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Integration of Environmental Aspects in Regional and Inter-regional Trade Agreements

by

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List of Abbreviations

AEC	African Economic Community
ACM	Arab Common Market
ACS	Association of Caribbean States
AFTA	ASEAN Free Trade Area
ALADI	Asociación Latinoamericana de Integración
ALALC	Asociación Latino-Americana de Libre Comercio (Latin American Free Trade Association)
APEC	Asian – Pacific Economic Co-operation
APEREC	APEC Energy Ressource Center
ANZCERTA	Australia - New Zealand Closer Economic Relations and Trade Agreement
AGEM	Applied General Equilibrium Models
ALCSA	Asociación de Libre Comercio Sud-Americana
ASEAN	Association of South-East Asian Nations
ASEP	ASEAN Environment Programme
ASPEN	ASEAN Strategic Plan of Action
BECC	Border Environmental Co-operation Commission
BTA	Border Tax Adjustments
CARICOM	Caribbean Community and Common Market
CARIFTA	Caribbean Free Trade Association
CACM	Central American Common Market
CAN	Comunidad Andina
CCAD	Comisión Centroamericana de Medio Ambiente y Desarrollo
CDM	Clean Development Mechanism
CEAO	Communauté Economique de l’Afrique de l’Ouest
CEC	Commission for Environmental Co-operation
CEFTA	Central and Eastern European Free Trade Area
CEEAC	Communauté Economique des Etats de l’Afrique Central
CEPGL	Communauté Economique des Pays des Grands Lacs
CEPT	Common Preferential Tariff
CER	Closer Economic Relations Trade Agreement
CMESA	Common Market for Eastern and Southern Africa
COMESA	Common Market for East and Southern Africa
CSD	Commission for Sustainable Development
CUSFTA	Canada – US Free Trade Agreement
CUWAS	Customs Union of West African States
DSR	Driving Force-State-Response-Ansatz
DPSIR	Driving Forces-Pressures-State-Impact-Responses
EAC	(1) East African Co-operation (2) East African Community
EAEC	(1) East Asian Economic Community (2) East African Economic Community
EC	European Community
ECCM	East Caribbean Common Market
ECCAS	Economic Community of Central African States

ECGLC	Economic Community of the Great Lake Countries
ECO	Economic Co-operation Organisation
ECOWAS	Economic Community of West African States
ECU	Equatorial Customs Union
EEA	European Environmental Agency
EEC	European Economic Community
EFTA	European Free Trade Association
EIA	Environmental Impact Assessment
ELMS	Environment and Land Management Section
EPA	Environmental Protection Agency
EU	European Union
FC	Financial Cooperation
FTA	Free Trade Agreement
FTAA	Free Trade Area of the Americas
GATT	General Agreement on Tariffs and Trade
GCC	Gulf Co-operation Council
GSP	General System of Preferences
IBWC	International Boundary and Water Commission
IMF	International Monetary Fund
IPA	Integrated Programme of Action
ISO	International Organization for Standardization
ITTO	International Tropical Timber Organisation
LAC	Latin American and Caribbean Region
LAFTA	Latin American Free Trade Association
LAIA	Latin American Integration Association
LCA	Life Cycle Assessment
LDC	Least Developed Countries
MAP	Mediterranean Action Plan
MCCA	Mercado Común Centroamericano
MEA	¹⁾ Maghreb Economic Area
	²⁾ Multilateral Environmental Agreement
MERCOSUR	Southern Common Market
MFTZ	Mediterranean Free Trade Zone
MRU	Mano River Union
NAD Bank	North American Development Bank
NAAEC	North American Agreement on Environmental Co-operation
NAFTA	North American Free Trade Agreement
OAS	Organisation of American States
OAU	Organisation of African Unity
OECS	Organisation of Eastern Caribbean States
OECD	Organisation for Economic Co-operation and Development

PAFTA	Pacific American Free Trade Area
PPM	Process and Production Methods
PPP	Polluter Pays Principle
PSR	Pressure-State-Response
PTA	(1) Preferential Trade Area for Eastern and Southern Asia (2) Preferential Trading Arrangement
RCD	Regional Co-operation for Development
SAARC	South Asian Association for Regional Co-operation
SACU	South African Customs Union
SADC	Southern African Development Community
SADCC	Southern African Development Co-ordination Conference
SAFTA	South Asian Free Trade Area
SAP	Structured Adjustment Programmes
SAPTA	South Asian Preferential Trading Arrangement
SELA	Sistema Económico Latinoamericano
SICA	Sistema de Integración Centroamericano
SPREP	South Pacific Regional Environment Programme,
SREZ	Sub-regional Economic Zones
SRU	Sachverständigenrat für Umweltfragen (The German Council of Environmental Advisers)
TAFTA	Transatlantic Free Trade Area
UDAE	Union Douanière de l'Afrique Equatorial
UDAO	Union Douanière de l'Afrique de l'Ouest
UDEAC	Union Douanière et Economique de l'Afrique Central
UDEAO	Union Douanière des Etats de l'Afrique de l'Ouest
UEMOA	Union Economique et Monétaire Ouest-Africaine
UMOA	Union Monétaire Ouest-Africaine
UMA	Union du Maghreb Arabe (Arab Maghreb Union)
UNEP	United Nations Environment Programme
WAEC	West African Economic Community
WHFTA	Western Hemisphere Free Trade Area
WHO	World Health Organisation
WRI	World Resources Institute
WTO	World Trade Organisation
WWF	World Wide Fund for Nature

Executive Summary: Findings and Recommendations

Findings:

1. Regional free trade agreements offer a very good opportunity to harness the political energy devoted to economic integration and liberalisation to the cause of progress in environmental policy.
2. Free trade agreements can become as important for the environment as they are for trade policy. Germany plays its part in the negotiation of free trade agreements at the level of the EU. The environmental effects of regional free trade agreements affect Germany too, either directly or indirectly.
3. Liberalisation of trade can only lead to sustainable development if it is accompanied by environmental policy. There are positive and negative relationships between free trade and the environment; and there is a grey area in between. Effective co-ordination of environment and trade policy results in win-win situations.
4. An essential condition for the success of a regional environmental policy is that it is politically desirable to all the partner countries and that they therefore give it full support. Dedication and commitment are required. Commitment to the environment will only be effective if there is the political will by each state involved. Regional environmental policy will be greatly reduced by market or political failure. Economically weak countries often regard environmental protection as an obstacle to development.
5. Regional free trade agreements can be used as instruments to achieve global, regional, and national environmental aims. Regional environmental policy has already been included in many regional integration agreements. However, experience with locally based environmental protection has been limited in terms of time and content to date.
6. Environmental protection can be a guiding principle of nearly all the agreements. The extent of the regulation is, on the whole, wide. The depth of the regulation is shallow. In many cases, there is a pronounced lack of implementation in practice.
7. Economically driven regional free trade agreements have more direct effects on the environment than agreements which are aimed more at political integration. Integration zones which aim at deeper integration also pursue more ambitious environmental aims than other groups of states do.
8. No systematic Environmental Impact Assessment for free trade zones has yet been systematically developed, nor has one yet been carried out *ex ante*.
9. The intensity of integration in many free trade agreements is very different. Only a very small number of the integration agreements between developing companies have been able to realise their time schedules.
10. Successful integration zones have a magnetic attraction to third countries. This requires strategic decisions with regard to widening or deepening the integration. Bi-regional free trade agreements are to be classified as strategic alliances.
11. Successful integration zones have a magnetic attraction to third countries. This requires strategic decisions with regard to widening or deepening the integration. Bi-regional free trade agreements are to be classified as strategic alliances.

Recommendations:

1. The political motivation behind the establishment of a free trade zone should be used to incorporate environmental policy with a high priority in the integration process.
2. The auto-dynamic processes which develop in regional free trade agreements should be used more to achieve environmental policy objectives.
3. The political dialogue between the members of a regional free trade agreement should increasingly be extended to include environmental policy.
4. The strategic possibilities of *interregional* free trade agreements should increasingly be used to achieve environment policy objectives. There is untapped potential here.
5. Within the framework of interregional or bilateral free trade agreements (above all with threshold, transition, or developing countries) environmental interests should be included more strongly - perhaps in the form of ecological conditionality (ecological "good governance").
6. The member states of a regional free trade agreement should also increasingly include elements in their environmental policy which collide with current WTO/GATT regulations. Applications to third countries are only possible if compatibility with WTO/GATT is respected.
7. Accord in environmental policy agreements should be used by economic compensations, taking different capacities into account.
8. If the level of harmonisation of regional standards is low at the beginning of the process, it is useful to agree to raising harmonisation step by step ("phasing up").
9. A regional free trade agreement should be based on a previous Environmental Impact Assessment and should include continuous environmental monitoring. Financial resources should be made available to ensure that this is possible. Ecological aspects should be included in Trade Policy Reviews.
10. Whether negotiations are carried out in single-track or parallel-track procedure will depend on the strategic priorities. In all cases, the commissions carrying out the negotiations should be competent in a range of disciplines.

SUMMARY

1. Experiences with regional approaches to integration

By the end of 1999 there were almost 120 regional free trade agreements registered with the WTO. Approximately one third of these had been concluded in the last ten to twelve years. Only a small number of the integration agreements between developing countries had been able to keep to their time schedules. Some have been revived by newer initiatives. The continued success of the EU is, in the light of the just as continuous extension and intensification of the integration, an exceptional phenomenon in the international field. The intensity of integration in the numerous regional agreements is very varied. Most instances are free trade zones. The number of customs unions and (real) single markets is small.

▪ Legal aspects with regard to GATT

For regional integration agreements, there is an important exception with regard to the principle of most favoured nations status. Article XXIV GATT standardises this privilege for free trade zones and customs unions which facilitate trade between their members, without erecting trade barriers for third states. An *enabling clause* also applies for unilateral preference agreements between industrial and developing countries, e.g. the general preference system of the EU for developing countries.

⇒The WTO/GATT norms place far fewer restrictions on internal aspects of regionally planned environmental policies than is often assumed (Section 6.1).

▪ Economic effects of regional free trade

The positive effects of integration agreements have a magnetic attraction for third countries. It is therefore often necessary to make strategic decisions about whether to aim more at *intensifying* the integration, or to concentrate on *extending* the membership basis. There is a tendency for free trade zones with a deeper level of integration to incorporate environmental protection more strongly than others; NAFTA, however, is an exception.

Regional free trade agreements on the one hand induce *static effects*, which can be achieved in the short term by dismantling tariff and non-tariff barriers to trade. This relates on the one hand to the *creation of trade* with the zone, with resulting employment and incomes. On the other hand, there can be a *diversion (or deflection) of trade*, in so far as hitherto trade partners in third countries are displaced by enterprises in countries which are part of the integration zone. Further static effects are possible with regard to balance of trade and currency exchange rates.

What is often even more important, however, are the induced medium and long term *dynamic effects* of integration. These occur with regard to technology transfers, with consequences in terms of quantities and prices; learning processes for companies and those responsible for trade policy; development of human resources; effects on macroeconomic and political stability of the member states; investment flows; trends towards political and legislative harmonisation; strengthening of the private sector and democratic political culture; changes in patterns of consumption, competition, administrative structures, the tax system, local, national and regional power structure; the formation of institutions and many other things.

▪ **Forms of integration**

Forms of regional integration range from informal interstate coordination measures to, with increasing *depth of integration*, trade and co-operation agreements, agreements on preferences, agreements on association, free trade zones, customs unions, common markets, economic communities (economic unions) and currency unions, up to political unions. In the case of many existing integration agreements, terms such as "common market", "economic community", or "economic union" are at best declarations of intent, but descriptions of the actual situation.

▪ **Motives for integration**

The motive forces for regional integration are of an economic and a political nature. Regional free trade agreements which have a primarily economic motivation have, in comparison to those which are more politically motivated, more direct consequences for the environment. This is because they bring about greater consequences for trade, production, and consumption, which can have a significant effect on the environment. Integration agreements which are more politically motivated can also have direct positive environmental effects, if there is co-operation on environmental policy, or if the member states take part en bloc in international negotiations on environmental matters. In some integration agreements, economic and political motivations are very closely knit.

▪ **Conditions for success of regional free trade agreements**

Integration implies the disintegration of national structures. This is one of the important reasons why integration can only be understood as a long-term procedure, and must be clearly distinguished from co-operation agreement limited either to a certain time or to certain functions. The success of economic integration is an essential precondition for effective regional environmental policy.

- A vital precondition for success is that there must be a political will to integration on the part of all the states involved, and that they all support the aim. *Dedication and commitment* are essential. A further important precondition is the stability of the political and macroeconomic environment.
- There must be binding obligations between the members of the integration zone, together with the political will to implement these obligations. In many cases, measures are agreed on, but not implemented. The partners must be ready to give up at least a certain degree of sovereignty. Willingness to give up sovereign rights is, in fact, very low in all integration agreements.
- Deregulation of trade within the integration zone should not be opposed by any measures designed to restrict trade (tax distortions, administrative barriers, restrictions of the right to set up businesses, or restrictive competition laws, currency risks, currency exchange controls, etc.). The environment for investors is of especial importance.
- As a rule, the positive effects for trade are stronger, the higher the level of development of the countries involved is. The *creation of trade* is greater, the higher the customs duty barriers between the member states were before the union. The lower the out customs barriers were before and are after the union, the lower is the *diversion of trade*.

- In the case of free trade zones between developing countries with low levels of economic development, the liberalisation of trade must be supported by other efforts, in particular those aimed at developing the regional infrastructure, the labour force, mobility of capital, and measures to compensate for regional disparities.
- When efforts to achieve integration stagnate or fail, this is usually because of economic disparities and/or political differences between the partner nations. Economic integration requires political harmony, or at least mutual compatibility. Relations between the partners will be the less stable, the greater the economic or other problems between them are.
- The greater the differences in economic advantage between the partners in the integration process, the greater will be the significance of conflicts which exist between the partners at the beginning of the process, or which develop during its early stages. Conflicts have a very negative effect on the inflow of direct investments. Without investments, internal liberalisation of trade is not a sufficient driving force for integration.
- The greater the socio-political similarities are, the less powerful are the centrifugal forces of disintegration. The more similar the participating countries are, the more evenly the advantages and disadvantages of integration can be shared between them, especially with regard to trade, direct investment, and employment. Consensus and convergence of economic policy will promote integration.
- Large differences in the economic and social orders have a strong potential for disintegration, and often lead to the grounding of the integration process, or its restriction to aspects which are relatively uncontroversial. Instead of a multi-national integration, what then develop are more bilateral and partial approaches.
- In structurally homogenous integration zones, the problems of adaptation are much less significant. The political driving force must ensure that the institutional development keeps pace with the economic integration. This applies to the development of adequate institutional capacity as well as to effective legal structures. Restricting the integrational process to the level of the executive limits the participation of the people in the integration process.
- In the case of complementary economic relations, the economic structures must complement each other in such a way that the exchange of goods does not lead to a serious balance of payments problem because of severe asymmetries in trade. The higher the level of industrial development, the better the chances of increasing the complementary aspects and the complexity of the division of labour by trade.
- In substitutional economic relationships there must be a certain level of development of the partner countries in order to allow significant inter-regional trade to come into being. Integration at a common low level of development is not a promising prospect. The competitiveness of the partner countries must be comparable and the conditions of competition must be at least similar, if distortions are to be avoided.
- Larger, economically stronger countries tend to profit more from free trade agreements than their smaller, weaker neighbours. Within most of the south-south integration zones, therefore, asymmetrical relationships have developed.
- A prior period of "quiet integration" of trade policy, with social and political networking, before the formal establishment of free trade zones, has proved very favourable.
- Successful implementation of common policies and measures will depend upon the partners making the necessary funding and human resources available, and creating the necessary legal and administrative environment. Local administrative structures in particular tend to lag behind the development of integration.

- When the positive and negative effects of integration are divided unequally between the partners, then the weaker partners often have to be granted special status and special dispensations, in order to counteract the potential for disintegration. Compensation systems between partner countries can help in this respect.

▪ **Strategic considerations**

Regional integration can solve economic and ecological problems. It opens up opportunities which are hardly possible at a global level. Generally speaking, it can be said that the prospects for success of free trade and integration are all the better, the more modest the level of ambition is, i.e. the more limited the initial aims of the co-operation are, with any further aims being put off for future phases. It is useful to begin with only a few steps, but with a clear multiplier effect, such as with reduction of internal customs barriers and common customs tariffs for third countries. Regional environmental protection policies can already be realised at this stage in the development.

Extending the membership means in the first place the creation and the diversion of trade. When the new members have very different structures, as, for example, would the case with new EU members in Eastern Europe, the problems of internal adaptation are bigger. This can lead to asymmetric development, if appropriate countermeasures cannot be taken. Extending the zone of integration therefore requires that the "old" members have the potential to absorb the strain on the new members. This ability increases as the depth of integration is extended. It is therefore necessary to strike a balance between extending and intensifying the integration process; extension requires internal consolidation.

Even at a low level of integration, it can make sense to extend the zone of integration, because the resulting strengthening of the negotiating position in the global and international context is an important strategic factor. Gradual extension of the integration zone can prepare the way for later intensification. Bi-regional free trade agreements can be seen as strategic alliances and should be used more for environmental protection. This also applies to bilateral agreements between individual countries.

2. Consequences of regional free trade for the environment

There has been little systematic research of the effects on the environment of regional free trade agreements. A stringent *methodology* for such research also still has to be developed, although approaches have already been made. *Static* environmental effects are a direct result of the consequences of trade: e.g. emissions from transport, production, and consumption as a result of the creation and diversion of trade. *Dynamic* effects are of an indirect nature and are a result of reactions in different policy sectors (e.g. transport, agriculture, technology). The greater the depth of integration, the more significant the dynamic effects are. There are also consequences for products, technology, growth, economies of scale, structure (with regard to "hot spots"), and regulation.

Potential **areas of conflict** between trade and the environment are areas in which there are different environmental standards between the partners, not for reasons of natural circumstance, but because of human influence (or because of both):

- *Movement of investments and industry* because of deficiencies in the implementation of environmental policy. (This in fact happens less often in practice than is often thought.)
- *Extra-territorial application of environmental standards* in order to impose own ideas of environmental protection in other countries. This occurs especially where there are different levels of economic and ecological development. "Environmental dumping" can be countered by trade measures with regard to imports.
- *So-called "eco-protectionism"*, where motives of environmental protection are really just an excuse for trade barriers.
- *Cross-border environmental pollution*, especially by emission of pollutants into rivers and the air.
- *Over-use of shared resources*, especially scarce water or fish resources.
- *Breach of multilateral environmental agreements*.

Areas of action with relevance for the environment must be identified and seen as the basis for regional environmental policy. In all integration agreements, environmental policy is just one of many policy areas, and is only accorded special importance in exceptional cases. The cross-section function of environmental protection seldom has a concrete effect as an integration principle. Generally speaking, the agreements identify particular *sectors* of the economy, in which the member states wish to work together (e.g. agriculture, mining, transport, tourism, technology). It is less usual to agree on *measures and instruments* with which to reduce or avoid environmental problems (e.g. minimum standards, regulations, levies, taxes, etc.). Furthermore, there are institutional areas with regard to the *way of working together* on environmental policy. These overlap with organisational aspects, such as arbitration procedures or exchange of information.

Although hardly any free trade agreements refer to them explicitly, there are other **problematic areas** which are relevant to environmental policy. Among these are:

- Population pressure
- Global environmental problems, especially climate and the ozone layer
- Land-related aspects, such as preservation of the soil, use of the land, planning
- The role of civil society and awareness and participation by the people
- The necessary *capacity building*, mainly in the administration, but also in civil society
- Environmentally-relevant planning and prognosis capacity with regard to the evaluation of environmental effects in terms of *Environmental Impact Assessment*.

•

Different kinds of needs for action exist for the following **types of integration agreement**:

- North-South agreements (e.g. with regard to different initial conditions, interests, and the will to implement)
- Agreements with high or low levels of integrational depth (e.g. with regard to the determination of regional minimum environmental standards)
- Agreements involving comprehensive deregulation of multiple sectors, as these can also affect sensitive areas

- Regional agreements vs. inter-regional agreements (especially with regard to the differences between the participating countries). Regional agreements tend to lend themselves to more intensive co-operation on environmental policy. The strategic possibilities to include environmental protection in inter-regional or other bilateral agreements could be used more effectively.

The **environmental effects** which may be expected to arise from a planned regional integration agreement should always be *assessed in advance*. This has so far never been done for a real free trade agreement. Whether it will be done for the planned Mediterranean Free Trade Zone is not yet clear. Methodologically, there are a large number of assessment and prognosis problems, as the environmental effects arising out of integration are very difficult to separate from other influential factors, which overlap, and are, to some extent, interdependent. The existing methodological evaluation proposals (e.g. from OECD, CEC, and WRI) are supplemented in this study by an *Environment Impact Assessment* approach consisting of six steps:

1. Analytical estimate of the *economic* effects of regional integration agreements, in order to identify the critical areas.
2. *Categorisation* of sectors and product groups with regard to their potential **ecological** consequences.
3. *Screening*: description of the environmental situation before integration (*status quo ante*).
4. *Gap analysis*: description of the potentially positive and negative effects of the foreseen *economic* development on the environment at regional and national level, in order to identify the priority problem areas; contrasting of the expected environmental situation with alternative measure scenarios.
5. *Policy responses*: evaluation of alternative environmental policy options taking into account the targeted environmental quality aims, derivation of concrete recommendations for action, including institutional and regulatory aspects.
6. *Monitoring and controlling* of environmental effects overtime (*follow up*).

This approach differs from the existing methods in, among other things, the following points:

- It is based on the concrete sub-regional and local action levels (location reference, *hot spots*)
- It clearly identifies *indicators* which can be used to describe the environment in terms of *status quo* and developments
- It is based on *gap* analyses which start out from different *first*, *second*, and *third-best* scenarios and also process dynamic reactions and changes in state policy on the environment, economy, and infrastructure.

The regional *ex-ante* environmental assessment should be carried out at intervals as continuous environmental monitoring.

3. Environmental policy in the most important regional integration agreements

Environmental protection is integrated into existing and planned regional integration agreements in different ways. Especially in newer and viable agreements, environmental aspects are more strongly integrated than in earlier times. This reflects the trend for greater emphasis to be placed on environmental policy both in industrial countries and in developing countries. The range of environmental policy topics is as impressive as the often ambitious environmental aims and intentions. In many cases, however, there is still a large gap between these intentions and their actual implementation.

The **extent of regulation** with regard to the environment (extent of inclusion of various environmental considerations) is, on the whole, large. The **depth of regulation** (the authority of regional institutions, measures) on the other hand, is much less. It is not the effects resulting from liberalisation of trade which are responsible for the unsatisfactory state of regional environmental policy, but the *inadequate implementation* of existing environmental protection regulations. This depends on criteria which are, at least in part, interdependent:

- The level of development of the members
- How similar the members are
- The size of the integration zone
- The targeted level of depth of integration.

As a result it is not surprising that groups of countries intending to achieve a greater depth of integration also had more ambitious aims in terms of environmental policy. In the case of integration agreements which were only aimed at achieving liberalisation of trade, environmental policy ambitions were lower. An important difference was between integration plans designed only to enable the exchange of goods (free trade zones, customs unions), and integrations aimed at greater depth, including mobility of the factors of production and harmonisation of sector policy (common market, economic community). Informal aspects are more important in this respect than formal ones. Some integration agreements, which are formally aimed only at a low level of integration, actually pursue a much more intensive cooperation and integration policy. In contrast, the environmental aspects of integration between some countries which formally pursue a deeper level of integration are relatively weak, both with regard to the policy profile and the willingness to implementation. It is not possible to draw a clear connection between the formally stated level of integration and the intensity of the environmental policy. *Commitment* is the decisive factor.

With regard to the **level of development** of the members, there are four **types of integration**:

Agreements between industrial countries alone, between developing countries alone, between threshold and developing countries, and between industrial, threshold, and developing countries. Integration agreements which are determined by industrial countries are, with regard to the inclusion of environmental action areas and instruments in the agreement, more highly differentiated. In order to achieve an effective regional environmental policy in the integration zone, it is therefore necessary for economically stronger partner countries to support the weaker ones in the transition period. It is a remarkable fact that there are highly developed verbal formulations of environmental policy aims in South-South agreements. However, as soon as the partners to the integration agreement come to terms on real agreements, where

environmental policies enjoy only low *priority*, it is no surprise to find that the *real* environmental policy lags a long way behind the fine theory of environmental policy.

To sum up, three issues can be noted from the analysis of the integration agreements studied:

- The intended depth of integration tends also to determine the intensity of cooperation on environmental policy. In a common market, regional environmental policy has a relatively firm basis, compared to a free trade zone, in which integration only goes as far as the free exchange of goods. NAFTA is atypical in this respect.
- A formal agreement for integration in depth is no guarantee for effective environmental policy. The actual results will depend much more on the political commitment and the readiness of the countries involved to really implement the environmental policy, and especially to provide the financial means to do so. The level of development of the partners is an important factor in this respect.
- Effective regional environmental policy also requires that economically stronger partners support weaker ones during the implementation phase.

4. Case studies on the environmental effects of regional integration

The case studies described in Chapter 4 range from the North American Free Trade Agreement (NAFTA) to the Mediterranean Free Trade Zone, and to MERCOSUR, and show a wide range of experience.

- The experience of NAFTA so far has been very limited. Nevertheless, there is already some evidence of how successfully ecological aspects of the Agreement have been implemented, and to what extent the agreed instruments and institutions are able to deal with problems and serve as orientation for other agreements.
- In the planned MFTZ there are a number of discrepancies with regard to agreement on environmental protection standards and their current implementation. Cooperation on environmental policy in an integration zone, in which the EU takes a strong lead on environmental policy, ought to be more consistent. This is a clear example of how difficult it is to plan and implement a regionally-oriented environmental policy for cooperation by partners who are so different from each other.
- The environmental policy status of MERCOSUR is at a weak stage of development. The large number of resolutions, declarations and minutes cannot disguise the fact that there is a huge gap between these statements of good intentions and their implementation. Progress on environmental policy is slow and restricted to sporadic activity.

5. Environmental policy instruments in regional free trade agreements

If environmental measures within a free trade agreement clash with WTO/GATT regulations, then the Vienna Convention on Contract Law (1969) prescribes that the regulation of the older agreements should be replaced by the newer one. Thus the WTO Agreement of 1995 has a dominant position compared to earlier environmental agreements. If, however, an environmental agreement has come into being after 1st January 1995, then it has priority over WTO between the member countries. In regional free trade agreements it is therefore quite possible to agree on instruments which *per se* clash with WTO/GATT regulations. An example of such conflict could be trade restrictions with regard to process and production methods (PPMs), as long as they do not have an adverse effect on third countries. Their application to third countries which are members of WTO is therefore only possible if WTO/GATT compatibility is respected.

The application of environmental policy instruments internally, between member countries of an integration zone, does not pose any problems in terms of WTO regulations. Problems can arise when such environmental policy measures are applied externally, to non-members of the zone. Such occurrences have to be assessed from *case to case*; no general rules are applicable (see Section 6.1.2).

Environmentally relevant **instruments** are put into groups in this study:

- Measures governed by statutory legislation
- Economic (market) measures
- Measures for interstate co-operation, especially political cooperation, indicative instruments of the state and
- Voluntary (informal) measures of the private economy.

Categorisation is not always precisely possible.

The suitability of various environmental policy instruments in the context of a regional integration agreement is evaluated below in a shortened **SWOT analysis**. Each instrument has strengths and weaknesses; i.e. internal advantages and disadvantages with regard to ecological effectiveness, economic efficiency, and social and political acceptability of its application. There are also opportunities and threats resulting from external factors, especially the environment of the regional integration. Strengths and opportunities are advantages, weaknesses and threats are disadvantages of the instrument.

Assessment of whether a particular instrument is suitable for a particular regional integration agreement is not the same as deciding whether the instrument is economically efficient or ecologically effective. To make this decision, it is necessary to balance the theoretical advantages and disadvantages of an instrument and the practical and political aspects in favour or against its application in an integration area. These practically-oriented aspects are dominant.¹

¹ Ecological taxation is, for instance, a first-best instrument. Because of serious methodological problems, and political problems with regard to national implementation and regional harmonisation, ecological taxes are practically unsuitable for integration in a regional free trade agreement.

There is a wide range of opinions about when, how, and in what combinations environmental instruments should be applied. Selection of the instruments is usually made according to the **criteria**:

- Effectiveness in terms of environmental policy
- Economic efficiency
- Social and political acceptance.

Problems of efficiency and acceptance in particular can, also with regard to administrative practicality and implementability in practice, override the environmental effectiveness of an instrument and result in it being less suitable. These criteria are also applied with **environmental principles** in mind. In the context of regional free trade agreements, the principles of *cause* and *prevention*, and, above all, *integration* (the so-called cross-section clause) are of prime significance. Assessment of the suitability of an instrument for a particular case, the level of development of the countries involved and the depth of integration must be considered. The overview on the following pages summarises some preliminary assessments on the basis of the criteria outlined above.

Summary of evaluation of environmental instruments

Instrument	Type of integration			
	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Statutory legislation	++	0	+	+
Standards	++	+	+	+
Protection of investments	++	+	++	++
Liability law	++	0	+	+
Ecological taxes	(+)	-	0	-
Charges	+	0	0	0
Removal of environmentally damaging subsidies	++	0	+	+
Payment of environmentally helpful subsidies	++	+	+	++
Certificates	(+)	-	0	(+)
Joint implementation	-	+	++	++
Trade preferences	-	-	0	(++)
Trade restrictions	0	0	0	0
Ecological duties	0/(-)	0/(-)	0/(-)	0/(-)
Border Tax Adjustments	+	0	0	(+)
Political dialogue	++	++	++	++
Environmental action plans	++	+	+	+
Co-operation	++	++	++	++
Adaptation support	+	-	(+)	++
Arbitration in disputes	++	++	++	++
Complaints procedures	++	(++)	(++)	++
Reports, monitoring	++	++	++	++
Institution building	++	0	+	0
Voluntary obligations	0	+	+	+
Ecological audits	++	0	+	+
Ecological labels	+	(+)	+	(+)

++ = very good; + = suitable; 0 = partly suitable; - = unsuitable;

In brackets = weaker; IC = industrial country; DC = developing country; NIC = newly industrialising country

For regional free trade agreements between industrial countries, nearly all environmental policy instruments are suitable or very suitable. In the case of "mixed" free trade agreements between industrial, newly industrial, and developing countries, environmentally relevant trade preferences and cooperative instruments are particularly useful. Industrial countries can especially push for the integration of such instruments in a regional free trade agreement which are associated with economic incentives for the developing countries involved. The concept of "good governance" also has an ecological dimension.

As a matter of principle, regional environmental standards should be agreed. However, not all national environmental standards necessarily need to be regionally harmonised. In the case of a low start out level of harmonisation of regional standards, it is best to agree on a step by step phasing up. Environmental protection measures have a much smaller detrimental effect on the competitiveness of most companies than is often thought. On the contrary, good environmental standards and a positive environmental image of the company are valuable marketing arguments.

6. Political conclusions and recommendations

(1) Contractual integration of trade and environmental issues

- **Free trade agreements as opportunities for regional environmental policy**

Recommendation:

The political motivation to create a free trade zone should be used to establish environmental policy as a high-priority part of the integration process. Regional free trade agreements offer a very good opportunity to establish a comprehensive environmental system beyond the national borders. The restructuring process always connected with economic integration is a favourable framework for a simultaneous development of environmental policy at national and regional level. The willingness to cooperate between member countries of an integration zone is always higher than that between unconnected countries. Free trade agreements mean a consistently higher level of trade liberalisation than that realised at the multi-lateral WTO level. They can therefore provide a lot more leverage which can be used to achieve environmental protection aims. The political commitment to economic integration triggers impulses that also reflect on economic integration.

Recommendation:

The dynamism developed in regional free trade agreements should be used increasingly to achieve environmental policy aims. An effective regional environmental policy improves the climate for environmental policy at the national level and contributes to overcoming fragmentation at the national level.

Recommendation:

Environmental agreements within free trade agreements should primarily have a regional perspective. This makes it possible for the globalisation of environmental damage to be countered by the re-establishment of territories. If environmental front line policy is borne by a whole region, this usually lessens fears of suffering from the disadvantages of being the first

to move on the issue. Individual nations would fear the loss of competitive advantages arising from unilateral national environmental policy.

- **Contractual foundation of environmental policy**

Recommendation:

The contracting states to a regional free trade agreement should more strongly include elements in their environmental policy which clash with the current WTO/GATT regulations.

In the description of instruments outlined above, it was shown that environmental agreements concluded *after* 1st January 1995 have priority over any WTO standards with which they may clash according to the Vienna contract law convention, provided that third countries are not thereby disadvantaged (see section 6.1.2 in the text).

- **Political and public dialogue**

Recommendation:

The political dialogue on environmental policy between the parties to a regional free trade agreement should be intensified.

The usually low quality of international environmental law should be remedied in high-level political dialogue. The usually vague commitments to environmental protection (*soft law* in the wider sense) have not immediate and real effect on the practical level, and are not backed up by sanctions for offences. The effectiveness of environmental standards depends on the goodwill of individual states and their willingness to implement these standards.

Political dialogue prepares the way for regional free trade agreements and accompanies their implementation. The dialogue should involve environmental experts from the state and the private sector. In the preparation of actual contractual negotiations, it is important to also involve the middle and lower levels of administration and politics in the preparation and decision-making process.

- **Strategic considerations**

Recommendation:

The strategic possibilities of inter-regional free trade agreements should be used more intensively for environmental policy aims.

The strategic qualities of free trade agreements should be used to promote ecological interests. Above all, bi-regional free trade agreements are strategic alliances in global competition. In the framework of free trade agreements with NICs and developing countries, environmental issues should be included more clearly, if appropriate in the form of an ecological conditionally with regard to ecological good governance. To achieve this, there must be mutual readiness to compromise in order to achieve progress on environmental policy. This is best promoted by package solutions (see Chapter 7, *single vs. parallel track*).

(2) Conceptional recommendations

Environmental policy is always most difficult to realise in situations in which other problems - economic and social problems - are more urgent. The environmental awareness of people in

such situations is not normally very high. Integration agreements involving only developing and newly industrialising countries include environmental aspects mainly in the form of declarations. It is not unusual for close links between industry and politics to have a strong retarding effect on environmental policy.

- Environmental protection and sustainable development should be included in the preamble and main text of free trade agreements.
- Basic principles of environmental protection (including the principles of cause and prevention) should be established in regional free trade agreements.
- Respecting the principle of subsidiarity, environmental policy should be included as a cross-sectional task for the formation of policy in all sectors (principle of integration).
- The necessity of budget funding for regional environmental policy should be established in the free trade agreement.
- Environmental quality objectives should be agreed on a regional level. At the same time, internationally recognised environmental agreements should be established in the free trade agreement.
- The free trade agreement should include an obligation to implement and enforce existing regional and national environmental standards. This obligation should be legally enforceable.
- The acceptance of regional agreements for environmental protection is increased if the right to a country's own national environmental policy is granted.
- Regional environmental policy agreements should take account of the differing capacities for implementation in the member countries. Where the differences between the countries are great, political concern about environmental problems can be expected to be lower in the economically weaker countries. The industrial countries can also be expected to try to use environmental policy to push forward economic interests. Willingness to agree on environmental policy can be improved by economic compensation measures, taking different capacities into account.

(3) Recommendations on contents

- A regional free trade agreement should be based on a prior *Environmental Impact Assessment*, and should provide for continuous environmental monitoring. Funding must be made available for the achievement of these aims. Ecological aspects should be included in *Trade Policy Reviews*. It is important to agree on a common methodology for the evaluation of environmental effects.
- A free trade agreement should include arbitration procedures for cases of disputes about environmental matters between states and between the state and private sector. Because of differing national legal systems, an interstate agreement on this matter should establish principles and guidelines.

- To support the enforcement of national and regional environmental standards, the free trade agreement should include ecological clauses in its stipulations about public procurement.
- The free trade agreement should enable the member countries to use their national laws with regard to competition to allow agreements and cooperation between business enterprises in order to improve industrial environmental protection. The freedom of the individual countries to formulate such laws will, however, be reduced: International companies occupy areas of influence parallel to or between the states and cannot be adequately controlled by national legal instruments.
- Regionalisation of environmental policy should be institutionally established. This requires appropriate political and administrative structures at regional and national level. Staff and funding must also be provided for these facilities. Among the most important institutional functions are: arbitration services for cases of dispute; the development of regional environmental standards; the development of regional, and the harmonisation of national eco-labels, and environmental monitoring and evaluation. Institutional deficits will be worsened if the political will to enforce these measures is lacking, and/or if the liability laws are inadequate.
- Liability for endangering the environment should be a basic principle of environmental liability. This principle of environmental liability should also apply for interstate and international law. State liability as a safety net to protect individual private persons from harm would be useful.

7. Strategic considerations for negotiations

(1) Single or parallel track

- In the case of *single track* (*single undertaking*) negotiations, environmental and trade aspects are included in a single contractual body. Consensus must be reached on all questions of detail.
- In *parallel track* negotiations environmental and trade policy are incorporated in separate contracts.

The essential difference is whether one part of the agreement can be agreed on without the others, or whether both can be had only as a "packet". These alternatives do not necessarily lead to significantly different results. The differences are mainly in the negotiating strategy and method. In both *single* and *parallel track* procedures, environmental and trade policy can be matched. In any case, an early assessment of the environmental consequences of the deregulation of trade should be carried out, which will require integration of the contents irrespective of the type of track chosen.

- Treatment of environmental and trade questions in the *single track* procedure requires that environmental policy be accepted as an integral part of the integration agreement, equal in importance to trade policy.

- Separate negotiations can lead to a separation of economic integration and environmental aspects. This may be advantageous if the structures of interests in trade policy and environmental policy are not congruent. In this case, consensus on environmental policy is possible without pressure from the trade or investment agenda. Another aspect is that the separation of trade and environment can lead to the loss of substantial cross-references, so that the environmental consequences of trade, and the consequences for trade of environmental policy cannot be adequately considered.
- If negotiations are carried out separately, they may progress at different rates. This can be an advantage or a disadvantage. Each of the negotiation procedures can develop its own dynamic.
- Leaving out or postponement of environmental policy could mean that it loses political priority.
- If negotiations of environmental and trade policy are held together, they can be aligned and adapted to each other at an early stage. This is also favourable for planning arbitration measures for cases of dispute at the interfaces of trade and the environment, which requires a high level of awareness of the interdependence between the two.
- Parallel negotiations can lead to procedures, institutions, and regulations being developed in parallel.
- A *single track* for trade and environmental questions is more suitable for agreements between industrial countries, because the environmental standards in the countries involved will be relatively similar, and there will be less contention about questions of competition policy than in North-South agreements.
- There are often co-operative mechanisms for solving cross-border problems in place before an integration agreement is made. These mechanisms can be used and further developed for environmental co-operation, without including them in the text of the trade policy agreement.

Recommendation:

In the context of a regional free trade agreement, environmental protection should be negotiated, if at all possible, in a *single track* procedure. Incorporation in an integrative approach which is primarily economic gives environmental policy greater political significance (also with respect to other areas of policy) and more realistic chances of being put into practice. If the *single track* procedure is not possible, then parallel track negotiations are an acceptable second-best solution; in spite of some disadvantages, they also offer advantages. The details of the case at hand will be decisive.

(2) Double track

A *double track* procedure would be, for example, an environmental framework or basis agreement which is integrated into the regional free trade agreement, but with fewer precise obligations, as a *soft law*. This basic agreement can be complemented by minutes, subsidiary agreements, programs, etc., which are themselves *hard law* in the sense of international law. The *double track* option should only be chosen if a specification of the basic environmental agreement is sure.

OBJECTIVES AND STRUCTURE OF THE STUDY

The global deregulation of trade and the globalisation of economic relationships has been occurring at the same time as the trend to regionalisation of trade. The latter has occurred in the form of the formation of large trading blocs, such as the EU, NAFTA, ASEAN, APEC, MERCOSUR, and in a steady growth in number of regional and inter-regional free trade agreements. In the light of this development, it is to be expected that free trade agreements will have the same kind of importance for environmental policy as agreements at WTO level.

This study systematically analyses the environmental effects of free trade agreements, and investigates opportunities to link liberalisation of trade in the context of free trade agreements with environmental policy. The starting point is the finding that environmental and trade policy are mutually supportive, and that liberalisation of trade can only lead to sustainable development if supported by corresponding developments in environmental policy.

This analysis is significant for German environmental policy in two respects. Firstly, Germany contributes to negotiation of free trade agreements at the European level. Secondly, the environmental consequences of free trade agreements reached by the EU, and other free trade agreements, also affect Germany, both directly and indirectly.

The time span within which the standard of living doubles in China is ten years, in India twenty years. Given the political significance of this growth dynamic, it would be simply unrealistic to expect to try to prevent the governments of many countries from giving greater priority to economic development than to environmental protection (C. Ch. von Weizsäcker). Since this has not only local (national) implications, but also, and more importantly, global ones, it is necessary to strengthen the *positive* relationship between economic growth and the environment and to make the maximum possible use of *win-win* situations. The political commitment to the achievement of economic improvement in regional free trade agreements can also be used to push forward environmental policy considerations. Regional environmental policy is a new and not yet firmly established field of policy. Nevertheless, it has already been introduced into many regional integration agreements. Experience with environmental protection in a regional context has been, thus far, very limited. Environmental policy is a matter of broad correlation, which means that regional integration zones can be used to pursue global aims.

In comparison to international environmental agreements, regional environmental policy allows specific adaptation to the capacity of absorption and action of the countries involved, as well as to specific regional environmental problems. Regional free trade agreements, however, have a difficult target function: maximisation of the economic advantages of integration while minimising the ecological strain. Environmental policy is just one of a number of other areas of policy. Experience has shown that environmental protection tends to have a high priority when there are real environmental problems, which could affect voter behaviour.

This study is divided into seven chapters.

Chapter 1 gives an overview of the development of regional integration since the second-world war. This overview is accompanied by a representation of the static and dynamic *economic effects* of free trade agreements. This is supplemented by a typology according to various criteria. On the basis of real experience, an overview of the criteria for success or lack of success of regional free trade agreements will be offered. The relationship between the free trade agreements and the WTO/GATT regulations will be shown.

Chapter 2 analyses the *ecological effects* of regional free trade. This points to various clusters of problems which, in turn, call for environmental *policy responses*. *Methodological aspects* will therefore be examined first. After examination of existing approaches, a proposal will be presented for how the ecological effects of regional integration can be reviewed and evaluated in the context of an *Environmental Impact Assessment*.

Chapter 3 contains an analysis of the most important regional integration agreements. These are not only very different from each other as whole structures; there are also often very significant internal differences between the members. As well as the historical development and the economic perspectives, the different levels of inclusion of environmental policy are also dealt with.

Chapter 4 offers an extension to the above analysis in the form of an in-depth presentation of environmental policy in three selected case studies: NAFTA, Mercosur, and the Mediterranean Free Trade Zone.

Chapter 5 summarises the available environmental policy instruments and evaluates them with regard to their possible application in regional integration zones.

Chapter 6 points to political conclusions and recommendations.

Chapter 7 deals with some aspects of negotiation strategy.

1. Typology of regional integration

1.1 Overview of the development of regional integration since the second world war

At the beginning of the year 2000, there were more than 100 regional and inter-regional trade agreements registered with the WTO. Of these, approximately one third have come into being in the last ten to twelve years. There are three important aspects of regional integration agreements since the second world war (WTO 1995:27f.):

- Efforts to achieve regional integration were at first restricted to western Europe (EEC/EFTA).
- Only a small number of integration agreements² between developing countries have been able to realise their original time schedule. Some integration agreements have been revitalised by new initiatives.
- The intensity of economic integration in the large number of integration agreements varies greatly. Most of them are free trade agreements. The number of real customs unions and common markets is small.

Three phases of regional integration can be distinguished. These are dealt with in the following three sections.

1.1.1 The first phase of regional block building

The development of free trade after the second world war has been significantly influenced by the 1948 GATT. Article XXIV of GATT provides for exceptions to the principle of most favoured nations status (non-discrimination) in the formation of regional economic blocks. This refers primarily to free trade zones and customs unions (see section 1.6). These provisions for exception were, however, hardly at all utilised until the founding of the EEC.

Developments within the context of GATT are closely related to developments on the European continent. The treaty creating the European Economic Community (EEC), which came into effect on 1st January 1958, established the contractual basis for European integration, and marks the beginning of regional block formation. The original aim was to establish a single market between the founder members, Belgium, France, Germany, Italy, Luxembourg, and the Netherlands. The motives for the establishment of the EEC were primarily of a political nature. The aim was to integrate the Federal Republic of Germany into the western block, and to form a politically and economically functional block in opposition to the socialist camp.

In the 1960s, the formation of the EEC was at the core of the first phase of regional block formation, which also saw a wave of free trade agreements in Africa and Latin America, aimed at creating stronger cooperation between southern countries. In Africa, the aim was to

² The concepts "Free Trade Agreement" and "Integration Agreement" are synonymous. Levels of "forms" and "types" are defined in section 1.4.

replace colonial economic structures by regional co-operation in the process of decolonisation. In Latin America, the hope was to achieve improvements in contrast to the then relatively unsuccessful national policies to substitute imports by domestic industrialisation.

These developments had a significant influence on the positive further development in the multi-lateral GATT negotiations. The background to this was the successful formation of regional economic blocks, which supported intra-regional trade (trade creation), and placed less emphasis on inter-regional trade, so that countries which did not participate in the regional blocks could suffer economic disadvantages caused by diversion of trade. This led to the USA in particular trying to strengthen inter-regional trade within the framework of GATT.

While this first phase of regional block building on the European continent progressed successfully (as well as the EEC, EFTA was also formed in 1960 as a reaction to the EEC), attempts at regional block building on other continents failed. The reasons for this are varied and are related specially to the development strategies and the structures of the participating countries:

- The intra-industrial division of labour was only weakly developed - i.e. external trade consisted almost exclusively of a few raw materials. This was and is the case for many developing countries.
- The strategies of import-substituting industrialisation (e.g. in Latin America) were not very successful (Dieter, 1998, 205f; Schirm, 1997).

On 1st January 1973 Denmark, the United Kingdom, and Ireland joined the EEC, and the free trade agreement between the EEC and EFTA came into force (European Economic Zone). In the course of the 1970s, the EEC developed more and more into a trading block, which presented a closed block to the outside world (common external duties, common agricultural policy, common trade policy), and which bound ever more parts of the world to it by means of co-operation, free trade, association, and preference agreements (Europe, the Mediterranean zone, ACP states in the framework of the Lomé convention).

1.1.2 Regional block formations in the 1980s

With the southward extension of the EU (Greece 1981, Spain and Portugal 1986) and the Single European Act (1987) aimed at establishing a single market by 1992, a new phase in efforts to achieve regional integration was initiated (Borrmann, 1995). The aim of the single market programme was to create a unified economic zone without internal borders, which would enable free movement of goods, but also a common market for services, free movement of people, and freedom to establish enterprises. The Maastricht Treaty of 7th February 1992 (EU treaty) pushed the development of the EU forward with the three pillars EC treaty (previously the EEC treaty), the common external and security policy and co-operation on internal and judicial policy.

Parallel to these developments, there were negotiations with EFTA on the formation of a European Economic Area (EEA), which came into force in 1994. In addition, within the

framework of the so-called European Agreements, a first step was taken towards the integration of the reforming countries of Central and Eastern Europe into the Western European Market. Among other things, this led to the foundation of the Central European Free Trade Association (CEFTA) as a counter-balance and extension to the one-sided orientation of the reforming Eastern European countries towards the West.

The success of the EU contributed to the world wide revival of old efforts at integration, or the formation of new free trade zones, parallel to the widening and deepening of the integration zones on the European continent. In North America, the free trade agreement between the USA and Canada of 1988 was followed in 1992 by the free trade zone including Mexico, **NAFTA**, which came into force in 1994. In Latin America, already existing agreements (MCCA, the **Andean Group**) were re-worked, and given new life, and new agreements, such as **Mercosur**, were established. In Asia, if not so strongly, efforts to achieve regional integration have been made since the 1980s. Most prominent among these have been the efforts by ASEAN to establish a free trade zone (**AFTA**).

1.1.3 Regional and interregional integration in the 1990s

Since the end of the 1980s there has been a world wide increase in efforts towards regional, inter-regional, and bi-lateral free trade agreements. Until 2000, 184 regional free trade agreements were registered with the WTO. Of these, 110 are currently in force. An overview is given in Appendix 1. Nearly every country in the world is a member of at least one integration agreement. The economically strongest countries and groups of states are members of integration zones such as the EU, NAFTA, and APEC. In addition, there are a large number of **bi-lateral free trade agreements** between individual countries. A number of states are trying to join existing integration zones (NAFTA, EU). There are also trends towards bi-regional approaches between free trading zones (e.g. EU and Mercosur).

This boom in new efforts and the revival of old projects for regional integration has political and economic causes. The economic causes include increasing international competition, the slow progress and results of the GATT Uruguay round, and political re-orientation after the end of the East-West conflict. Regional integration agreements offer the participating countries a number of economic and political advantages (see section 1.2).

The Single European Act of 1986 can be seen as the beginning and the cause of efforts towards integration by other countries. Apart from the success of integration in Europe (the extension and deepening of the EU) two other factors were also of primary importance:

- Uncertainty about the outcome of the GATT Uruguay round.
- The de-facto integration as a consequence of increasing regional trade and flows of investment as a motive for regional integration between industrial countries (Dieter, 1996).

New efforts towards integration, in contrast to earlier efforts, have two defining characteristics: Competition and global market orientation of the developing countries, and an "open regionalism". Developing countries are trying to use the benefits of regional integration with regard to improvements in international competitiveness, which can be achieved by the better access to the markets of industrialised countries, or by creating larger markets in the

countries themselves. In contrast to earlier efforts towards integration, which involved detachment from the industrialised countries, the new projects are consistently orientated towards the global market.

In comparison with earlier integration projects, integration agreements which work on the principle of "**open regionalism**" (Bergsten, 1997) try to avoid diversion of trade away from non-members and thus any reduction in their standards of welfare. The principle of "open regionalism" means that the building of regional integration zones is not combined with the setting up of barriers against outsiders (as reflected in the concept of "Fortress Europe"). The aim of open regionalism is much more to allow outside countries to have access to the markets created, and thus to the economic advantages of integration, or at least to ensure that they do not suffer a worsening of conditions. Examples of this are Chile's wish to join NAFTA, and bringing Turkey into the customs union with the EU.

In the recent past, the trend towards strengthening of regional trade agreements has continued (WTO, 1998). In **Africa**, the new economic and currency union, UEMOA, includes the French-speaking countries of West Africa. They plan, among other things, to introduce common external tariffs. Negotiations are taking place in South Africa towards the creation of a free trade zone between the members of the *South African Development Community* (SADC). Within this group, the *South African Customs Union* (SACU, consisting of Botswana, Lesotho, Namibia, South Africa, Swaziland) is revising its common tariff policy. The *East African Cooperation* (EAC II) is pushing the process in the direction of an economic and currency union. The African states of the Lomé convention are currently negotiating a new EU-ACP agreement with the EU (Cotonou agreement).

In the **Americas**, an agreement has been signed between 34 states in order to create a free trade zone by the year 2005, the *Free Trade Area of the Americas* (FTAA). In Latin America, efforts to achieve unilateral trade liberalisation have been covered by a revitalisation of existing regional integration agreements. In Mercosur, progress has been made on the development of a common policy on external tariffs. There are also agreements with individual countries from the region, or with earlier sub-regional groupings, e.g. between Mercosur and the Andean Group (*Comunidad Andina*: CAN), and between Canada and Chile. There are also plans to create a *South American Free Trade Area* (SAFTA), which may include the whole Southern American continent.

In **Asia**, economic integration within ASEAN continues to make progress. As an immediate reaction to the Asian crisis, ASEAN members have accelerated the liberalisation of trade and opening up to direct investment. In Central Asia, five new countries, Kazakhstan, the Kirghizian Republic, Tadshikistan, Turkmenistan and Usbekistan, have taken up negotiations with Iran, Pakistan, and Turkey about trade relations. Japan has suggested a free trade zone with South Korea, which could be extended multilaterally. In preparation, both countries have lifted a range of trade restrictions against each other.

In **Europe**, preparations are being made for the extension to the east. The European Council has invited Estonia, Poland, Slovenia, the Czech Republic, Hungary, and Cyprus to a first round of negotiations on the question of full membership. Negotiations on a new generation of free trade agreements with the Mediterranean countries aimed at establishing a *Mediterranean Free Trade Zone* (MFTZ) are in process. A customs union with Turkey has already been established. EFTA countries have also already set up a large number of free trade agreements with Central and Eastern European countries, and with Mediterranean countries.

Since the mid 1990s, efforts to achieve inter-regional free trade have become more and more important. The EU is carrying out free trade negotiations on the inter-regional level with Mercosur, Mexico, Canada, and South Africa. In the framework of the new **Transatlantic Partnership**, the EU and the USA are working together to abolish non-tariff trade barriers. The most important **interregional free trade agreements** include:

- *Asian Pacific Economic Cooperation (APEC)*, which aims to achieve a free trade zone, the Pacific American Free Trade Area (**PAFTA**) by the year 2010 for industrialised countries, and 2020 for emerging and developing countries in the Asian region.
- *Free Trade Area of the Americas (FTAA)* or *Western Hemisphere Free Trade Association (WHFTA)*, which were established at the summit meeting of the Organisation of American States (OAS) in Miami in 1994. The aim is to achieve a free trade zone by 2005.
- *Transatlantic Free Trade Area (TAFTA)*, which was taken up by the Common Action Plan for the EU and the USA in 1995. Suggestions for the creation of a transatlantic economic zone involving Europe and the USA are discussed in this context.
- *Mediterranean Free Trade Zone (MFTZ)* to come into being between the EU and 12 countries of the Mediterranean region by 2010, agreed by the Barcelona declaration of 1995.
- Free trade agreements between the **EU** and other regional integration blocs, and with individual states. Since 1995, negotiations have been taking place on the creation of a free trade zone between the **EU**, **Mercosur**, and between the **EU** and **South Africa**, or between the **EU** and the **SADC**. In the context of the re-negotiation of the Lomé Convention, the EU is also trying to negotiate directly with groups of states, and seeks by this means to promote regional integration projects with developing countries indirectly.

Of the inter-regional agreements mentioned, only the APEC is currently apparent. The boom in regional integration projects which arose at the end of the 1980s seems to giving way to a consolidation phase. Building of new regional integration zones is now less prominent. The emphasis at present is on giving new direction to existing integration agreements. Most integration zones place more importance on deepening rather than widening the integration.

Parallel to regional and inter-regional integration, there are increasing efforts to achieve **sub-regional** integration, especially in the Asian region, where cross-border so-called **Growth Triangles** are being formed like mine ASEANs, e.g. between Indonesia, Malaysia, Brunei, and the Philippines, or on the rim of the Mekong delta. These are established primarily as free trade zones. There is no room here to go into the finer aspects of international law of these arrangements.

The effects of regional integration are often manifested only in the medium and long term, and are therefore, especially in newer integration zones, not yet comprehensively assessable (e.g. NAFTA, Mercosur). Inter-regional integration agreements are only at the beginning of their implementation (such as TAFTA or WHFTA). The EU, NAFTA, and Mercosur, show a high level of integrational dynamism. These integration agreements also show dynamic

effects. The most important integration agreements in terms of the size of the markets are NAFTA, EU, APEC. The three centres of gravity of the global economy, Europe, North America, and Japan and South East Asia are included in inter-regional agreements. Structurally heterogeneous free trade zones, such as NAFTA, are especially interesting in terms of the prospects for the transfer of knowledge and technology, and thus of knowledge-based competitive advantages, to the weaker member states.

Special advantages of regional integration have been effectively incorporated into agreements which realise faster liberalisation of trade than that prescribed by the WTO. NAFTA and Mercosur, for example, include agriculture. Non-tariff barriers to trade have been largely eradicated in NAFTA and in the EU. The process of "deeper integration" in the EU and SADC has included coordination of macro and sector policies. In NAFTA, Canada and Mexico have been adapting to USA policies in some areas, such as agriculture. Many regional integration agreements (Mercosur, SADC, ECOWAS, CARICOM, MCCA) enter collectively into international negotiations as a single subject in international law to the outside world - e.g. in negotiations with the EU. This offers opportunities for contractual integration of environmental policy and to reduce differences between national and international environmental standards.

The following sections sketch the likely economic effects of regional free trade agreements. "Likely", because, analytically, they can only be deduced under *ceteris-paribus* conditions, whereas in reality, different, partly inter-correlated influences overlap, and cannot be clearly distinguished empirically. The environmental effects of regional integration are described separately and in detail in Chapter 2.

1.2 Economic effects of regional free trade

Some aspects of regional integration which are relevant directly or indirectly to questions of environmental protection are summarised below. There is unfortunately not space in this paper to go into the detailed deduction and representation here (Altmann 2000).

1.2.1 Static effects

(1) Free trade agreements are a part of an export-oriented development strategy. They are designed to achieve economic **advantages** which can be summarised under the concept of **creation of trade** (Viner, 1959; Cecchini, 1988). Static effects - or, more precisely, comparative static effects - describe the changes which, other things being equal, are achieved in the short term by removing tariff and non-tariff trade barriers. Abolishing customs duties makes imports cheaper. Removing other, non-tariff, barriers to trade makes it generally easier for enterprises to act within the integration zone. On the whole, this leads to the new development or strengthening of trade relations between the integrated states. This has been clearly observed in the EU; trade between EU countries has increased by more than 800% since the founding of the community. Increasing trade contributes to *securing the survival of enterprises*, to increasing *employment*, and to the *income* of the states. Enterprises and employees who are directly affected by increasing competition from imports feel these effects of integration directly. The fact that protectionist measures do not create new jobs, and state income is not created by them, is often not obvious. It is, however, methodologically difficult to separate effects on trade caused by integration from those caused by other factors, such as global competition, exchange rate fluctuations, etc.

(2) Apart from the attractive creation of trade, integration can also cause problems between states. Internal flows of trade can partially or completely replace relations to third countries (**diversion or deflection of trade**), with corresponding negative effects for **employment** and the state finances of the deprived country. An example of this is the lasting difficulty in trade relations to the EU suffered by North African states because of the accession to the EU of Greece, Spain, and Portugal. Similar effects of deflection of trade would, on the other hand, be experienced by the southern countries of the EU if, in the event of the creation of an EU - Mediterranean free trade zone (see sections 3.6.5 and 4.2), there is a resulting liberalisation of the currently still protectionist EU agricultural policy. The EU, on the other hand, has lost approximately half of its market share in Mexico to the USA through the creation of NAFTA.

The trend in terms of effects of regional free trade agreements on the balance of payments, the foreign debt, and on currency exchange rates, cannot be further dealt with here. An abrupt removal of internal customs duties can, however, lead to very strong reactions in balances of payments and currency exchange rates. For this, and other reasons, reductions in customs duties required by integration agreements (also in the context of the WTO), are carried out gradually over a longer period of time.

1.2.2 Dynamic effects

The dynamic effects on integration induced by free trade agreements are medium and long term. The following representation must, of necessity, be much compressed, but makes clear the large number of factors which are of direct or indirect significance for the environment.

(3) Regional creation of trade leads in the medium run to increasing national incomes, and this, in turn, to savings and investments, which stimulate economic growth. In the long term, growth leads to innovation by increasing the incentives for investment in new technologies. On the whole, the **technology transfer** within the integration zone is intensified, as is the transfer from outside through direct investments. This has strong relevance for environmental policy.

(4) For the enterprises, the removal of inter-state protective customs duties means an increase in **competitive pressure** from the partner countries. Not all enterprises will be able to meet this challenge. Increasing competitive pressure and taking up of market opportunities in the enlarged regional market lead to economies of scale with quantity and price effects and increases in the range of products. By taking on best practices and developing human resources, positive **learning effects**³ result. Analytical frameworks, such as the Trade Policy Reviews of the European Union illustrate the wide spectrum of these trade policy induced effects (Environment and Development Resource Centre, 1998:27). There is, for example, in the EU, a clear "voluntary obligation" to carry out ecological audits in enterprises, but also increasingly in administrative organisations.

(5) Although there are examples to the contrary (Mercosur), economic integration generally has a positive effect on the macro-economic stability of the member states. Instability, as experienced for example in so-called Asian crisis of 1997-99, is not usually caused by integration, but by external factors.

³ Improvements in work processes, organisation of the enterprise, management, etc. are designated "X-efficiency" (Leibstein, 1966).

(6) Changes in the flows of trade and consumer structures also affect the flows of investment. New investments, including foreign direct inward investments, re-act flexibly to the conditions in different regional locations. International enterprises are not the only ones to apply best practices in the field of environmental protection. The depth of integration plays an important part here: Integration zones which are expected to develop beyond "shallow" liberalisation of trade to deeper levels of integration (EU, Mercosur) are more attractive to direct investors than regions where there is less certainty about this development (CEAO). Empirical studies, however, indicate that it is much more difficult to predict developments in flows of investments than it is to predict trade effects (Blomström/Kokko, 1998). Prognosis is also made more difficult by dynamic changes in the material infrastructure of the integration zone.

(7) The economic and political integration of the member states of a free trade zone causes a general trend towards **harmonisation**. This applies sectorally, and instrumentally with regard to coming together and unification in agricultural, energy, transport, monetary, financial, customs⁴, and environmental policy, but also legally and technically with regard to alignment of national legal norms (perhaps also on a supra-national level, as in the EU) and environmental standards.

(8) Liberalisation of trade is usually to be seen against the background of changes in the fundamental philosophy of the state and together with a general climate of **liberalisation**. This could be seen with special clarity in Latin America, where free trade and democratically-orientated state cultures could only gain ground after the end of military dictatorships. The same also applies for some states in Asia. This, of course, also has an effect on the macroeconomic climate. The abolition of trade restrictions removes most of the hitherto existing incentives for **illegal trade**, and removes the basis for smuggling. At the same time, the "necessity" of 'smoothing' administrative procedures (licences, import and export restrictions, including environmental regulations, currency controls, etc.) by corruption will also diminish. The changes in power structures which this implies do not always take place smoothly.

(9) In the process of trade liberalisation, most countries also experience a change in emphasis, away from state intervention by de-regulation to emphasis on **private sector activity** (sometimes voluntary: eco-audit). This changes the decision structures, reduces state control, increases individual freedoms, and implies a corresponding state policy appreciation of the actions of individuals. Economic liberalisation (free trade) is hardly conceivable without a congruent political philosophy. Reduction of state intervention, however, in no way implies a weak state. On the contrary, the state which concentrates on its core functions must be a strong state, which is strong enough to deal with the adaptation problems accompanying integration without the old controlling mechanisms in the area of trade.

(10) The observed, mainly economic effects of free trade agreements also cause **sociological changes**, by expanding the middle classes and creating new groups with greater purchasing power. The strong consumption orientation which usually accompanies this is very significant for the environment. This refers both to the product preferences of the consumers, who - influenced in part by advertising and tourism - look to foreign life styles, and to the type, scale, and quality of commercial advertising communication. These changes in individual value structures can bring about political, as well as sociological changes.

⁴ Harmonisation and simplification of customs procedures have also been observed in free trade zones with different external customs duty regimes. A specially clear example of this is between the EU and EFTA.

(11) The administrative effort required to raise duties is relatively low. Direct and indirect taxation requires a much more highly differentiated administrative system, also within the companies. It is not surprising that the state budgets of many developing countries are based to a large extent on customs duties. Trade liberalisation therefore involves a re-structuring of **state revenues**, a process which must not only be supported administratively, often impeded by lack of capacity. Especially in developing countries, the **taxation systems** are not adequately developed. The increase in income from indirect taxation induced by the creation of trade therefore usually does not compensate fully for the loss of customs duties, meaning that these must be compensated for out of direct taxation. Direct taxation (e.g. income and corporation tax) is administratively more complex than indirect taxation. It has therefore often been observed (EAC II, SADC) that the free trade process is held up because no compensation for loss of customs duty earnings by indirect taxation can be expected. In addition, in many countries the necessity of extending the tax base also became clear, because the tax regulations were applied and enforced very inadequately. Changes in this respect imply **distribution effects** and **shifts in power**, which can be very politically sensitive, especially if stricter environmental standards are to be applied at the same time.

(12) A reduction or abolition of goods-related border controls (as in the EU) greatly reduces the state's possibilities for imposing prohibitions or limitations on trade, including with regard to the environment. An important side effect is that the removal of customs formalities changes the basis for collecting statistical data.⁵

(13) Regional integration agreements have not only an economic agenda, primarily designed to institute free trade, but also include strong elements of **political co-operation**. The member states are partners, which has an effect on the type and quality of co-operation also on issues not directly related to trade. On the one hand, there is (usually) a trend towards greater **political stability** in the individual member states. On the other hand, the considerable **political weight** which integration zones as a whole, as well as their individual member states, can gain in the international scene, has to be emphasised. Such impressive economic and political success as that achieved in the EU obviously stimulate imitation, and have a magnetic attraction for the surrounding countries, as demonstrated by the joining of the EFTA countries and the "waiting list" of would-be members, who - and this is not of only secondary importance - will also have to accept the EU environmental standards. In nearly all integration zones, there are "centrifugal forces" in effect which tend towards expansion, either by admitting new members, or in the form of treaties with states or other integration zones. As an example of this, Mercosur has concluded bilateral agreements with Chile and Bolivia, and is negotiating with the Andean Group, which could well result in a Free Trade Area of the Americas (FTAA) having a wide-based political basis for negotiation.

The more the integration zones develop into a supranational unit, the more the political **power structures** within the regions change. Where there is deeper integration, responsibilities are given to regional institutions (EU, NAFTA). This leads to a weakening of the influence of national *pressure groups*, which must then react by forming regional alliances, which tend to be more difficult to organise than at a national level. On the other hand, the concentration of decision-making structures within the integration zone - as in the case of Brussels in the EU - often makes it easier for lobbyists to press their interests. The other side of this development, however, is that the regional decision making level takes on role (often a welcomed role) of a scapegoat, which national political decision makers can hide behind. This has been clearly

⁵ In the EU a replacement was needed in the form of the IntraStat-System. Apart from spot checks on borders and in the single market, the **monitoring** of free trade is moving over to the **companies**, who must therefore be prepared for more intensive and prolonged audits, for which specially trained staff are needed.

observable in the EU. "Brussels" can be made responsible for a number of national wrong decisions, because the transparency of many decision making processes is inadequate. The perhaps positive diffusion of decision-making power on the regional level is countered by a negative, non-transparent concentration of power on the regional level. There is not room here to examine the concrete decision-making processes in regional and supra-national organisations.

An important aspect can also be seen in the fact that the member states of an integration zone normally see themselves as *partners*. In the ideal case, existing inter-state problems are solved and tensions reduced. The EU is an impressive example of this kind of development, but similar examples can be seen in Mercosur, ASEAN, and APEC. That this is not always the case is demonstrated by conflicts such as that between India and Pakistan, and also in the conflicts within the East African Community (EAC I).

1.3 Regional integration, free trade and environmental protection

The paradigm of free trade promises increasing wealth by eradicating trade restrictions - even though on the basis of assumptions which have not been realised. The **protectionists** therefore stand as pragmatists in opposition to the Free Trade dogma. The protectionists support restrictions on free trade in order to protect national interests - including in reference to environmental protection.

Between the extreme of absolute free trade on the one hand, and on the other hand (theoretical) complete dissociation from international trade relations, intermediate forms are practised in reality. These are supposed to combine the advantages of free trade with the advantages of protectionism within the framework of regional free trade agreements. These agreements take a middle way in that they combine internal liberalisation of trade with external protection. It is therefore typical of regional integration agreements that the countries co-operating with each other grant each other free trade preferences, but practice protectionism against uninvolved **third countries**, and separate themselves from the rest of the global economy. The internal privileged conditions are withheld from non-members. This contravenes the basic GATT principle of non-discrimination (analogue: most favoured nations status), but is allowed as an exception for regional integration agreements by Art. XXIV GATT (see section 1.6). The global economic picture as a whole is therefore a patchwork of liberalised, partly liberalised, or not liberalised economic zones. This also has consequences for national and regional environmental protection.

The concept of (economic) integration goes back to Balassa (1961a and 1961 b). A large number of greatly varying definitions were developed later. The common denominator is that national economies combine to create a common, unified, multinational economic zone. The various (economic) **integration types** are positioned along a continuum between two poles. At one extreme there are fully sovereign non-integrated states. At the other extreme is the complete integration of previously independent states in one (federal) state. This state has direct power over its citizens (possibly legitimised by elections) and is a single subject in international law, whereby the member states lose their individual personality in international law, but maintain their legal identity within the community.

The law on international treaties between nations allows integrating states to regulate their relationships to each other. Also in the area of the environment, international common law applies even where not supported by an international treaty (Kunig, 1992: 47ff.) - for example, cross-border pollution of rivers results in liability for damages. The parties to an integration agreement transfer **individual sovereign rights**, to varying extents, to supra-national institutions, thereby creating varying degrees of supra-national law, which in the event of a clash may "break" national law, which can be changed by mutual consent.⁶ Within the integration zone, there can then arise supra-national agents (decision-making bodies, administrations). The member states, however, retain their national state sovereignty in international law - in contrast to federations.

Integration is at the same time a **condition**, whereby one may be referring to a status quo or an intended target, and a **process**. As a (trade policy) process, integration involves the abolition of discrimination between the partner countries by tariff or non-tariff barriers. There are various forms of (economic) integration with varying degrees of intensity of integration. These are sketched out in the following section. In practice, in many cases, these levels of integration are passed through consecutively, although this need not necessarily be the case. Section 1.8, on the conditions for successful integration, also examines some strategic aspects of integration.

1.4 Forms of integration

(1) Coordination

The co-ordination (reaching mutual agreement) of areas of policy between individual countries is the weakest form of international co-operation. This involves no loss of sovereignty by the states involved, only a certain restriction. The parties to the agreement enter into a commitment to inform each other about intended actions in certain areas of policy, and to agree on these, thus creating tendencies to convergence - e.g. on environmental policy.

(2) Trade and cooperation agreements

The term "cooperation" refers to agreements for a limited time and/or on limited issues. At the state level, cooperation could mean e.g. the conclusion of trade agreements providing the legal and other conditions for trade between two states. These agreements are binding for the countries involved in international law. In contrast to coordination, cooperation involves jointly exercising legislative rights, whereby the executive sovereign rights remain in the hands of each of the member states. Only if both legislative and executive rights are given up to shared bodies in order to achieve common (perhaps limited) policies does one speak of integration.

Trade and cooperation agreements are not treaties of association or integration; i.e. they do not imply further moves towards integration beyond matters of trade or industrial policy. Trade agreements regulate e.g. the supply and acceptance of certain raw materials, formalities in carrying out mutual imports and exports, investment terms, or matters of patent law. In

⁶ The concept "supra-national" can be interpreted in either of two ways: on the one hand to describe in general a level above the national level; e.g. a research institute run together by several states may be described as "supra-national". Here it is often used synonymously with "international". On the other hand, "supra-national" can be used in a more strictly defined legal sense to mean a legal level with supra-national authority, which "breaks" national law. The latter definition is the proper one and the one used in this study.

Asia, e.g. there is the *Asian Pacific Economic Cooperation* (APEC), which aims to co-ordinate economic cooperation between the APEC states, which, in turn, are aiming to create a free trade zone, (the *Asian Free Trade Area*, AFTA) including Australia, Japan, Canada, USA, South Korea, New Zealand, China, Taiwan, and Hong Kong.

Cooperation agreements can refer to certain partial areas of cooperation, such as research, customs administration, or environmental protection. The EU has concluded trade-oriented co-operation agreements with a number of states and groups of states, including ASEAN (1983), the Rio Group of 11 Latin American countries (1990), and bi-lateral agreements with a number of Latin American and Asian states: Sri Lanka (1975), India (1981), Brazil (1982), Pakistan (1985), Argentina (1990), Chile (1990), Mexico (1991), Uruguay (1991).

(3) Preference Agreements

Whether or not a preference agreement is to be seen as a form of integration remains an open question. In any case, it would be the weakest form of regional integration. Preference agreements refer to customs preferences, and are an exception to the GATT principle of Most Favoured Nations or non-discrimination. **One-sided** preference agreements give one partner privileges, such as freedom from customs duty for imports. **Two-sided** agreements grant the same privileges to both parties. Both forms are exceptions for the principle of *Most Favoured Nation* principle. Customs duties are either reduced or abolished. The range of products is usually limited: trade liberalisation applies only for certain goods, with special regulations applying for "sensitive" goods.

The EU has, among other things, concluded a general preference agreement with EFTA, which is extended by bi-lateral additional agreements. Furthermore, there is an EU preference agreement with the Mediterranean countries, the countries of Central and Eastern Europe (MOEL), as well as a general preference system for practically all developing countries (GPS: *General System of Preferences*), and finally the Lomé Convention (since 2000: Cotonou Agreement) (under which mutual preference is waived), a preference agreement for states in Africa, the Caribbean, and the Pacific.

The significance of customs preferences as a trade policy incentive for development must be seen in context: tariff protection of the EU has been reduced by the GATT/WTO rounds to an average of just 3 - 4%. Some high-duty goods, such as electrical machines, agricultural products such as shell fish and live cattle, can carry duties of 15 - 20% or even more. These "normal" customs duties are applied for all non-preference imports (MFN duties). All other imports can thus claim privileges. An erosion of preferences is thus often referred to, since the sense of trade privilege was that other countries should not be able to claim it. In fact, there are only a few countries which do not enjoy trade preferences in any form: the USA, Canada, Japan, Australia, New Zealand, and, for reasons of international law, Taiwan (which has preferences with EFTA), and the northern part of Cyprus, which has recently been excluded by the European Court of Justice. Others are excluded because of embargoes: Libya, Serbia, Montenegro, and, for political reasons, North Korea and Cuba.

(4) Association agreements

Whereas trade and co-operation agreements do not intend any further integration, association agreements are a stage towards integration. Associations are common between groups of states (e.g. EU) and individual states. The concept of association describes a special relationship between a country and a community of states which strives beyond simple free trade. Association usually precedes full membership, as with the association of Poland, Hungary, the Czech Republic, the Slovakian Republic, whose aim is to achieve full membership of the EU. The term is, however, sometimes used in a confusing way - for example with regard to the relationship of the ACP states to the EU. The EU no longer refers to these agreements as association agreements - which also applies for the co-operation agreements with the Mediterranean countries - but as **interim agreements** (e.g. with Bulgaria and Romania). As a rule these agreements at first provide preferential customs tariffs leading to a step by step approach to a free trade zone.

With regard to formalities, from the point of view of the European Community, there is also the difference that association agreements, according to Art. 310 EEC (Amsterdam), must be approved by the Council of Ministers *unanimously*, after the European Parliament has had its say on the matter and institutional agreements have been reached (e.g. the setting up of a common advisory committee). For trade agreements, a qualified majority in the Council is enough (Art. 133 EEC). In practice, the parliament is also involved before trade agreements are concluded. Associated states can take an advisory part in decision-making processes within the EEC, but without having a vote. They are also not allowed to take part in financial transfers.

Integration in the real sense of the word should only be used when the partner states want to develop a common economic zone. According to the WTO rules, exceptions to the GATT principles for integration zones are permissible when nearly the whole of the trade is affected and trade barriers against third countries are not put up. Ideally, the following forms of integration can be distinguished (Viner, 1950):

(5) Free trade zones

The weakest form of economic integration is known as a free trade zone.⁷ In this case, the countries involved agree to reduce customs duties and non-tariff trade barriers between each other. Trade liberalisation generally covers all goods. A common trade policy towards third countries is not agreed; in particular, no common external customs duties are agreed. Thus the various national tariff and non-tariff regulations of the member states towards third countries remain in place. Examples of such free trade zones are EFTA and NAFTA.

In order to prevent goods from third countries being brought into the free trade zone through the country with the lowest import duties, and then being passed on to other member countries, the **origin** of the goods must be proven in order to claim the preferential treatment. When goods are produced wholly in one country, this is no problem, but much more complicated when components from various countries are used. For this reason, rules of origin must be agreed for *all* goods, which are normally different for the different product groups, and sometimes with great variations. The supplementary protocols on **rules of origin** in the integration or association agreement are therefore often very extensive. There is no room to go into further details here. This requires a corresponding administrative effort, since suppliers

⁷ Not to be confused with national free trade and special economic zones, which many countries set up in order to promote exports.

must provide their customers with documentation on the origins of all goods, so that they can be imported duty free. Sometimes, the work involved can be so great that it is more economical not to claim the preferential treatment and just to pay the normal duties as for a third country. Strict criteria on origin also hinder imports and can replace an (illegal) increase in external import duties. In the medium term, complex regulations on origin cause a certain pressure towards harmonisation of national customs policy. At present, regulations on origin are applied only to goods. There is, however, a discussion underway to extend them to services (WTO 1995:49).

(6) Customs union

In the next highest form of integration, the member countries agree on a common external customs tariff against third countries, while completely dismantling all tariff and non-tariff barriers to internal trade. This creates a common customs zone, referred to as a customs union. Customs revenues are divided up among the member states. The EU is (among other things) a customs union.

(7) Common market

A common market includes a customs union. In addition, as well as the internal liberalisation of trade, there is also liberalisation with regard to the factors of production. This means "four freedoms": the free movement of goods, the free movement of services, free movement of capital, freedom of workers throughout the market and freedom for companies to establish operations in any member country. Apart from other alignments (such as a common system of patents), a common market ought really to have a harmonised taxation system. In the EU, in which the term "single market" has established itself as the designation for a common market, transactions which should not be affected by customs regulations are in fact considerably hindered by the different systems of taxation.

(8) Economic community (economic union)

The fourth stage of integration is referred to as an economic community, or, synonymously, an economic union. In order to realise this, in addition to the criteria for the common market, there must also be a harmonisation of economic policy. This refers in particular to agreement on priorities in pursuing alternative economic policy objectives (e.g. whether promoting employment or fighting inflation should have priority), which instruments should be applied to achieve these aims (e.g. monetary or fiscal policies), what money base policies should be pursued, how to deal with national debts, etc. Furthermore, it would be necessary to align the legal systems in a supra-national system with common supra-national institutions.

(9) Currency union⁸

The creation of a currency union (monetary union) means unifying the currency system between the member states, whereby as a matter of principle, only one currency can be valid in the whole integration zone. In the opinion of the so-called "Economists", monetary integration should only take place when integration with regard to goods and factors of production has made good headway (common market, economic community, "crowning theory"). An opposing view is held by the "Monetarists". They are of the opinion that early monetary integration will push forward and support economic integration. There are several examples of this way

⁸ Monetary integration in the form of a currency union will not be dealt with here in a context mainly concerned with trade policy, nor into the special aspects of the EWWU. The remarks are of a general nature.

of proceeding, including the Franc CFA zone, the ECA-I, and also the EU. Currency union is not an absolutely necessary step in the process of economic integration, but is recommendable when deeper integration has been achieved.

The weakest form of currency integration is the **currency exchange rate union**, as it existed in the European Exchange Rate Mechanism. Bi-lateral reference rates of exchange are agreed for the currencies involved. The cash exchange rate can deviate from this rate within fixed limits. In the next level up of integration, exchange rate fluctuations are no longer possible (e.g. Franc CFA zone). In a "real" **currency union**, there is only one currency common for all states (such as the Euro in the EU).

(10) Political union

The most intensive level of integration is the complete, including political, melting together of the member states in a federation (federal state). This implies extensive transfer of sovereign rights to the supra-national level.

1.5 Remarks on typology

In reality, there are a large number of integration agreements which refer to themselves as common markets, economic community, or economic union (e.g. Mercosur, MCCA, ECOWAS). The term, however, is in these cases at best a statement of intent, and not a description of the reality. The on the whole very demanding pre-conditions for these "deeper" forms of integration are usual not achieved. In most cases, not even a free trade zone has been realised as the lowest form of integration.

On the other hand, the typology described above is not an obligatory pattern of steps. Stages can be jumped over or left out. There are, for example, integration zones in which internal free trade has not yet been realised, but partial factor mobility already exists (CEAO: mobility of capital).

Many examples show that the positive effects of integration zones exercise a strong attraction for third countries. This already happens at the relatively low level of integration of the free trade zone, as has been observed in the case of NAFTA, which Bolivia and Chile want to join. In such cases, the integration partners have to make a strategic decision: whether to seek to achieve a deepening of integration or a widening of the integration zone. Simultaneous efforts in both directions can overload weaker integration groups. This question also arises for the EU, with its long list of candidates to join, with the difference, that although integration is not yet perfect, the depth of integration achieved by such an economically powerful zone as the EU can mean that such extension would make sense. Nonetheless, an eastward extension will present even the EU with considerable financial and institutional problems. It is very likely that within the European integration zone, a two-track system of integration ("two speeds") will be carried out.

It has been observed that with increasing depth of integration, the number of possible fields of action with regard to **environmental protection** also rises. A common market offers many more possibilities for the development of common environmental standards and for harmonisation of policies than a preference system. The aims of a free trade zone primarily involve the removal of trade barriers. The EU is thus based not on a pure trade agreement, but on an agreement with co-ordinated areas of policy including a common trade policy towards other

economic blocks. In a free trade zone, this happens, if it happens at all, by informal agreements, and not by common institutions. The absence of common political institutions makes common progress on environmental protection more difficult. This, however, does not necessarily mean a low environmental level for the member states. Stronger inclusion of environmental protection considerations is necessary with growing depth of integration, because this brings with it increasing trade and economic growth, and thus increasing environmental effects. Chapter 2 goes into this in more depth.

1.6 GATT: the legal position of integration agreements

According to **Art. I** of GATT, WTO members must apply the Most Favoured Nation Principle (MFN).⁹ For regional integration agreements, there is an important exception to this principle. This is contained in **Art. XXIV**, the central GATT rule on integration agreements. This grants the privilege to free trade zones or customs unions, which facilitate trade between their members without putting up trade barriers against third states (Section 4). According to Section 8, free trade zones and customs unions must remove tariffs and other barriers to mutual trade for "substantially all the trade between their customs territories". The principle of liberalisation is not, however, absolute. "Where necessary", the states can keep levies or other restrictions according to Art. XI (quantitative restrictions), XII (for reasons of the balance of trade), XIII (non-discriminatory handling of quantitative restrictions), XIV (exceptions to non-discrimination rule), XV (currency agreements), and XX (general exceptions; this is the only - and here only implied - establishment of environmental protection in the GATT agreement). Members of the customs union must apply "approximately" the same external tariffs to third countries, which "on the whole" must not be higher than they were before integration. According to Art. XXIV, Section 7, integration agreements must be notified in advance to GATT so that GATT may have the opportunity to make suggestions. In practice, notification is carried out already when a work group has produced a draft, and does not wait until the agreement has been signed, as the GATT regulation strictly stipulates.

Part IV, which was included in the GATT in 1965, makes specific provision for promotion of the trade and development of developing countries, even if the "substantially all trade" criterion is not fulfilled. On various occasions, Part IV and Art. XIV were combined, in order to grant developing countries non-reciprocal preferences (as in the case of the EA with the Lomé Convention).

The so-called **enabling clause** was developed during the Tokyo round in 1979 and enables developing countries to make preferential agreements among themselves. This also applies for one-sided preference agreements between industrialised countries and developing countries, e.g. GSP.

On the basis of **Art. XXV**, WTO members can grant waivers for sectoral free trade agreements (e.g. 1952 for the EGKS agreement, or 1965 for the USA - Canada automobile agreement).

If previous trade partners should suffer disadvantages in the process of integration, because previous bilateral trade agreements have been adapted to a customs union, and customs preferences could not be maintained, the disadvantaged countries can claim compensation or take counter steps according to Art. XXVIII.

⁹ In its contents, this means the same as the non-discrimination principle.

WTO/GATT and international or regional environmental agreements are equal elements of general international law. If there are clashes between two countries because of two international agreements, the situation is to be judged on the basis of the Vienna Treaty Convention of 1969. If both countries are parties to both agreements, then the agreement which was concluded later can replace the stipulations of the earlier agreement (*lex posterior*- see section 6.1.2). On this basis, the WTO agreement of 1995 has a dominant position with regard to earlier environmental agreements. If an environmental agreement came in to being for both countries after 1.1.1995, then this has dominance over the WTO. The members of an integration zone can therefore make agreements among themselves which contradict WTO rules. The application of these agreements to third countries which are members of WTO is only possible in compliance with WTO/GATT.

1.7 Structural analysis and typology of regional integration agreements

1.7.1 Overview

In the following sections the most important integration regions and inter-regional agreements are briefly described. Chapter 3 gives a detailed picture with special emphasis on economic integration and environmental policy. Bilateral agreements are not included. The following overview summarises the integration agreements according to their geographical location.

Europe:

- European Union (EU)
- European Free trade Association (EFTA)
- Central and Eastern European Free Trade Area (CEFTA)
- Baltic Free Trade Area (BFTA)

North America:

- North American Free Trade Agreement (NAFTA)

Latin America and the Caribbean:

- Asociación Latinoamericana de Integración (ALADI)
- Mercado Común del Cono Sur (Mercosur) Comunidad Andina (CAN)
- Caribbean Community and Common Market (CARICOM)

Asia and Australia:

- Closer Economic Relations Trade Agreement (CER)
- Association of South-East Asian Nations (ASEAN)
- ASEAN Free Trade Association (AFTA)
- Bangkok Agreement
- South Asian Association for Regional Co-operation (SAARC)
- South Asian Free Trade Zone (SAFTA)
- Economic Co-operation Organisation (ECO)

Africa and the Middle East:

- Arab Common Market (ACM)
- Gulf Co-operation Council (GCC)
- Arab Maghreb Union (UMA)
- Union Douanière de l'Afrique de l'Ouest (UDEAO)
- Communauté Economique de l'Afrique de l'Ouest (CEAO)
- Union Economique et Monétaire Ouest-Africaine (UEMOA)
- Union Douanière et Economique de l'Afrique Central (UDEAC)
- Communauté Economique des Etats de l'Afrique Central (CEEAC)
- Southern African Development Community (SADC)
- East African Community (EAC)
- Mano River Union (MRU)
- Economic Community of West African States (ECOWAS)
- Preferential Trade Area for Eastern and Southern African States (PTA)
- African Economic Community (AEC)
- Common Market of East and South African States (COMESA)

Inter-regional agreements:*Existing:*

- Asian-Pacific Economic Co-operation (APEC)
- EU-ACP (Lomé Convention)
- Mediterranean Free Trade Zone (MFTZ)

Under negotiation:

- Latin American Free Trade Area (LAFTA)
- Free Trade Area of the Americas (FTAA)
- Transatlantic Free Trade Area (TAFTA)
- EU-Mercosur, EU- South Africa/SADC

In terms of economic power (GDP), NAFTA is the biggest of the integration zones with approx. US\$ 8,700 bn. (1997), followed by the EU with US\$ 8,580 bn. Mercosur has US\$ 1,135 bn and ASEAN 745 bn. In terms of share in world trade, the EU, with exports of 44.7% is the biggest integration zone, followed by Asia (in general) with 24.8%, North America (17.2%), Latin America (5.2%), MEE (3.4%), and the remaining developing countries (4.7%). In terms of imports, the EU leads with 43.6%, ahead of North America with 21.3%, followed by Asia (20.1%), Latin America (6.3%), MEE (3.8%), and the other developing countries with 4.9% (WTO figures).

In terms of population, ASEAN has 485 million people, NAFTA 392 million, EU 374 million, Mercosur 208 million (iwd 27/99). Figure 1/1 gives an overview of the founding data and the size of the most important integration zones. Figure 1/2 gives an overview of the agreements and the criteria for analysis and typology dealt with in this and the next section.

In the following sections, the following points will be dealt with:

- Motives for regional integration (Section 1.7.2)
- Size of the market created, external trade (GDP of members, share of world trade), internal trade (economic sectors, export products, import products, trade partners - Section 1.7.3).

- Level of development of integration partners (industrialised countries, emerging countries, developing countries), and type of integration (North-North, North-South, South-South - Section 1.7.4).
- Depth of integration (free trade zone, customs union, common market, economic community), stage of implementation (Section 1.7.5).
- Integration of environmental aspects (environmental objectives, regulations in the agreements relevant to the environment, types of problems), changes in national environmental policy in the participating countries in the integration process (Chapter 3).

Fig. 1/1: Basis data on the agreements dealt with

Agreement	Founding date	Integration Partners	Integration area in km ²	GDP in bn. US \$
EU	1958	15	3.130.199	7.201,70
EFTA	1960	4	447.790	280,60
Lomé IV	1975/1989 ¹⁰	EU + 70 ACP states	---	---
CEFTA	1992	6	782.051	502,10
NAFTA	1992	3	20.302.970	9.108,00
APEC	1989	17	43.407.571	18.824,60
ASEAN	1967/1992	9	4.184.737	1.887,00
SAARC	1985	6	3.997.860	2.061,02
ALADI	1980	11	19.027.984	2.819,10
Mercosur	1991	4	11.794.320	1.362,60
CAN	1969/1990	6	4.561.824	558,90
MCCA	1960/1994	7	411.954	89,40
CARICOM	1973	14	410.429	39,18
SADC	1992	14	9.086.455	356,95
ECOWAS	1975/1993	16	6.145.000	72,10

Source: Author's selection based on World Fact Book, 1996

¹⁰ Year of foundation or (latest) renewal of the agreement

Fig. 1/2: Agreements and criteria

Criteria → ↓ Agreements	Number of integration partners	Type	Dominant motive	Share of GDP of integration area of world GDP	Integration status	Next integration objective / time horizon	Structure
EU	15	North-North	Economical	20,12 %	Economic Community	-----	Homogeneous
EFTA	4	North-North	Economical	2,76 %	Customs union	-----	Relatively homogeneous
Lomé IV	EU + 70	North-South	Political	ca. 21 %	Preferential trade	Free trade zone	Very heterogeneous
CEFTA	6	South-South	Economical	0,53 %	Free trade	-----	Homogeneous
NAFTA	3	North-South	Economical	25,44 %	Free trade *	-----	Relatively heterogeneous
APEC	17	North-South	Economical	52,12 %	Preferential trade	Free trade zone/2010/2020	Heterogeneous
ASEAN	9	South-South	Political	5,27 %	Preferential trade	Free trade zone/2003	Homogeneous
SAARC	6	South-South	Political	5,76 %	Preferential trade	Free trade zone/2001	Relatively homogeneous
ALADI	11	South-South	Political	7,78 %	Preferential trade	-----	Relatively homogeneous
Mercosur	4	South-South	Economical	3,81 %	Free trade (sectoral)	Customs union/2001/2006	Relatively homogeneous
CAN	6	South-South	Economical	1,56 %	Free trade *	Common market	Homogeneous
MCCA	7	South-South	Political	0,25 %	Free trade *	Common market	Relatively homogeneous
CARICOM	14	South-South	Political	0,28 %	Free trade *	Common market/2000	Relatively homogeneous
SADC	14	South-South	Political	1,00 %	Preferential trade	Free trade zone/2006	Relatively homogeneous
ECOWAS	16	South-South	Political	0,20 %	Free trade *	Customs union/2000	Homogeneous

Source: Author's selection based on World Fact Book, 1996

* = Free trade not yet fully implemented

1.7.2 Motives for regional integration

Two main motives dominate efforts to achieve regional integration: economic motives and political motives. Figure 1/3 summarises these in an overview. Section 1.8 looks at them more closely in combination with the conditions for the success of integration. Regional integration agreements which are primarily economically motivated have more direct environmental effects, compared to agreements which are more politically motivated. This is because the economically driven integration zones create or divert more trade, which can have a significant effect on the environment. Integration zones which are primarily politically driven are therefore not included in this study. However, even primarily politically driven integrate zones can have a direct effect on the environment if co-operation on environmental policy follows (as in SADC), or the member countries present a common front in international negotiations on environmental matters (as with ASEAN). In some integration zones, political and economic motivations overlap (e.g. ASEAN/AFTA).

Fig. 1/3: Motives for regional integration

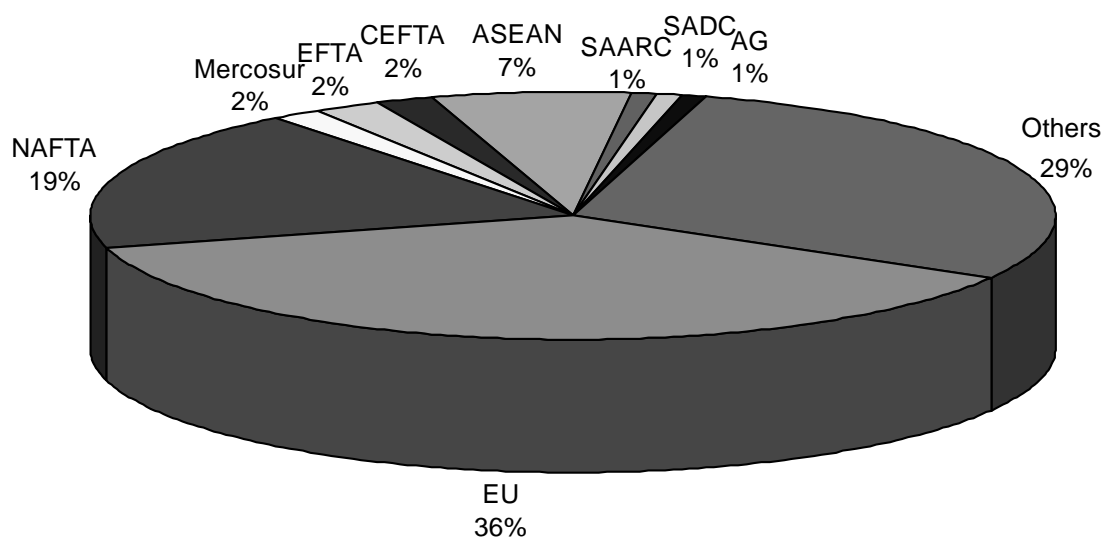
Primarily politically motivated:	Primarily economically motivated:
<ul style="list-style-type: none"> • ASEAN • SAARC • SADC • CARICOM • MCCA • Lomé • ECOWAS • ALADI 	<ul style="list-style-type: none"> • EU • NAFTA • APEC • Mercosur • EFTA • CEFTA • MFTZ • Andean Community (CAN)

The Transatlantic Free Trade Area (TAFTA) and the Free Trade Area of the Americas (FTAA) currently being planned cannot yet be clearly categorised, as it is not yet possible to differentiate between political and economic motives at these early stages in the negotiations, and both types of motive play a part in the efforts towards integration. In addition, the various integration partners have different motives for wanting to come together.

1.7.3 Size of the markets created and external trade

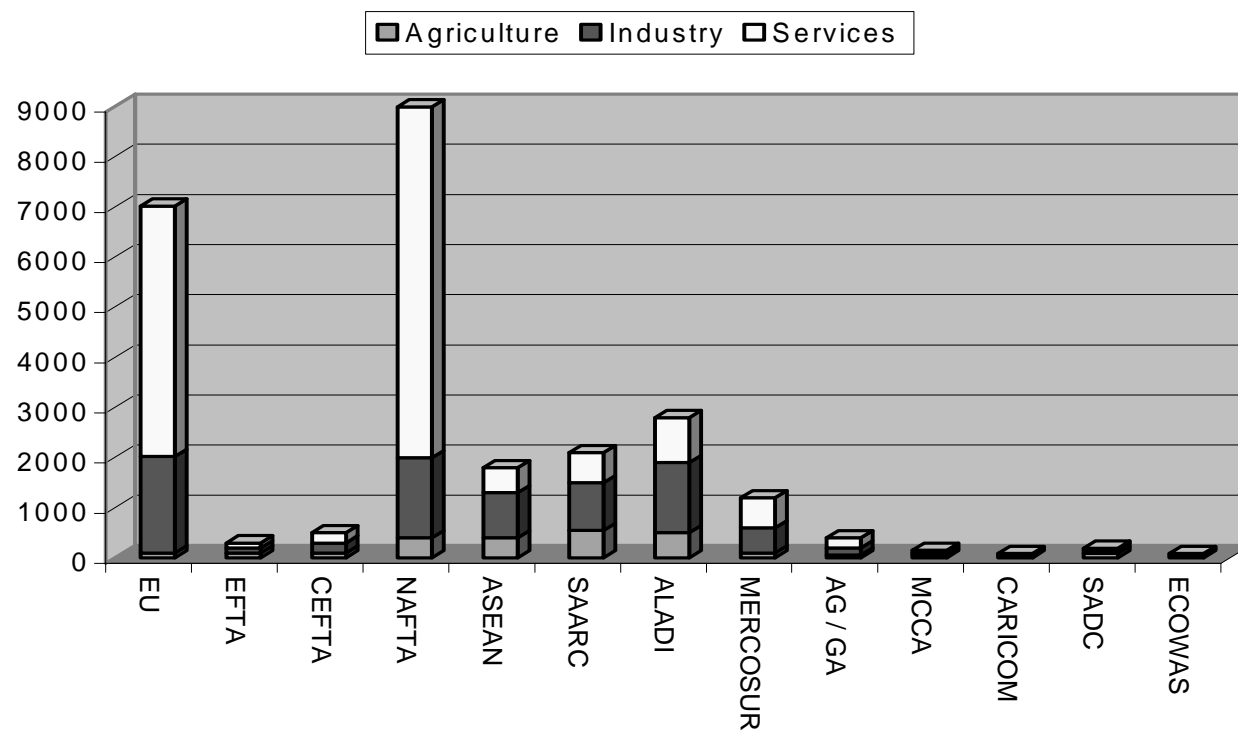
The size of the integration zone as a market is primarily important with regard to the potential effect on trade. The bigger the market, the stronger the possible effect on the creation of trade. Big markets also influence the global flow of goods, which in turn induce environmental effects. Their influence on the environment therefore reaches far beyond their own territory.

The most important integration zones with regard to the market size are the EU, APEC, and NAFTA. TAFTA would have a very strong trade creation effect. As well as the size of the market created (figure 1/4), the level of external trade with third countries also plays a part. Fig 1/5 indicates the relative sizes of the various integration zones in terms of GDP in billions (= 1000,000,000) of US dollars.

Fig. 1/4: Share of each agreement in world trade

Source: IMF 1996

Fig. 1/5: GDP in billions of US dollars



Source: Author's representation, based on World Fact Book 1996

1.7.4 Level of development of integration partners

The level of development and the economic structures of the participating countries have a decisive influence on the success of integration. The positive effects for trade are greater, the higher the level of development of the participating countries is, because the effects connected with intra-industrial trade in substitutive trade structures are greater than the trade effects between countries with a low level of development and complementary economic and trade structures.

A difference must be made between structurally homogenous and structurally heterogeneous integration zones (Proff/Proff, 1996). Structurally homogenous integration zones include only industrialised countries (such as the EU), or only developing or emerging countries (e.g. Mercosur, MCCA, CEFTA, the Andes Community). Heterogeneous integration zones include different types of countries (e.g. NAFTA). Figure 1/6 groups the integration agreements dealt with here according to the level of development of the integration partners. In the case of integration zones which include industrialised and developing countries (e.g. EU -Lomé) there is a relatively high proportion of trade in raw materials and labour-intensive goods which usually imply environmental problems.

Fig. 1/6: Typology according to the level of development of the integration partners

Agreement	IC	NIC	DC
EU	x		
EFTA	x		
Lomé	x		x
CEFTA		x	
NAFTA	x	x	
APEC	x	x	x
ASEAN		x	x
SAARC			x
ALADI		x	x
Mercosur		x	x
Andean Community (CAN)			x
MCCA			x
CARICOM			x
SADC		x	x
ECOWAS			x

1.7.5 Depth of integration

The four most important integration zones show very different levels of economic integration (figure 1/7).

Fig. 1/7: Levels of integration

Levels of integration	EU	NAFTA	Mercosur	ASEAN-7
Free trade in goods	5	4	2	2
Free trade in services	4	3	1	2
Mobility of workers	4	2	1	1
Supranational institutions	5	2	1	0
Coordination of monetary policies	4	1	0	0
Coordination of fiscal policies	1	0	0	0

Author's own presentation, based on Proff/Proff, 1996: 394. 0 = lowest, 5 = highest degree of integration.

NAFTA: USA, Canada, Mexico,

Mercosur: Argentina, Brasilia, Paraguay, Uruguay,

ASEAN-7: Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam

As the depth of integration increases, creation of trade increases as a result. Also, an increasing number of political areas are involved in the regional integration. This results in increasing effects for the environment, which become more obvious as the depth of integration increases. Fig. 1/7, however, shows that only a few agreements are based on deeper integration. It has been observed, though, that many integration agreements bear names which reflect not the level of integration which has actually been achieved, but the level which is aimed at. Examples of this are MCCA or ECOWAS, which are certainly not in reality common markets. Fig. 1/8 therefore refers to the depth of integration really aimed at.

Fig. 1/8: Depths of integration

Agreement	Depths of integration				
	Preference system	Free trade zone	Customs union	Common market	Economic union
EU				x	(x)
EFTA		x			
Lomé	x				
CEFTA		(x)			
NAFTA		x			
APEC	x	(x)			
ASEAN		(x)			
SAARC		(x)			
ALADI	x				
Mercosur		(x)	(x)		
CAN		(x)	(x)		
MCCA			(x)		
CARICOM		(x)	(x)		
SADC		(x)			
ECOWAS		(x)			

1.7.6 Implementation of the agreements

The expected (positive) effects (Section 1.2) can only come about if the agreements are realised. A number of agreements are still in the planning or testing stage - e.g. TAFTA and APEC. The economic and ecological effects of these agreements can therefore only be estimated as a tendency. Some agreements, such as ASEAN/AFTA and SAARC are not expected to be completely implemented within the foreseen time. The large number of exceptions often included with regard to the liberalisation of trade can often weaken or delay the implementation of an agreement. In the case of some agreements, such as NAFTA and Mercosur, advances in liberalisation have been achieved quickly. Others, such as MCCA and ECOWAS, have stagnated at very early stages (see section 1.8).

A distinction must be made between integration agreements in which one country is dominant, determining the direction and the pace of integration, and those with a more balanced structure between the countries involved. The implementation of integration will also depend on whether compensatory mechanisms are included in the agreement, as is the case in the EU; thus reducing resistance to the internal liberalisation of trade. The EU is dedicated to a balancing of the standards of living within Europe by means of economic and currency union; to this end, the "structural adjustment fund" is used. Internationally, however, this is an exception; in other integration areas there are no really functional compensation mechanisms to be observed.

1.8 Conditions for success of integration

It has been noted that hardly any integration agreements between non-industrialised countries have been able to keep to the schedule first agreed on (WTO 1995:1). In the light of the huge variety of approaches to integration, it is hardly possible to reach general conclusions or to estimate the chances of success of a free trade agreement; there are too many (partly external) variables which play a part in determining the development within an integration area. The continuous success of the European Union is, in an international context, an exception to the rule - especially in the light of its equally continuous widening and deepening. In spite of this, some aspects can be generalised which may have a positive or negative effect on the prospects for the success of integration. These can in general be summarised as homogeneity, growth, and stability (Langhammer, 1993). On closer inspection, however, a much more differentiated structure is seen. Some of the following thoughts result from reflection on the previous observations of the effects of integration. Overlaps are therefore unavoidable.

1.8.1 Evaluation of practical experience

- **Political commitment**

It is essential that there be the **political will** and **support** from all partner countries. Dedication and commitment are needed. Binding commitments between the integration partners must be possible, and these must be accompanied by the political will to implement them. In many cases, measures are agreed upon, but their implementation is neglected. The revival of Mercosur, for example, was a result of intensive diplomatic activity by the presidents of the

states involved. The collapse of the former East African Community (EAC I) was mainly caused by deep mutual dislike among the heads of state. For integration to be successful, it is not enough for the participating countries to see individual advantages. The political will must also include common interests as a central aspect, and not be abandoned as soon as problems arise. One speaks of the so-called ALADI virus when countries start meeting the agreed obligations only to the extent that they may see to be right from time to time (Roett 1999:60).

Integration agreements are a tightly woven web of relations, extending into many areas, and valid for a long period. The resulting **interdependence** is artificially created, but wanted and accepted by all involved. The integration partners feel bound to the agreed co-operative behaviour. Implementation of common policies and measures will depend on how intensively the partners support and implement politically the required application of financial and human resources, and to what extent they create the necessary legal and administrative framework, including right down to the lowest level. Local administrative structures in particular often lag far behind integrational developments.

Nationalism provides an unfavourable breeding ground for regional integration. It is therefore important to determine to what extent the partners are prepared to, at least partly, **relinquish national sovereignty**. Relinquishing sovereignty also means limiting the state's monopoly on environmental regulations. More intensive integration, such as that of the EU, also leads to a **legal community**, the members of which are bound by a web of regulations. There are often clear regulations about what is allowed and what is forbidden, often monitored by central bodies. Agreeing to adhere to the agreed regulations (and to submit to sanctions in the case of breaches) is primarily important as an expression of willingness to cooperate; sanction mechanisms are hardly ever applied in practice. Countries which implement agreed common policies, while other member countries do not, tend to put themselves at a disadvantage by doing this. This then limits their readiness to concede sovereignty (Pethig, 1991). There is, however, great reluctance to relinquish national sovereignty in all integration zones.

Every process of integration is marked by conflicts and contradictions resulting from the different interests of the countries involved. A necessary pre-condition for economic integration is **political harmony** - or at least absence of conflict. This will be the weaker, the greater the economic and other problems between the states are. Liberalisation of trade in goods implies a philosophy of political economy which must also be compatible with the philosophy of the state. Without a **commitment to democracy** and a **decentralised state structure**, free market orientation at the national level stands as little chance of success as regional free trade.

A great deal of **heterogeneity** in the economic and social structure of the societies is a considerable potential for disintegration, and often leads to a stalling of attempts to achieve integration, or in restricting integration measures to relatively non-controversial matters. Mercosur, for example, has only marginal significance as a market for Brazil. For this reason, in the event of conflict between its regional and its global market interests, the more important global perspective will always dominate. Instead of multi-national integration, what then develops is more bi-lateral and partial approaches. In the case of homogenous integration zones, the potentially problematic pressures to adapt are fewer, and the resistance to internal liberalisation is correspondingly weaker.

To put it in a positive light: the greater the socio-political similarities (history, culture, language, political system, legal system, economic system, lifestyle, consumer habits), the lower are the disintegrative centrifugal forces, and the more co-operative the atmosphere between the partner countries. On the whole, there must be extensive congruence of thought. Over time, greater understanding for the positions of the other partners develops, as does the ability to see one's own position relative to the others. The partners often have similar ideas about what constitutes a fair solution, as can be observed e.g. in the case of NAFTA. It has proved most favourable that there be a preliminary phase of silent integration, as was the case leading up to the formal foundation of NAFTA, in the form of trade policy and links in the fields of trade, production, and social policy.

- **General economic conditions**

The greater the similarities between the co-operating countries, the easier it is to balance out the advantages and disadvantages of integration, especially with regard to trade, direct investment, and employment. However, if the similarity is at a *low* level of development, the prospects of success are not good. A certain level of economic development is a prerequisite.

Geographical proximity and infrastructural connections between the partner countries are factors which favour regional integration. Internal trade between the ECOWAS countries, was, for example, hindered for years by inadequate road connections. Only with the help of external donors have a coastal highway and the trans-Sahel highway been built in recent years. Empirical enquiries (Badiane, 1997) have also shown inadequate transport infra-structures to be a recurring impeding factor.

- **Economic structures**

In the case of **complementary** economic relations, the economic structures must complement each other in such a way that a serious problem of balance of payments does not occur because of a grave imbalance in trade. The potentials of complementary structures are used astonishingly rarely - especially in Africa. Complementary structures normally lead to the creation of inter-industrial trade in the integration zone. The higher the level of industrialisation, the better the chances of improving the complementarity and the complexity of the division of labour by trade. Substitutional structures at a low level of development rarely lead to a creation of inter-regional trade, since the partner countries tend to remain oriented to the outside with regard to trade (MCCA, ECOWAS). On the other hand, groups of countries of this kind (e.g. the Mediterranean countries) are very similar with regard to their problem structures and the scarcity of available means, so that it would seem to make sense to seek shared solutions in the context of regional cooperation.

Substitutional provision of factors and resources, or **economic structures**, tends to lead to an intra-industrial exchange of goods. This, however, presumes a high level of development (as, for example, in the case of the EU countries) in order to bring about a significant level of inter-regional trade. Mercosur, for example, includes 200 million people, only 10 % of whom, however, have a purchasing power equivalent to the average in Spain. Most of the integration zones in Africa are also economically weak markets. At the same time, the competitiveness of the partner countries must be at a comparable level of development, and the conditions of competition must at least be similar, in order to avoid distortions. Competition law therefore plays an important role in the integration process.

Provided that it is realistic to assume widely varying starting conditions in the partner countries, any integration which aims at more than partial co-operation will require economic **re-structuring** on the national levels, and will not be restricted to mere overcoming of national borders by trade policy. Integration thus implies **disintegration of national structures**, whereby the national components are to be amalgamated into new structures on a regional level. Integration is often used by the national elites as an instrument to enable them to participate in global power (Dietrich 1998:308). This is not the only reason why integration can only be understood in a long-term perspective, and must be distinguished from temporarily or functionally limited cooperation.

- **Macroeconomic conditions**

It is important that there should be no other **obstacles to trade** working against the liberalisation of trade within the integration reason. This liberalisation is after all intended to motivate enterprises to engage in import and export business. Such obstacles often include tax distortions and administrative problems (e.g. regulations about the origin of goods) in the process of trade, restriction to direct investments by regulations on residence or competition law, inadequate opportunities for enterprises to obtain information about markets, customers and suppliers, general lack of management and marketing skills, currency risks, exchange controls, inadequate finance and payment structures, restrictions on mobility of labour by visa requirements or employment law, etc. Empirical studies point out (Badiane, 1997) that inter-regional creation of trade is especially impeded by inadequate financing opportunities at the private level. The conditions for internal investment and direct investments are especially important in this respect (see section 5.1.2).

The larger the integration zone, the stronger the trade-creating effects will be. This will be more pronounced if customs duty barriers between the member states were very high before the integration. The lower external duties for third countries were before and after integration, the lower will be the diversion of trade. The abolition of duties or taxes on cross-border trade in goods, and the removal of non-tariff trade barriers is a necessary, but not in itself sufficient pre-condition for successful economic integration. An important factor for success of economic integration is a stable **macroeconomic and political environment** in which private business activity can take place. On the monetary level, this includes realistic and reliable currency exchange rates,¹¹ largely inflation-free development, a policy of privatisation and support for private enterprise (including appropriate taxation policy), and the development of an effective banking system. Without economic and political stability, efforts towards achieving integration will have no basis, as was well demonstrated by the political turbulences in Paraguay and Ecuador in 1999. The countries involved in the integration zone are responsible for shaping these conditions. *Economic* integration, however, is primarily achieved at the level of private enterprise and by the consumers. A strong consensus and convergence of economic policy between the partner countries is therefore favourable for integration. In Mercosur, e.g., the complete lack of co-ordination of economic policy has been one of the greatest obstacles.

If the conditions are too unfavourable, the commitment of private enterprise will soon evaporate. The necessity for linking the state and the private levels has become increasingly obvious, and - as in the case of ECOWAS II - has also been formally established. This, however, should not be restricted to the involvement of enterprises, but should especially aim at achieving the **participation** of civil society.

¹¹ Monetary integration, as in UEMOA or the EU, provides an especially favourable environment for integration with regard to the production and trading of goods. It is not, however, essential, and requires the completion of a number of prerequisites which have not been achieved in many integration zones. See section 1.8.

- **Disparities and differences**

When moves to achieve integration stagnate or fail, it is usually for two reasons: **economic disparities** and/or **political disagreement**. Economic disparities occur when the countries in the integration zone have very different **starting conditions** with regard to geographical size, number of people, infra-structure, transport systems, administrative structures, raw material resources, economic power, incomes level, level of employment, inflation, dependence on imports and exports, incomes level, social standards, environmental standards, special geographic features (coastal region, inland region, mountains, rivers), etc. Under liberal conditions, the factors of production do not choose their locations with regard to balanced regional development, but according to criteria of micro-economic efficiency. Unequal competitive conditions and mobility of factors of production can thus even increase interregional inequalities, instead of helping to level them.

The dynamic of a regional agreement depends on how successful the countries involved are at implementing the positive economic and political effects described in section 1.2 - i.e. in using the advantages of regional integration and the aims of the regional integration project agreed between the partner countries. This involves strong integration in the world economy at the same time as internal development. A realistic foreign exchange policy is also required. The example of Mercosur shows how much the integration process depends on the interests of the dominant partner country, Brazil, which is strongly oriented towards multilateral economic networks, and for which the small integrated market is only of secondary importance.

The greater the inequality in the distribution of the advantages and disadvantages of integration between the partner countries, the greater will be the significance of unsolved political, territorial, ideological, ethnic, or religious conflicts which prevail between the partner countries at the start of integration, or which develop during the process of integration, and which are revitalised or intensified by unsatisfactory effects of integration. Conflicts have a very negative effect on the inflow of direct investments. Without direct inward investments, internal liberalisation of trade is not an adequate driving force for integration.

- **Compensation mechanisms**

Larger, economically stronger countries tend to benefit more from integration than do their smaller, weaker neighbours. In most of the South-South integration projects, which were partly conceived as counter balances to the dominant industrial countries, asymmetrical relations have developed (Brazil in Mercosur, Kenya in EAC I, Nigeria in ECOWAS). There are a number of examples of integration efforts which have failed for this reason - e.g. the split off of the Andean group from the earlier Latin American Free Trade Association (LAFTA), the collapse of the East African Community (EAC I) between Kenya, Uganda, and Tanzania, and the disintegration of the Central American common market (MCCA), which even degenerated into the "Football War" between Honduras and El Salvador. There are also tendencies in the ASEAN/APEC region - driven mainly by Malaysia - to create a sub-regional *East Asian Economic Community* (EAEC).

If the positive and negative effects of integration are distributed unequally among the individual member states, weaker partners are often granted a special status and exceptional regulations, in order to counteract the anti-integrational effects. Inter-regional **compensation systems** can play a (limited) role in this respect - either by package solutions or by a kind of

"clearing" of the balance of advantages and disadvantages of different partial aspects (e.g. concessions in fisheries policies against advantages in the timber industry), or by financial **transfers** such as in the EU with the European Regional Funds and various other funds. This is especially necessary if the state budget is largely financed by customs duties (in many cases up to one third, in some states as much as 60 - 80 %). If it is not possible to compensate for the loss of customs income caused by liberalisation, especially by substitution by other types of tax income generated by the creation of trade, the success of the integration is endangered, and the agreed removal of barriers to trade may easily stall. There is an increasing tendency to compensate for regional disproportions by state intervention. The extent and scope of exceptional regulations should not, of course, lead to the integration agreement coming to be mainly a long list of special regulations with regard to intra-regional trade.

With regard to the **liberalisation** of tariffs, it is noticeable that dismantling of customs duties is carried out mainly in areas based on complementary economic relations. Exemptions from customs duty, or major reductions in the amount payable, are granted mainly for goods which are needed, but not produced, in the region granting the preference. In the EU, for example, such preferences are applied especially to raw materials. In other areas, in which substitutional relationships could lead to competition - e.g. in agriculture - there are partly no preferences or sometimes even barriers, partly only under the side-condition that no problems arise (related to in the EU as "sensitive" areas or goods). In the Lomé convention, for example, there are at least potential barriers against industrial semi-finished and finished products. It is also conspicuous that regional integration agreements often exclude agriculture, or treat it with special regulations. This is, of course, a considerable obstacle to integration in regions which are heavily agricultural, such as ECOWAS (Badiane, 1997).

In integration agreements between developing countries with a low level of economic development, the liberalisation of trade must be supported by extensive further efforts, especially to develop the regional infrastructure, the mobility of labour and capital, and to balance regional disparities. Experience with **compensation funds** outside the EU has to date shown that the funds have normally been inadequate and their distribution and administration inefficient. The former *East African Community* collapsed in spite of existing compensation agreements which were not applied.

- **Institutional capacities**

The political driving force must also ensure that the institutional development keeps pace with the economic integration. This applies to the development of adequate institutional capacities on the national level, as well as efficient institutional and legal structures on the regional or supra-regional level. The integration process in the EU has been accompanied by the development of supra-national institutions with decision-making powers. These also provide an organised balancing of interests in the context of institutionalised negotiations (Sangmeister 1999:73). A limitation of the institutionalisation to the executive (as in Mercosur) restricts the participation of the population in the integration process. Weak institutional structures can lead to bottlenecks in the integration process, since the problems grow with the progress of integration, requiring appropriate mechanisms for finding solutions and co-ordination.

If too many of these prerequisites are not fulfilled, then integration efforts will not be able to achieve the desired economic impetus. The latest UN Index of Human Development (July 1999) shows in stark clarity that liberalisation of trade is only one of many conditions required for success. The twenty least developed countries in the world are *all* in Africa, they are *all* parties to free trade agreements, and they are *all* partners to the Lomé convention.

1.8.2 Strategic considerations

The forms of integration outlined in section 1.3 show a progressive sequence of forms of integration. This can be observed in many cases, the first step being the establishment of a free trade zone, which is later developed into a customs union, and then developed into a common market, and developed even more intensively, as with the EU.

Supra-regional, sectorally limited integration projects can improve the conditions and pre-requisites for economic growth and development, as shown by the example of the former SADCC. In SADCC, an attempt was made to implement an alternative to classical integration via market integration and customs union by concentrating cooperation on the development of infrastructure and the development of industry by investment promotion. The negative side of this, however, was the massive financial dependency on donor institutions and the lack of any further-going competences of co-ordination.

In general, it can be said that prospects for success of co-operation and integration projects are greater, the less ambitious they are - i.e. the more limited the initially envisaged co-operation is. In the course of time, of course, the scope can be extended. Mercosur, for example, is characterized by (initially) only a small number of members and a pragmatic approach. It is strategically favourable for the success of integration to take only a few steps, but for these to have a larger multiplier effect, for example, internal zero customs duties and a common external customs tariff. These important steps are practically irreversible. It is interesting to note that ASEAN, with its very reserved integration policy, shows the best economic success. SADC, too, is pursuing a modest course of integration. Mercosur has found that the member states cling tenaciously to their national sovereignty, thus slowing down any movement towards integration. The level of supra-national institutionalisation is also correspondingly low. Smaller integration zones tend to be more successful than larger ones. In Latin America, comprehensive integrationist intentions have consistently failed. In Africa, continental plans are totally illusory (Dietrich 1998:307). An aggressive, "pushy" integration strategy can therefore quite easily have a counter-productive effect.

As a matter of principle, the questions of **widening** or **deepening** will arise at some time in every integration process. This is very clear in the case of the EU, but also with NAFTA, in Mercosur and ASEAN. In spite of various attempts in theory, there is no convincing evidence for an "optimal integration zone"¹² with regard to the size or the number of members or their required level of connections at the beginning of the integration process.

Widening the structure of the members implies in the first place especially static trade creating and diverting effects. In the case of a heterogeneous member structure, as will be the case in the EU as it extends to Eastern Europe, the internal problems of adaptation are also increasing. If these problems are not countered by suitable measures, then they can lead to asymmetrical developments. This has also occurred in Mercosur. An extension of the integration zone therefore requires a certain **potential for absorption** of integration-caused strains by the other members. This ability doubtlessly increases in the course of the deepening of the integration, in so far as structural distortions decrease, and mechanisms for cooperation and compensation improve. A balance therefore has to be found between widening and deepening integration. There are, however, no general rules on this.

¹² For monetary integration, the theory of the optimal currency zone is much more developed and advanced.

Widening would, however, require a prior internal consolidation. This is borne out by earlier, originally very widely ambitious integration attempts in Africa and Latin America, the failure or stagnation of which can be traced back to the large number of members and the resulting very large differences between them. As a consequence of this, both in Latin America and Africa, sub-regional groups of states have been formed which aim at a deeper integration between just a few states, instead of wider "shallow" integration.

In spite of this, it can be sensible to extend the integration zone, even at a level of integration which is not yet very deep. This is because an important aspect of integration is in the resulting greater power it gives in political negotiations. A gradual widening of the integration zone can prepare the way for a later further widening and deepening. An example of this is the pursuit by the Mercosur states of a policy of involving other states and groups of states by bilateral agreements (Chile, Bolivia, the Andean Group). This enhances the general negotiating power of an extended Mercosur against industrial countries, and especially with regard to negotiations on a Latin American free trade zone, or even a Free Trade Association of the Americas (FTAA). There is also a strategic advantage in that the necessities of adaptation in an integration zone which consists of "neighbours" are fewer than they would be in an integration zone which included North American, or European industrial countries, in which the heterogeneity would increase *very* much. An integration project which is at first restricted to South America could lead to scale effects which would improve the absorption capacity for the adaptation requirements in a later hemispherical integration zone, or cooperation with the USA or with the EU.

The formation of regional integration zones is often seen as a first step, and a *second-best* solution, to the real aim of a *first-best* solution of economic and ecological problems. With regard to environmental protection, this is certainly an accurate assessment. Deeper regional integration opens up possibilities for environmental protection which at present are hardly realisable at a global level. With regard to both economic and ecological perspectives, doubts are justified, because regionalisation in the context of limited free trade agreements has a strategic quality - which can not always be clearly seen - designed to assert economic, political, and, increasingly, ecological interests against other economic regions. This is also made clear by increasing activities to form bi-regional free trade agreements which are quite clearly **strategic alliances** (see section 3.6.6).

2. Effects of regional free trade on the environment

This chapter examines the **environmental effects** of regional free trade agreements. This will be done in a comprehensive manner, not to be confused with the much narrower perspective of projects designed to assess environmental impact, as described, for example in Article 23, 143 of the Lomé Convention, but more in line with Article 38, which stipulates that "... [the] areas of ACP-EC co-operation [...] shall be systematically examined and appraised in [the] light of real protection and effective management of the environment and natural resources".

In the following section, 2.1, the **causes** of environmental strain will first be theoretically deduced, and theoretical approaches to solutions will be outlined. This will be followed by suggestions for the systematic **assessment** of environmental effects. Section 2.2 shows the **problem** areas, in relation to this context of effects, in the examined real integration agreements, with reference to environmental protection. These are at the same time **fields of action** in which environmental policy instruments are applied. Section 2.3 deals with **methodology** for assessing and *evaluating* the environmental effects of integration agreements, and includes a proposal for a real approach to evaluation.

2.1 Theoretical derivation

2.1.1 Causes of environmental strain

In a global perspective, there are really two closely related main causes of environmental strain: **population growth** and private and state **poverty**. The central assumption that human economic activity, without being countered by environmental policy, will lead to increased environmental strain caused by production, transport, and consumption, is realistic. Even assuming a constant per capita environmental strain, absolute environmental strain, *ceteris paribus*, will be progressive, not linear, with every new inhabitant of the planet. Projected estimates of world population growth are thus cause for concern (see section 2.2.5). The fact that the effects described in the literature as "market failure" allow the externalisation of environmental costs, does not need to be entered into in depth here any more than does the logically obvious approach of reducing environmental strain by internalising environmental costs. The Mediterranean example can clarify this. In the course of liberalisation of EU agricultural policy, the Mediterranean countries surely have a very good chance of taking market share from the southern EU countries. However, this is only the case because they do not have to pay the appropriate scarcity price for the water needed to irrigate their farm land. If the appropriate prices had to be paid, there would hardly be any competitive advantage worth mentioning. At present, extremely rare water resources are being grossly wasted.

2.1.2 Perspectives: the J-curve effect

The connection between trade liberalisation and the environment is indirect. There are two related correlations:

Regional liberalisation	⇒	Growth	
		Growth	⇒ Environment

The connection between regional liberalisation and growth can be seen as certain. Growth, however, can have either a positive or negative effect on the environment.

2.1.2.1 Environmental strain

So far, it has been implicitly assumed that consumer behaviour remains constant. This assumption, however, is not realistic. The countries carrying out economic liberalisation, and with growing populations and economies are also influenced by western consumer patterns. Since there is a lot of room in these for improvement, the environmental deficits of the industrial countries are increasingly and progressively transferred, especially to the rapidly developing transforming and threshold countries of Asia and Latin America, with a less dynamic effect on the "normal" developing countries.

In this connection, **structural adjustment programmes** (SAP), postulated in many countries by the World Bank and/or IMF to achieve market economic re-structuring and integration in the global economy, have been criticised for involving cuts in state expenditure in "peripheral" areas, such as the environment or health services, while at the same time stimulating production methods in industry and agriculture which cause environmental strain (MFTZ Environment Monitor 1.1999:4).

Even in an optimistic light, the most favourable anticipated development of environmental strain in connection with regional integration efforts is a J curve of environmental quality (see section 2.1.3.6.4).¹³ If increased economic activity leads to greater environmental strain, then regional integration means that environmental problems will increase. Without a counter-active environmental policy, environmental strain will increase because of the induced growth effects (population, consumption, production, trade, direct investment). This means that environmental quality will deteriorate in inverse proportion to economic growth (falling branch of the J curve) because the environmental costs are not internalised (market and policy failure). If it is assumed that the population of Mercosur, ASEAN, China, India, etc. are striving to achieve consumer structures similar to those in the west, using subsidies which cause environmental strain, the negative trend becomes quite clear. Supporting these trends by regional integration will thus, *ceteris paribus*, worsen the quality of the environment. It is therefore necessary to oppose this trend by putting in place positive environmental effects and relief of environmental strain (rising branch of the J curve) which can be results of regional integration.

2.1.2.2 Environmental relief

Regional integration improves the efficient allocation of resources, promotes economic growth, and increases general wealth. In terms of comparative statistics, a displacement of demand away from domestically produced goods to imported goods can lead to a reduction of environmental strain in the importing country, provided that the environmentally relevant production standards (PPM, see section 5.1.1) in the exporting country are higher, thus leading to a net reduction in strain on the regional and global environment. At the same time, the distribution of environmentally-friendly goods, services, and technologies is promoted, and there are incentives to increase environmental standards, especially by increased competitive

¹³ An inverse U curve is often mentioned - in analogy in the final result - which does not refer to the quality of the environment, but to environmental strain (e.g. Beghin/Potier, 1997). The empirical evidence for or against the validity of J curves or U curves vary greatly. A scientific discussion of these J or inverse U curves will not be entered into here.

pressure between more highly developed countries. If the hypothesis that increasing per capita income is accompanied by a corresponding increase in environmental awareness is correct, and if private and public poverty can also be reduced in the process of economic growth, making it possible to divert more and more resources towards environmental protection, then the trend for environmental quality to deteriorate can be stopped, and, indeed, converted into a positive development (rising branch of the J curve - see section 2.1.3.6.4). A precondition for this is that increasing per capita income really does result in increasing environmental protection.

2.1.2.3 Policy failure

On the basis of hitherto experience, however, (see chapter 3), some scepticism is called for here. In reality, all states are far from internalising the environmental costs. This is based firstly on a lack of political will (**policy failure**), and not on operative impossibility. The environmental strains arising from economic activity would either not take place, or only be in a significantly reduced form, if the already *existing* environmental regulations were applied and enforced consistently. The often quoted environmental problems in the border region between the USA and Mexico are caused primarily by investment, production, and trade. If effective environmental policy had been applied, however, this could not have happened on this large scale. Factually unfounded fears that environmental protection can lead to competitive disadvantages often lead to a failure to implement environmental initiatives.

Policy failure is an international phenomenon. It is, above all, a problem of awareness. Public opinion tends to play down environmental dangers, and towards an optimistic appraisal of possible solutions. "The willingness of people to forego present advantages for the sake of avoiding future disadvantages is fatally underdeveloped" (Hoimar von Dittfurt, quoted in Wöhlcke, 1987:62). The perspective of environmental policy is therefore restricted to the present. Short-term concepts, however, are not suitable instruments for countering long-term developments in environmental strain. The short-term rationality is in stark contrast to long-term irrationality. Rationality on the small scale is opposed to irrationality on the large scale. Combating illegal dumping of waste seems to be more important than global restoration of environments. Things which are forbidden in small communities are allowed in larger ones (waste of resources, destruction, air pollution - see Wöhlcke).

In the face of massive economic and social problems, poor states cannot be expected to set ecological priorities when other problems are much more to the fore. Ecological interests will be subservient to economic progress, which will be measured in terms of a consuming standard of living. This is especially the case for countries with a high level of debt, who are forced to try to improve their foreign currency situation. In developing countries in particular, the preferences of the citizens are often not included in the process of determining political objectives. An inadequate environmental policy, or an inadequate implementation of environmental measure is not always an accurate reflection of the will of the people, who may well prefer a higher level of environmental protection. The environmental policy concept of good governance includes an environmental dimension.

2.1.3 Typology of environmental effects in regional context, according to OECD (1994)

The OECD presented a comprehensive approach in 1994, in which the environmental consequences arising out of regional integration analysed systematically and in terms of typology

(OECD 1994). This approach is outlined below, and expanded on in several points. Section 2.1.5 contains further systematic suggestions for *analysing* environmental effects of regional integration zones. Section 2.3 expands on this by looking at the methodology for *evaluating* environmental effects.

2.1.3.1 Type of consequence

There are three main types of environmental effects, depending on the type of their consequences, which can increase or decrease, overlap, and do not have to appear exclusively (OECD 1994 - see section 2.3). **Pollution effects** consist of increased or decreased emissions of damaging substances into the air, water, or ground, including the disposal of waste ("brown pollution"). Pollution effects also include the life cycle, recycling and re-using, and the disposal of non-hazardous and hazardous wastes. Dealing with poisonous substances is also to be seen in terms of pollution effects. **Health and safety effects** relate to increased or decreased levels of protection for the life and health of people, animals, and plants. These effects include hygiene, water supply, quality of foodstuffs, spread of environmentally conditioned disease, and epidemics. **Resource effects** ("green pollution") include the use of energy and other natural resources, destruction of living space and eco-systems, increasing or decreasing destruction of the variety of species, and changes in the use of land. These effects can be caused by the direct use of natural resources, or indirectly, as a result of economic activity which requires natural resources as raw material.

2.1.3.2 Geographical dimension

Environmental effects can occur on different spatial levels. **Local** and **national** environmental effects are limited to the territory of one country. They include e.g. town smog or polluted waters. Cross-border **regional** environmental effects occur in two or more countries, e.g. acid rain, water pollution, or shared resources. An extreme example is the drying up of the Aral Lake caused by over-use of river water resources on national territory. **Global** effects concern all countries. They include damage of global commons, such as the earth's atmosphere, the oceans, and the Antarctic. Countries and regions which are not integrated in the free trade agreement concerned can also be affected by the environmental effects of that agreement, since a clear demarcation is not possible, since eco-systems do not respect national boundaries (OECD, 1994; Stevens, 1994:8). This is sometimes referred to as the de-territorialisation of environmental problems.

2.1.3.3 Levels of causes

The various causes of environmental effects are the starting points for the suitable measures and thus determine the nature and selection of *policy responses*. Generally speaking, three levels can be identified:

- The **structural characteristics** of the integration zone, which influence the environmental situation, include socio-economic and physical factors, such as the ground and the climate.
- On the level of **behaviour**, the individual players follow different aims and strategies. Individual subsistence economy produces different effects than collective interests, which are pursued by donor institutions and governments. This often comes into effect in specific culturally determined consequences for the environment.

- Both of these are overridden by **secular trends**, such as population development, migration, spread of monetary economy, or reduction in state activity.

2.1.3.4 Static environmental consequences of regional free trade

Creation of trade and diversion of trade, and the re-allocation of factors of production are the most important environmentally relevant (comparative) static effects of regional integration. They lead to quantitative changes in production and consumption structures. Static effects have a more short-term effect, and can thus be better observed. In spite of this, no adequate empirical investigations have been carried out, and those that have been carried out have hardly ever succeeded in distinguishing the causal influence of regional free trade from other influences. The thesis of the regional free trade agreement as a laboratory is therefore not strongly founded. The theoretical models which attempt to explain trade liberalisation and economic integration can also only provide an inadequate reflection of reality, and are hardly suited to examine the consequences of foreign trade policy for the environment. Most of the models so far, for example, have assumed perfect competition (Anderson, 1992; Siebert, 1992).

The static effects have economically ambivalent consequences, since both positive and negative effects on wealth are associated with the trade and allocation effects, both for the states involved in the integration, and globally. Negative effects on the environment occur when there are distortions (e.g. by subsidies for domestic products), which cause "wrong prices" which stimulate the production of environmentally damaging goods, thus preventing an efficient allocation of resources. The aim of trade liberalisation is to remove such barriers to trade, with correspondingly positive results for the environment. The at least partial liberalisation of resource-intensive areas, such as agriculture, which have so far only been partially achieved in international negotiations (especially in the GATT Uruguay round), has been realised in NAFTA, AFTA, and in Mercosur as a component of the regional free trade agreement.

In the integration zone, there are re-allocations of production factors and specialisations. Countries with ample environmental factors specialise in resource-intensive goods. This is problematic for developing countries if the lack of environmental policy, which is normally the case, makes it wrongly seem as if there were ample environmental factors. This can lead to a wrong economic specialisation, and has a negative effect on long-term welfare. Specialisation in labour-intensive production can also lead to environmental damage if environmental policy has been inadequately implemented, as in the case of the Maquiladora industry in Mexico (see case study in section 4.1). Analogous examples can be found in *Export Processing Zones* in many countries in which the maintenance of environmental (and social) standards has been relatively unimportant compared to tax relief and other preferential treatment.

The higher demand for goods from the integration zone caused by the effects of trade diversion and trade creation is bound up with *positive* environmental effects, if these goods can be produced *within* the integration zone with less environmental strain than outside it, which is the case if, for example, environmental costs can be internalised. On the other hand, it is also possible that trade diversion can cause demand for environmentally friendly goods from outside the integration zone to end, with negative effects.

2.1.3.5 Dynamic environmental effects of regional free trade

Dynamic effects of regional free trade occur above all in the long-term. Together with the political advantages of regional integration, they offer opportunities to realise **win-win options** in the tense field between trade and environment. *Deeper integration* improves the chances of aligning macro and sector policies in the course of the integration process, thus avoiding or reducing negative environmental effects. This can counter policy failure on the national level, e.g. by reducing environmentally damaging subsidies or non-tariff trade barriers combined with negative environmental effects. Especially in strongly protected sectors, this makes it possible to achieve steps towards liberalisation and positive environmental effects.

Transactions costs are removed by aligning norms and standards, improving the possibilities for further harmonisation of environmental standards. Identifying environmentally friendly products by common standards is more efficient than developing separate national standards systems. This also increases the willingness to accept shared environmental standards in the countries involved in the free trade agreement. Common environmental standards are also made more easily achievable by increasing economic relationships between the countries. On the other hand, increasing competitive pressure can also lead to less competitive enterprises attempting to externalise environmental costs in order to save, which may be possible if environmental regulations are inadequate or are not implemented.

The extension of markets by regional free trade leads to a widening of the range of products offered. This may involve more environmentally-friendly products being offered, for which there was formerly no adequate demand, or for which the enterprises had no adequate incentive for product differentiation. Economies of scale will also make it possible to offer environmentally-friendly products at lower prices.

Along with the spread of environmentally friendly products, there tends to be a corresponding spread of environmental technology. This can be supported by cost pressure caused by the increase in competition - including from foreign investors. Larger markets, and the greater legal security ensured by integration agreements, offer greater incentives for foreign direct investors, and *spill-overs* in the area of environmental technology, initiated by foreign enterprises, become more likely. Technology transfers are promoted especially by co-operation and joint ventures between foreign and domestic enterprises.

The export of unprocessed raw materials offers very few opportunities for building up knowledge-based competitive advantages. Specialisation in a country on simple, environmentally-intensive goods, or purely on the export of raw materials, is a long-term obstacle to such learning effects, since this involves hardly any development of human capital or development of technological know how, causing the country to drift further and further away from technological progress. An economic policy strategy for countries with a high degree of environmental factor, which can be derived from the new theory of growth, is based on the development of industries which process natural resources. The export of raw materials can bring in the financial means to invest in the development of human capital required to strengthen learning and technological competence (Hillebrand, 1998). Many emerging and developing countries are striving towards an export-oriented industrialisation in the context of regional integration agreements. Hopes are placed above all on foreign direct investment, which will result in positive spill-over effects, with a transfer of knowledge and technology, which was a characteristic of the industrialisation of the threshold countries in Asia.

The distribution of environmental strain among the states can be changed by international trade. The environmental strain in individual countries can be reduced by trade without having to change the consumption of certain products, which have resource-intensive production. International trade makes it possible to **decouple** the link between production and consumption within one economy. Individual countries can protect their own resources, or improve the quality of their environments, by buying in resources in the form of environmentally intensively manufactured products (Diwan/Shafik, 1992).

2.1.3.6 Direct and indirect consequences of regional free trade for the environment

With the exception of the transport of the traded goods, trade does *not* have a *direct* effect on the environment. *Indirect* effects of trade on the environment arise as product effects, technology effects, structural effects, and growth effects, which influence prices. Each of these effects can be accompanied by increased or reduced pressures on the environment and consumption of resources. This has not been adequately examined so far (OECD 1994:4ff). One of the normally intended results of free trade agreements is the increase in production of environmentally friendly goods, services, and technologies, together with their distribution within the free trade zone, and thus their use within and outside the zone. Environmental effects connected with each trade agreement are put into five main categories in OECD (1994):

- Product effects
- Technology effects
- Structural effects
- Growth effects (economies of scale)
- Regulatory effects

The environmental effects can be either positive or negative. A distinction is made between direct and indirect effects. Product effects, technology effects, and regulatory effects can be direct and indirect. Growth effects and structural effects, on the other hand, can only be indirect - i.e. dependent on the influence of trade measures on the scope or location of trade activities.

2.1.3.6.1 Product effects/effects of scale

Positive environmental effects result when creation of trade increases the share of environmentally-friendly products in production and consumption in the integration zone increases (positive effects of scale). This can be caused by a lowering of their prices, or because previously supplied resource-intensive products are no longer competitive and are replaced by other products. It is, however, also possible for production and consumption of material and energy-intensive products in the integration zone to increase, including the production of hazardous wastes (negative effect of scale).

2.1.3.6.2 Technology effects

Many enterprises in the integration zone must adapt to the changed conditions and increased competitive pressure on the regional market. The required technology change can lead to lower energy and material-intensive production, thus raising resource productivity. In addition, internal liberalisation promotes access to integrated *end of pipe* environmental technologies. Pressure to introduce integrated environmental technology can be increased by an environmental policy designed to save resources

Especially in emerging and developing countries, regional liberalisation of trade can be extended to include environmental technologies, if foreign direct investment can be attracted. Companies operating trans-nationally usually bring higher environmental standards with them, as these are usual in industrial countries. These high environmental standards, combined with technology and management methods, are often applied world-wide by such trans-national companies. Regional export orientation also encourages the use of *best practice* technologies when the target markets have certain quality requirements - e.g. sanitary and phytosanitary standards which can only be met by using environmentally friendly technology.

2.1.3.6.3 Structural effects

Liberalisation of trade in regional integration zones changes the production structures. It is, however, very difficult to clearly identify the causal relations in this process (OECD 1997b:185). The theory of free trade always assumes "perfect markets" (without market failures, and with internalisation of the full costs of environmental use, and without political intervention). If this were the case, then the regional liberalisation of trade would mean more efficient allocation of the factors of production, resulting in positive structural change. In reality, the structural change can actually involve negative effects for the environment. The cause of increasing environmental strain is not, however, the regional trade, but the market and/or policy failure. Regional trade can, however, worsen the negative effects (Adams, 1997:185).

A distinction should be made here between the individual sectors, such as agriculture, transport, energy, and the structural change between primary, secondary, and tertiary sectors. Because of the complexity of the effects, sectoral studies are the ones most commonly carried out, in order to assess the effects of liberalisation of trade in a certain sector (OECD 1994b, 1997a). The effects of regional integration on general economic structural changes, which causes changes *between* the sectors, are very difficult to determine.

Geographically, negative environmental effects can occur if environmentally intensive enterprises concentrate in certain regions, thus increasing the potential for damage there and making these area so-called "*hot spots*". Tendencies of this kind used to exist to a large extent in regional integration zones such as the Andean Group, in which the countries involved reached agreement about the "distribution" of certain branches of industry. On the other hand, the concentration of environmental risks to the "*hot spots*" was reduced by regional decentralisation of production plants. On the level of the enterprise, there are, however, a number of reasons to avoid a splitting up of production.

The geographical structure of industry corresponds over wide areas largely to the distribution of **human settlements**. Most of the tangible environmental problems are concentrated in all countries in the large centres of population, and radiate from there concentrically into the surrounding areas. Economically successful areas attract streams of migrants, so that by a combination of push and pull factors, the environmental strain caused by human settlement in the large and mega-cities, also contributes to the environmental strain. These developments are only inadequately included in local and regional area and town planning - especially in developing countries. Only in the ASEAN region is any attention clearly paid to the environmental problems caused by massive **urbanisation**.

Regional trade liberalisation will have positive effects especially if it increases the importance of "clean", as opposed to "dirty" sectors. The "clean" industries consume relatively few resources, and are to be found especially in the services sector and in the modern industrial sector. Generally speaking, the pressure to produce efficiently leads to less intense exploitation of resources in production. In Latin America, in the course of the policy of opening in the 1980s, the import substituting industries largely collapsed. Most enterprises were in the heavy industries, and in the raw materials industries. High levels of protection, and efforts towards industrialisation, even at a very high price, most enterprises were very inefficient, using large amounts of material and energy. The collapse of these industries led to a clear reduction of pollution (Birdsall/Wheeler, 1992). Similar developments have been observed in the industrial re-structuring process in Eastern Europe.

The role of the developing countries in this context is controversial. The collapse of inefficient industries can lead to increased concentration on "natural" comparative advantages, and to intensification of raw material exports. In the course of structural adjustment programmes since the 1980s, exports of raw materials from developing countries have increased sharply, and exports have been diversified, whereby in many cases the production methods have not become more environmentally friendly (Reed, 1996), or production of new export products (e.g. soja, shrimps) have involved intensive consumption of resources. Competition for these products on the global market is very intensive, meaning that internalising the environmental costs of these products would make them uncompetitive.

The liberalisation of economic sectors which produce raw materials is therefore especially relevant for the environment. These sectors consist mainly of agriculture, forestries, fisheries, mining, and energy. These sectors have so far been excluded from liberalisation measures in industrial countries, and often also protected in the developing countries, since they provide strategic resources for economic development.

Trade liberalisation also has a positive effect if industrialisation processes in areas with labour-intensive production and knowledge-based competitive advantages can be successfully built up or extended - e.g. electronics. If an economic structural change leads to a new build up of export-oriented industries, then the question arises of whether these are more environmentally friendly than the old structures. The experience of the Maquiladora Industry in Mexico shows that labour-intensive industries can also cause considerable environmental pollution. In Industrialised countries, economic structural changes, involving growth in the services sector and increased productivity in use of resources in industry, have lead to a partial decoupling of economic growth from consumption of resources (Kågeson, 1997). The controversial connection between economic growth and the environment is analysed in the following section, as especially in the debate on trade policy, reference is constantly made to the growth resulting from the liberalisation of trade.

2.1.3.6.4 Growth effects

(a) General growth effects

There is a central methodological problem in that it is practically nearly impossible to filter out the environmental effects caused specifically by trade from those caused by general economic growth. Attempts to derive mono-causal connections produce partly unclear, positive and negative correlations between regional integration and the environment. A large number of empirical studies show significant positive correlations between the gross domestic product per capita (as a growth indicator) and certain environmental strain indicators (Ricken, 1997:173ff). This applies both with regard to consumption of resources and to pollutant emissions. The most important consumption of resources concerns water and energy. The most important emissions are energy-generated CO₂ and waste. The correlation coefficients, however, show only a relatively weak statistical correlation, which recedes in time.

On the macro-economic level, a central counter-argument is presented: Economic growth results in increasing incomes. Increasing incomes result in growth in demand for environmental quality. This argument, however, only makes sense provided that economic growth does not take place on the basis of environmental destruction; otherwise the resulting environmental destruction would have to be "repaired", and the costs for this "repair" taken from the increased income. There is also no evidence to show that economic growth alone can lead to becoming rich and clean. Industrial countries have, or produce environmental problems more than other countries (Jänicke, Weidner, 1997). It should be finally noted that economic growth is by no means a guaranteed method for reducing **poverty**, which is a main cause of environmental strain.

In the centre of the discussion about the environmental effects of economic growth is the **environmental Kuznets curve**. This describes the connection between inequalities of income and increases in income as J curve, or as a U curve (Kuznets, 1955). The same connection is assumed by various authors between environmental quality and income. Increases in income are accompanied at first by a deterioration in environmental quality. However, environmental quality starts to rise again after a certain level of income has been reached.¹⁴ The World Bank (1992) finds in the context of a country cross-sectional analysis that certain environmental quality indicators, over a period of time, with increasing pro capita income, in part only above a certain level, significantly improve. In the case studies mentioned here, the conclusion is drawn that economic growth can be compatible with environmental protection, if appropriate environmental protection measures are implemented. In the World Development Report for 1992, increasing environmental quality is reported as a result of decreased emissions caused by economic growth.

Without going into this matter in too much detail here, the studies mentioned indicate that increasing incomes per head do not improve the overall environmental quality, but only specially selected indicators, such as emissions. Jänicke/Weidner (1997) note that there is a positive correlation between GDP and environmental quality if emissions of SO₂ are used as indicators. A negative correlation, on the other hand, is identified with regard to environmental costs and transport, waste disposal, bio-diversity, and agricultural consumption. Developing countries have increasing pollution problems, and other environmental problems such as the spread of deserts and lack of water, which also must be taken into account.

¹⁴ Ricken, 1997:184; Grossmann/Krüger, 1993; Shafik/Bandyopadhyay, 1992; Panayotou, 1993; Selden/Song 1994; Rothmann, 1998; de Bruyn et al., 1998; Jänicke/Weidner, 1997.

Criticism has been levelled at the choice of indicators, which only reflect a part of the environmental strain. The consumption of renewable and non-renewable resources, such as energy, material, and land, is not taken into account. Furthermore, connections are made to an "optimal" level of use of resources (e.g. in the concept of so-called "*carrying capacity*"), which only be defined hazily.

In place of economic growth, new determining factors have been analysed in recent studies for the environmental Kuznets curve. It has been argued that previously postulated environmental Kuznets curves only came about because important factors were not considered. Toras/Boyce (1968) study the influence of social factors, such as education, human rights, and equality of income. They come to the conclusion that these factors affect the relationship between income and pollution of air and water, and that a balanced distribution of power contributes to lower environmental strain. Other studies examine the influence of various trade variables, and will be dealt with in more detail below. Kaufmann et al. (1998) introduce the concept of spatial intensity to the analysis of effects from income and emissions. The result of their analysis is that the spatial intensity of economic activity, and not income, is the decisive factor with regard to development of policies and technologies for reduction of SO₂ emissions.

These case studies show that growth and environmental protection are indeed compatible. However, success in improving environmental quality is determined by various factors. Economic growth alone does not contribute to improvement of environmental quality. The environmental Kuznets curve shows the relationship between the level of incomes and certain emissions, but has only a hypothetical relationship to other environmental strains.

A further aspect should also be examined. The customary interpretation of the environmental J curve presupposes consistency of environmental policy, and perceives this as an exogenous factor for growth. This, however, is unrealistic, as can be seen with the example of the EU or NAFTA. Environmental policy is an endogenous factor (Bommer, 1998:97ff) which varies with time and tends to improve environmental quality.

(b) Trade-induced growth effects

A number of studies examine the influence of international trade on environmental quality in various countries in connection with the environmental Kuznets curve. Some studies come to the conclusion that the open nature of an economy, and the resulting intensity of foreign trade, affects the quality of the environment.

The results of the studies carried out show clearly that the connections between economic growth and environmental effects have not been clearly analysed. In particular, the influence of foreign trade on economic growth is difficult to isolate from other factors which influence growth. Among other things, changes in production structures which are caused by trade must be more clearly defined. Because of the low level of significance of the Kuznets curve with regard to the correlation between economic growth and the quality of the environment, the causes of economic growth should be more clearly defined. Sectoral studies would be useful in this respect, in order to more clearly analyse individual influences with regard to the relationship between trade and environment.

2.1.3.6.5 Regulatory effects

Regulatory effects result from environmental policy making connected with the trade agreement, and from environmental standards. The effects are positive (or negative) if the trade agreement enables a government to take appropriate environmental policy measures more effectively (or if this ability is reduced by certain restrictions).

Compare the summaries in sections 2.1.8 and 2.1.9 below.

2.1.4 Systematics of CEC (1999)

The study of the *Commission for Environmental Cooperation* of NAFTA (CEC 1999) is designed as a case study of possible *pressures* which might arise from the NAFTA agreement for environmental elements such as air, water, soil, and biotic environments. Waste, by-products, and emissions from industrial activity, influences from production and consumption are considered to be pressures on the environment. Special importance is placed on identifying locations with especially high levels of influence on the environment, and the cumulative effect of environmental pressure ("*hot spots*").

On the economic level, national and international macro-economic and national microeconomic factors are examined. The flows of trade are analysed for certain individual products and for upstream and down stream subsidiary products in the NAFTA countries. A distinction is made between the time before the agreement, the transitory phase, and the time after the agreement. An important indicator for the authors of the study are the cross-border flows of direct investments.

The environmental effects of the NAFTA agreement are examined in four areas:

(1) Production, Management, and Technology

The basis is the individual production plant: industrial enterprise, agricultural production unit, etc. Several parameters are examined for each of these, which refer to fields specifically related to the NAFTA agreement:

- **Raw materials** and other goods required for production (e.g. energy generation, pesticides)
- **Production process**: degree of effectiveness, size, harvest or catch methods used, etc.
- **Technologies** used for production, but also end-of-pipe environmental technologies and agricultural methods
- **Management systems** applied in the production plant
- Relative **price** and other **characteristics** of the product (e.g. product-related emissions, direct and indirect subsidies).

(2) Infrastructure

A specific infrastructure is required for the production in the production plant and the distribution of the goods within the market. This includes public and private institutions for the transport of goods between suppliers, production plants, and the market: roads, railways, ports, airports, pipelines, irrigation canals, water dams, water supply and disposal, generation of energy, telecommunications. The CEC study starts out from the assumption that traditional transport patterns are changed as a result of the growth, privatisation, increase in logistical efficiency, transport routes, and substitution of products which result from a trade agreement.

(3) Socio-economic organisation

Environmental effects are influenced by the interplay of all social groups, by prevailing property rights, cultural characteristics, etc. Trade agreements can lead to migration, or concentration of production plants, and thus in turn to changes in traditional structures. Family enterprises, for example, as the prevailing form of production units, may become uncompetitive, leading to migration from rural areas into towns and conurbation's.

(4) Government policy

Economic and environmental state measures play a central role in that effects arising from liberalisation of trade can be intensified or braked.

2.1.5 Systematics of WRI (1997)

In a study by the *World Resources Institute* (WRI, 1997), the environmental effects (which are not described in detail) are related to five fields of effect, similar to those of the OECD (1994):

- allocative efficiency
- scale of economic activity
- composition of products
- technological innovation
- environmental policy

Depending on the nature of individual influences, positive or negative overall effects on the environment may occur. The basic thesis is that both trade and the environment can benefit from the abolition of market distortions on the economic and political level. Improved access to markets could be combined with obligations to harmonisation of environmental standards and innovations in the fields of technology and institutions.

Better **allocative efficiency** of resources generates positive effects for the environment, since lower waste, production methods, using fewer resources, are promoted. **The amount of economic activities** induced by trade leads to the desired economic growth and to a rise in gross domestic product per head. The study assumes a non-linear connection between trade activity and increasing environmental damage. A positive connection with increased environmental protection is deduced from an increase in GDP, but not proven. The **composition of products** generally causes positive (or negative) environmental effects if sectoral changes lead to lower (or higher) levels of emission. **Technological innovation** will lead, according to the WRI study, to an overall reduction in environmental pollution since traditional production methods will be replaced by less energy-intensive, lower-emission processes, and *end-of-pipe* technologies will be used more. National **environmental policy** combines the above mentioned influences, and is an essential pre-condition for effective reduction of environmental strain. Greater allocative efficiency caused by trade effects and the at first negative effects of eco-

conomic growth, which, however, can be balanced by the positive effects of product combinations and technological improvements, must, according to the study, be supported by an appropriate regulatory framework. An over-restrictive environmental policy, however, is seen as a danger which, in the final analysis, masks trade restrictions.

2.1.6 Further approaches

In **UNEP (1997)** international trade is held responsible for the increase in local and regional environmental problems. Market distortions are caused on the one hand by import restrictions, on the other hand indirectly by subsidies for energy, water, pesticides, fertilisers, etc. Import restrictions lead to protection of inefficient industries, whose over-production leads to unnecessary environmental strain, and takes away employment opportunities from people in developing countries, resulting in yet further negative environmental influences. Environmentally damaging subsidies are an obstacle to innovation and support a larger than necessary consumption of these resources in production.

The **World Bank** does not have a systematic method of describing the environmental consequences of trade so far, although this would certainly be useful in the context of structural adjustment programmes.

The **European Commission** has commissioned an evaluation of the planned new WTO round. First results are expected at the beginning of 2000.

2.1.7 Summary of positive and negative environmental effects

There is a central methodological problem in that general environmental effects arising from growth and trade cannot readily be distinguished from specifically integration-induced effects. There are, in fact, considerable overlaps. The attempt to derive monocausal explanations produces in part only unclear, both positive and negative, correlations between integration and the environment. In most cases, the environmental costs are considered to be the same (although they are seldom clearly distinguishable from other investments), and related either to the total investment, production costs, turnover, or production value. It is rare for two statistics to be directly compatible. These methodological problems also make an ex-ante prognosis of the expected environmental effects of an intended regional integration in the sense of an *Environmental Impact Assessment* (EIA) more difficult (section 2.2.3).

Positive and negative environment effects arise from regional economic integration. Differentiation between local (national), regional (cross-border), and global environmental effects are relevant for environmental policy, as well as for general policy. There is a trend to pay less attention to global effects in less developed integration zones than in vertically intensive integration zones such as the EU and NAFTA. At the same time, there is also a clear difference between theory (i.e. pretension) and the practice of environmental policy action both in industrialised and developing countries.

Regional free trade agreements can involve *positive* environmental effects in that creation and diversion of trade promote the consumption and production of environmentally friendly goods, and displacement of goods which place more strain on the environment. Increasing competition in the integration zone tends to promote the application of integrated environ-

mentally friendly technologies in the course of adjustment-oriented investment. In some integration zones, sectors with obsolete technology have been reduced.

Negative environmental effects can result from regional free trade agreements if production and consumption of environmentally strenuous goods and/or materials (including energy) increase, causing a corresponding increase in emissions and waste. *Hot spots* can form with regards to structure - and not only in large cities - in which environmental strain will be concentrated. A cause for concern is that in many free trade agreements, agriculture, forestries, fisheries, mining, and the energy industry, all environmentally intensive sectors, are excluded from the liberalisation process.

Whether integration-induced economic growth leads to positive or negative environmental effects is something which needs to be examined in a more differentiated manner. The argument, environmental strain at first increases with regional free trade, only to then decline as per-capita incomes rise (the J curve effect, environmental Kuznets curve) is countered by investigations which have identified increasing environmental strain. Stringent general correlations have not been shown.

Nonetheless, to summarise, it can be stated that in the process of successful regional free trade, the economic potential for improved environmental protection is strengthened. This is further supported by legal, institutional, political and social potential. Some of these aspects are examined more closely in the course of this study.

2.1.8 Consequences of environmental protection for trade

The effects of environmental protection for trade are not subjects of investigation for this study. The context will thus be only briefly indicated. Different environmental standards seem to have practically no influence on trade structures (Schulze/Ursprung, 1998). In summary and in agreement, empirical studies have established that the costs incurred by industry for environmental protection, with a few exceptions¹⁵ do not lead to enterprises in "dirty" sectors¹⁶ moving to *pollution havens* ("industrial flight" - e.g. Low/Yeats, 1992, Beghin/Potier, 1997, Ferrantino, 1997). The costs for environmental protection are low in comparison to other costs, and in context, only of secondary importance compared with other locational factors. Transnational enterprises normally bring in *best practice* technologies with direct investments. Environmental protection places far fewer competitive restrictions on most types of industry than is generally assumed. On the contrary, good environmental standards and a positive environmental image are seen by most companies as a valuable marketing instrument.

Uncontroversial is the fact that local enterprises in developing countries use more polluting technologies than enterprises in or from western industrial countries. Foreign investors therefore form a coalition with exporters in promoting higher environmental standards in the target markets.

¹⁵ Compare WWF International Briefing Paper "From liberalisation to sustainable development; WWF response to the OECD Paper "Open markets matter: the benefits Trade and Investment Liberalisation", Brussels, 1998. Among other countries, China also attracted incoming "dirty" industries, seeking to avoid environmental regulations at home (Yumin, 1999).

¹⁶ Including chemicals, copper smelting, refineries.

2.2 Priority environmental areas of action in regional free trade agreements

2.2.1 Conflict potential for environmental protection in liberalisation of trade

Potential fields of conflict in the area of trade and the environment are fields in which different environmental standards exist between the integration partners, not for natural reasons, but because of human influence. This applies especially for sectors in which negative environmental effects are to be expected to arise from trade liberalisation. Some examples make this clear.

- **Movement of investments and industry because of inadequate environmental implementation**

Investment incentives for the movement of industries arise because of low environmental standards, or because of failure to implement environmental legislation (*pollution havens*). This fear was often expressed during the NAFTA negotiations as the notorious failure to implement environmental legislation in Mexico was obvious, and that country's environmental technology infrastructure and the application of planning technology instruments were inadequate. Previous experience with the movement of industry into the Mexican border regions, where environmental costs are externalised by enterprises. From the US point of view, this represented a strong incentive to move industries out of the USA, with its stricter environmental standards in to Mexico.¹⁷ NAFTA regulations therefore prohibit any lowering of environmental standards with the aim of attracting or retaining investments.

- **Extra-territorial application of environmental standards**

The extra-territorial application of environmental standards - i.e. outside a country's own area of jurisdiction - is an attempt to implement this country's own ideas of environmental standards in another country. This occurs especially where there are differences in the levels of economic and environmental development. From the point of view of the country carrying out this practice, the aim is to counter "environmental dumping" as a result of low environmental standards in the foreign country by trade measures with regard to imports. From the point of view of the exporting country affected, especially in the case of developing countries, the industrial countries are disguising their non-tariff protectionist trade barriers in a green cloak. In the run-up to the NAFTA negotiations, for example, the USA were concerned for dolphins, as an international resource, because they saw their regulations with regard to fishing methods for US fishers threatened by less rigid Mexican environmental standards. The USA therefore wanted to persuade Mexico to accept the stricter US standards by imposing an import ban on Mexican tuna fish.

- **Cross-border environmental pollution**

Cross-border environmental pollution had, e.g. in the NAFTA area, a long history, without any concrete prospects of solutions. The border conflicts were based on a lack of plants for purifying water, disposing of waste, and on high pollutant emissions on the Mexican side. The emissions from vehicle traffic in Mexico were higher than in the USA, and in border traffic had a detrimental effect on the US environment. The Rio Grande was one of the most polluted border rivers, transporting untreated sewage from Mexican households and industry. A further

¹⁷ As shown in section 2.1.8, the "industrial flight" for reasons of environmental costs does not represent a significant problem in a global context.

important problem field is the **trade in waste**, which was used to avoid stricter environmental regulations by exporting waste, causing pollution in the importing country.

- **Over-use of shared resources**

In various regions of the world the over use of resources which are in principle for common use is a serious source of potential conflict. This applies especially for water resources and fish stocks.

Breach of multi-lateral environmental agreements

If a partner country has not signed or ratified a certain multi-lateral environmental agreement, or the agreements are breached by avoidance or inadequate implementation (e.g. trade with exotic animals as a breach of the CITES agreement) then the country's exports can meet with trade restrictions as imports into another member state of the multilateral environmental agreement. Mexico's variety of species and wealth of natural resources initially caused NAFTA to worry that increased trade with exotic animals and plants, and therefore exploitation of the natural resources, would take place.

- **Ecological protectionism**

A general question is, whether and when trade restrictions (e.g. import duties, import bans, quotas, etc.) are intended to serve environmental protection, and when they are protectionist. Levies on packaging waste are, for example, a legitimate means of restricting such waste. This, however, also has the effect (unintended, since the aim was to protect the environment) to place exporters at a disadvantage who have to cover great distances and several ports of transshipment, meaning that their goods have to be packed more carefully.

In the case of obligatory markings with regard to certain local, fixed environmental criteria (so-called "eco-labels"), foreign exporters fear an exaggerated level of protection, which domestic manufacturers will be able to meet more easily. Many conflicts arise, for example, out of measures designed to protect human health, such as restrictions on hormone influenced beef from the USA, restrictions on landing rights for older US jet planes, whose *hush kits* do not meet EU standards. Inclusion of ecologically grounded restrictions in connection with working conditions (e.g. pesticides in cut flowers) creates an unclear grey zone between permissible and non-permissible ecological criteria and social standards.

2.2.2 Demarcation of areas of environmental action

Those integration agreements which include environmental policy aspects do so in very different ways (Chapters 3 and 4). Environmental policy is only one of many areas of policy in all relevant agreements. Only in a few cases, however, (EU, NAFTA, SADC) is real importance placed on it. It is therefore interesting to identify the fields in which environmental policy, in the framework of regional integration agreements, can be given special importance, and out of which the need for environmental policy regulation can be derived. The question also arises in this respect of with which measures and instruments, and through which institutions these can be implemented (*policy response*). The problem fields are described as **fields of action** here.

There are a number of variants:

- All relevant agreements which refer to the environment address certain *sectors* of the economy, in which the member states want to work together on environmental issues (e.g. agriculture, mining).
- In all relevant agreements, *measures and instruments* are addressed, the use of which is to reduce or avoid environmental problems (regulations, levies, minimum standards, taxes, etc.).
- There are also institutional areas of action in which the *type of work* in the common environmental policy is addressed - e.g. through regional institutions or commissions. This overlaps with organisational aspects (arbitration procedures, exchange of information).

Integration agreements also vary greatly in the language of their definitions. The same aspect (e.g. harmonisation of standards, participation, exchange of information) is referred to in one as an instrument, in another as an area of policy. This may depend on the importance which is attached to individual aspects. The OECD uses the term "need for action" inconsistently (OECD 1994:5,11,41,108). This makes stringent systematisation difficult.

In Agenda 21 (Chpt. 2, section 2.9; BMU 1992) governments were given a number of objectives for long-term development, which should have been negotiated in the context of the multi-lateral economic negotiations in the Uruguay round:

- Promotion of an open, discrimination-free, and balanced system of trade
- Creation of better market access mechanisms for exports from developing countries
- Improvement of the functions of the raw materials markets.

It is assumed in this respect that an open multi-lateral trade system will lead to a more efficient allocation and use of the available resources and to an increase in production and income and a lower level of exploitation of the environment (section 2.19). It is accepted that the solution of global environmental problems will be achieved by using trade-related measures in order to strengthen the effect of environmental regulations. Environmental standards applicable for industrial countries could, if transferred to developing countries, cause unjustified social and economic costs (section 2.20).

Critical observation of the Rio follow-up conference in 1997 showed that the negative trends of the ineffective development had carried on. A causal relationship is seen between the increasing economic deregulation and the deterioration of environmental quality (epd 1999). The example of closed markets, as in the former socialist countries, made clear that also in non-liberalised markets, without accompanying environmental and social policy measures, increasing production had a negative effect on the environment.

In developing countries there is the danger that after the introduction of free trade agreements, the necessary investment in public and commercial infrastructure, which could make a positive contribution to environmental protection, was neglected in favour of more rapid increase in production. However, effective restrictions on production and trade do necessarily lead to the expected reversal of environmental pollution, as shown by the example of the Russian Federation.

2.2.3 Areas of action included in integration agreements

The following figure 2/1 gives an overview (with no claim to completeness) of the fields of action which are explicitly mentioned in the integration agreements dealt with here, or in which environmental cooperation in the framework of the regional cooperation is desired. The over-view makes clear the wide variety of priorities in the context of regional environmental policy. It is to be noted that reference is made throughout to environmental problems in connection with economic development (certain sectors of industry, infrastructure) while the **environmental media** (air, water, seas, soil) and complementary problem areas, such as health and waste, are addressed much less widely.

The **agricultural sector** is usually a special problem area, for which many exceptions and special regulations are negotiated. Emphasis on environmental policy, if placed at all, is low key. Food security is in the foreground, and not the question of the use of land. In the **field of transport**, if it is considered at all, primary concern is with emissions, and not questions of the use of space and the planning of space in the context of development of infrastructure. **Energy policy** is only addressed in the EU agreement and in the EU-Lomé agreement. Saving energy, or developing regenerative sources of energy are not seen as objectives of regional policy. Protection of **natural resources**, renewable ones such as water, seas, fish stocks, forests, and non-renewable ones, such as minerals and fossil energy, is postulated in most agreements (Natural Resource Management Policies) but in various ways: either directly (ground, forest, water, etc.), or indirectly by reference to sectors. **Technology transfer** is only addressed in a few agreements in relation to the environment. An important area is also the regulation of **trade in waste**, in order to prevent environmental pollution from being exported to partner countries.

As there is not yet any international general agreement for the **protection of the soil** (apart from desert agreements), regional regulations can close an important gap here.

Fig. 2/1: Environmental action fields included in regional free trade agreements

	EU	NAFTA	ASEAN	MERCOSUR	MCCA	CARICOM	SADC	ECOWAS	APEC	Lomé
Health protection	x					x				x
Natural resources	x						X		X	
Soil conservation, soil utilization							X			
Rain forest, bio-diversity					X					x
Agriculture	X	X	P	X		X	X		P	x
Forestry	X	X	X						P	
Fishing	X	X							P	x
Nutrition, food hygiene			X	X			X			x
Regional Development/Urban-rural problems	X	X								x
Industrial policy	X	X		X		X	X		X	x
Trade				X			X			
Traffic, transport	X	X	X	X		X	X		P	
Minerals, mining	X	X	X	X		X			X	x
Energy	X	X		X		X			P	x
Tourism			X			X			X	x
Infrastructure		X		X		X	X			
Competition policy				X						
Technology, science	X	X	X			X	X		X	x
Direct investment, finance						X				
Information systems	X	X		X						
Labels				X						
Water, oceans, water management, drinking water, humid areas, coastal areas, rivers, water/wastewater management		X						x		x
Desertification								x		
waste, toxic waste, waste exports	X	X						x	x	x
Catastrophes, wood fires			X	X	X					

X = included in the free trade agreement; P = planned.

2.2.4 Two examples

2.2.4.1 The agricultural sector

The agricultural sector is and long has been one of the most strictly regulated sectors. First approaches to reform can be seen on all levels (Jones/Youngman, 1997:214). On the *global level*, an "Agreement on Agriculture" was signed during the Uruguay round, with the aim of achieving a stronger orientation of the agricultural sector to principles of market economy. This agreement contains binding decisions on the abolition of specific elements of domestic agricultural promotion and export subsidies. In order to implement these reforms on the *national level*, industrial countries were given a period of six years (until 2000) and developing countries ten years (until 2004). On the *regional level*, several trade agreements (especially EU, NAFTA, Mercosur) include significant contractual sections on the agricultural sector, which have an influence on trade structures. On the *national level*, reforms have been carried out to comply with international agreements on the one hand, and to respect specific local priorities on the other hand.

At present, various national measures to support the agricultural sector affect environmental problems (OECD, 1995a).

Price support in the sense of guaranteed minimum prices, which, as a rule, are to be found in the developed countries, leads to an increase in the domestic agricultural prices against the global market prices. Higher agricultural prices increase incentives to use fertilisers, pesticides, mechanised production methods, and conversion of large stretches of land. In addition, they can provide incentives for intensification of production - i.e. intensified use in the form of e.g. use of fertilisers instead of extending the land used. In opposition to this, in low income countries, maximum prices are used to protect domestic consumers. This is an obstacle to the use of effective farming methods and increases the trend in developing countries for people to leave the land, with all the accompanying implications for local urban life. **Income support** reduces incentives to minimise production risks by means of environmentally friendly farming methods, as, for example, a wider range of products (no monocultures) or rotation planting - i.e. changing the crops grown over a period of time.

Input subsidies designed to reduce costs for the factors of production distort real prices and often lead to overuse of these inputs. Another form of subsidy is not to internalise the full costs for the use of natural resources (natural water springs, ground water wells), which leads to over-use of these resources.

The potential **economic effects** of trade liberalisation in the agricultural sector have been intensively investigated (prime examples being Goldin/van der Menbrugghe (1992), and Goldin et al. (1993)). Reforms in the context of national programmes (e.g. reduction of agricultural subsidies, reduction of trade barriers) represent a real potential for economic gains, although the gains are unequally distributed between and within the regions. The developed countries would stand to gain more, whereas there would be clear losers among the developing countries. It may be assumed that the potential gains would be great enough to balance out possible losses, or to compensate losers.

In spite of recent developments towards a stronger market orientation in the agricultural sector, there are still serious problems. In particular, the duties and tariffs in the agricultural sector are (in spite of the improvements in the Uruguay round) still too high and cause distortions of trade.

From an ecological point of view, subsidies and trade restrictions (protectionist measures) in the agricultural sector are grave causes of environmental damage. The OECD (1997a:59) especially emphasises the intensification of domestic production in the OECD countries, promotion of additional inputs (fertilisers, pesticides, energy) and monocultures in the OECD countries. Anderson (1992) refers to the high positive correlation between subsidies for domestic production and the use of fertilisers and pesticides. In addition, there is a displacement of production from developing countries on the world market, accompanied by a reduction in their incomes and resulting difficulties in investments in agriculture. At the same time, production in developing countries moves to ecologically sensitive areas, such as rain forests. May/Bonilla (1997:7) therefore draw the conclusion: "In general, producers benefit from direct subsidies obtained via price subsidies and indirect tariff restrictions, associations from the failure of sectoral and environmental policies to motivate them to internalize their environmental costs. The result is an inefficient and harmful agriculture."

Trade liberalisation in connection with appropriate changes in sectoral policies is, therefore, basically an opportunity to oppose such negative developments. Liberalisation of trade in agricultural produce is generally expected to lead to a move of production away from intensive production in the OECD and other industrial countries towards extensive production in developing countries. The net effect between positive and negative environmental effects cannot, however, be clearly defined.

Positive consequences for the environment would be in a reduction of chemical inputs (fertilisers, pesticides). Negative results would be in an intensified use of land and increase in landscape degradation in the developing countries. Trade liberalisation can increase the demand for specific products by changing the consumer structure by product and price effects. The environmental effects would depend on whether these products were produced in a more environmentally friendly manner than competing products and substitutes, or whether increase in demand would bring further environmental strains. Trade extension generally involves scale and growth effects. In the case of the agricultural sector, this leads to an increased demand for land and water. The OECD concludes (according to Jones/Youngman, 1997:217): "To sum up, the effects of trade liberalisation on agriculture are expected to be generally positive for the environment, provided appropriate environmental policies are in place when the liberalisation occurs."

Very recently, experiments have been made with so-called "*agro-environmental measures*" to take environmental policy aspects more strongly into account (Baldock, 1996:123ff in OECD 1996). Two types of influence are to be distinguished here: so-called *cross-compliance* programmes link up the traditional support by prices or incomes measures with the fulfilment of certain environmental policy requirements. This is intended to stimulate long-term changes in production and other aspects of behaviour in favour of more environmentally friendly methods in the agricultural sector. On the other hand, financial support is intended to encourage agricultural investments, e.g. in conservation of land, flood control, promotion of biodiversity.

2.2.4.2 Electricity market

The liberalisation of trade in electricity in the context of the deregulation of the energy markets (removal of subsidies, increasing competition) results in considerable environmental effects. Liberalisation of the trade in electricity has so far been largely restricted to Europe and North America (trade between Canada and the USA). Partly large differences in electricity prices between the regions signal a big potential for trade. The possible economic gains are

estimated for the EU at ten thousand million Euro for the years 2010 to 2020 (Jones/Youngman, 1997:205).

The gradual integration of the transforming countries of Central and Eastern Europe into the energy sector of the EU is expected to result in generally positive environmental effects. These are expected to be achieved by improvements in energy efficiency and the so-called *fuel-switching* effect (e.g. changing from coal to natural gas in energy generation). The implementation of the European Energy Charta is especially important in this respect. This is intended to reform the trans-European energy market in order to achieve higher energy efficiency, technology transfer, analysis of environmental costs, and better co-ordination of the production and use of renewable energies. The transforming countries have a special potential for innovation in this field, since they have to change their energy generating technologies anyway. This requires investment and technology transfer on a large scale. Positive technology effects, leading to the use of "clean technologies" in the generation of electricity, are used not only in the transferring countries, but also increasingly in the OECD countries in Latin America and Asia (Jones/Youngman, 1997:206).

Possible negative environmental effects of trade liberalisation on the European electricity market could result from the transforming countries being able to under-cut the prices on the West European electricity markets (e.g. because of lower environmental standards, or state subsidies). This could lead to a movement of electricity generation to the transforming countries, thus replacing "clean" electricity generation with obsolete technologies, and at the same time increasing the demand for electricity because of lower prices. The temporal dimension is therefore an important factor in trade liberalisation. *Before* liberalisation of trade in electricity takes place, there must be appropriate adaptation of national sector policies (e.g. with regard to subsidies) and environmental standards, in order to prevent negative environmental effects. If equal competitive conditions cannot be established, then there is the basic danger that environmental standards will be harmonised downwards, and/or subsidies maintained.

In many countries, the increase in competitive pressure has led to efforts to reduce national energy costs by creating more competition on the national and regional energy markets. In the EU, for example, first steps have been taken to liberalise the electricity market. Mexico had to carry out liberalisation methods, in the form of removal of market entry barriers, as a condition for entry into NAFTA (Jones/Youngman, 1997:201 ff.).

In the context of new free trade agreements, or of deepening existing ones, the tendencies to liberalisation, deregulation, and removal of subsidies on the energy markets can be expected to gain pressure. At the same time, harmonisation of national sector policies is necessary, in order to ensure equal competitive conditions within the integration zone.

The **systems of subsidies** still practised at present for non-renewable fossil fuels (coal, gas, oil) lead to an accelerated consumption of these sources of energy, increased inefficient energy consumption, and to a raise in the associated emissions. The artificially low prices also reduce the incentive to increase energy efficiency (Adams, 1997:186; Koplow, 1996:201 ff.). From the point of view of environmental policy, two types of subsidy should be differentiated. *Direct subsidies* reduce the costs and/or risks associated with the obtaining of non-renewable energies, and artificially reduce the prices (*policy failure*). This increases the demand and reduces the readiness to change to possible substitutes in the form of renewable resources, or *fuel switching*. On the other hand, *non-internalisation* of environmental costs can also be seen as a subsidy, since this keeps the costs for the use of the environmental factor artificially low (*market failure*). **Coal subsidies** are a clear example, since this fuel is subsidi-

dised heavily in a large number of countries (see examples in Adams, 1997:186). Removal of subsidies on non-renewable fuels would lead to significant improvements in the environment. Shah/Larsen (1992) estimate that the removal of world-wide energy subsidies would lead to a reduction of CO₂ emissions by 4 % to 5 %. According to the OECD-GREEN Model, the effects of *keeping* the present subsidies on energy, as compared with the effects of removing them completely in the years 2000 to 2010, would mean an increase in CO₂ emissions by the year 2050 of 41 % (Lee et al. 1994).

• Conclusions

It can be concluded that in the context of continuing liberalisation, the energy sector (whether on a bi-lateral, regional, or multi-lateral level) contains opportunities and risks. A decisive factor for the use of possible positive effects for the environment is the removal and avoidance of political failure (by creating free markets in order to achieve the optimal allocation of scarce resources), and of market failure (by internalising environmental costs). Because of its importance for other sectors and because of its environmental effects (especially in terms of global environmental problems), the energy sector is an area in which there is a very strong need for action.

2.2.5 Further action fields

The overview given above must be supplemented by evaluation of national, non-regional environmental policies, whereby other fields of action (problem areas) occur, which play a part in regional integration.

(1) **Population pressure** is of central significance for environmental policy problems. In 1830 there were approximately one thousand million people on the earth. In 1900 there were approximately one thousand five hundred million. In 1930 two thousand million. In 1960, just thirty years later, three thousand million. Fifteen years later, in 1974, it was four thousand million. Thirteen years later, in 1987, five thousand million. At the turn of the millennium, it will be six thousand million, and by 2010 probably about seven thousand million. This growth is now taking place almost entirely in developing countries, while the populations of industrial countries are growing only very slowly, or even remaining constant. China now has more than one thousand two hundred million people, India nine hundred million. In spite of a rigorous population control policy, China will have one thousand five hundred million people by the year 2025, as many as the population of the whole earth at the end of the last century. In the year 2025 there will, however, be more Indians than Chinese. Many countries, especially in Africa and Latin America have rates of economic growth which are too low to feed the growing populations. This results not only in linear increases in environmental strain, but progressive increases, as the populations of many countries are looking to western patterns of consumption as their models (see sections 1.2.2 and 2.1.3.1). Integration agreements refer to this problem in general terms (e.g. APEC), but not with reference to environmental policy, even though the demographic developments have in themselves enormous importance for environmental policy, also with regard to migration.

(2) The **global environmental problems** of climate and the ozone layer are not addressed in any of the free trade agreements. In older agreements, this is understandable. It seems, however, rather remarkable in more recent ones. It appears that the pressure of the problem is not yet sufficient, and that it still seems to be too remote and theoretical. However, even regional

air pollution problems, such as cross-border air pollution, are not mentioned. Biodiversity and protection of species are also not addressed in most integration agreements.

(3) **Soil related aspects** such as conservation of land, use of land, or land planning are only addressed sporadically (NAFTA).

(4) **Noise emissions** in the form of e.g. traffic and industrial noise are apparently too environmentally insignificant to be mentioned.

(5) The important role of **civil society** in the formulation and implementation of environmental policy is beyond doubt. However, it is not emphasised in the integration agreements. **Creation of awareness** and **participation** of the population are, however, not only local problems.

(6) In most integration agreements, institutional and organisational aspects are naturally also addressed. No integration agreement, however, makes reference to the necessary **capacity building** in the administrations of the partner countries. The lack of financial and personnel resources (including the building up of suitable human capital) should be considered much more systematically in the context of regional integration, especially, but not only in connection with environmental policy.

(7) In this connection, environmental **planning and prognosis capacity** is specially important. This is, of course, also an instrumental aspect. Since, however, the integration agreements do not really demand a strict separation of objectives (or problems) and means, the result is, especially with regard to environmental monitoring, and the preparatory and continuous evaluation of environmental effects (in the sense of *Environmental Impact Assessment*), a much neglected action field. This is also made clear by the fact that the UNEP in the coming years placed special emphasis on setting up an early warning system by observing global environmental damage.

(8) Aspects which may be more instrumental, such as minimum standards, liability law, arbitration, or sanctions, are not identified as fields for action. This is looked into more deeply in the following discussion on environmental policy instruments.

2.2.6 Varying needs for action

Varying needs for action on environmental policy exist above all for the following types of integration agreement:

- North-South agreements
- Agreements with greater vs. less depth of integration
- Agreements with comprehensive liberalisation of a number of sectors
- Regional agreements vs. inter-regional agreements.

(1) **North-South agreements** are, in some cases, motivated purely by economic policy (e.g. NAFTA). In other cases, they are aimed at a very wide but shallow integration (e.g. MFTZ), or also have expressly promotional characteristics (e.g. EU - Lomé). On the one hand, there are great differences in environmental standards, because of the great differences in structure between the members. This makes the introduction of minimum standards difficult. On the other hand, the ability and the willingness to take environmental action in developing countries tends to be lower. This makes agreement on appropriate *policy responses* more difficult,

which would be more necessary in order to counter the consequences of regional trade liberalisation, and to develop an effective environmental policy. In developing countries, the attitude can often be observed that they are not willing to pay for the environmental sins of their wealthy neighbours. In the face of economic under-development, it is therefore often difficult not only to grant environmental protection high priority, but also to implement it in practice.

In spite of the structural adjustment programmes implemented in many developing countries, further economic adaptation efforts are required, in order to achieve a comprehensive structural change. These will often have to be accompanied by increased use of resources (even if industrial pollution tends towards being reduced). Against this background, agreement on minimum standards will certainly be accompanied by financial, technological **transfers, aids to adjustment** and environmental **cooperation**. These should, on the other hand, be accompanied by a certain **environmental conditionality**.

(2) Varying degrees of need for action depend on the **depth of integration**. Regional environmental standards can only be set when a certain depth of integration has been achieved; i.e. when appropriate economic interlinks are in place and coordination (at least indirect co-ordination) of policy is working. Production standards are relatively easy to harmonise, in comparison to PPM standards. For the harmonisation of PPM standards, on the other hand, coordination of national sectoral policy is also necessary (agriculture, energy, the industrial sectors). For regional harmonisation of environmental taxes co-ordination of fiscal policies, among other things, is necessary. Coordination of this kind exists so far on a large scale only in the EU. Within NAFTA, there is a factual coordination of policies in the sense of alignment with the USA, which clearly carries the greatest economic weight in this integration region. In the context of Mercosur, there is no coordination of policy, but some harmonisation of standards in some areas.

(3) The need for action on environmental policy also has to be differentiated in terms of the **scope of liberalisation**. The political advantages of regional integration also enable a liberalisation in sectors not covered by GATT/WTO. Regional and inter-regional integration and free trade agreements normal include environmentally relevant areas in their regulations - e.g. agriculture and forestries, industry, energy, and tourism: These sectors are environmentally sensitive, and their liberalisation has direct implications for the environment. On the other hand, these sectors are often under the influence of protectionism, so that only a few developed *policy responses* are available, as these areas have not yet been liberalised in the context of GATT/WTO. An example of this special kind of need for action is the liberalisation of the NAFTA maize (sweet corn) market, with its effects in Mexico.

(4) Different needs for action exist in connection with **regional** and **inter-regional agreements**, especially with regard to the differences between the participating countries. In regional agreements there tends to be more intensive cooperation on environmental policy. Regional agreements usually cover a smaller number of more similar countries. It is usually easier to define environmental quality objectives with fewer negotiating partners. The geographical distance, and thus the differences between the countries participating in regional agreements, are usually not so large as between countries in inter-regional agreements. Neighbouring countries are more easily affected by cross-border environmental problems, and have more experience in cross-border cooperation, including in environmental matters. Agreements on environmentally-related measures are then more easily achieved, because there is a basis of mutual trust created by earlier cooperation. Interregional agreements are characterised by great diversity between the countries involved, which makes it more difficult to find common objectives (APEC, EU-MFTZ). Thus there tend to be more favourable start-out opportunities

for effective regional environmental control in regional free-trade agreements than in inter-regional agreements. Nevertheless, the strategic possibilities should be used more intensively, also in inter-regional agreements, especially in emerging, transforming, and developing countries, in order to emphasise the aspect of *good governance*.

2.3 Methods of evaluating the environmental effects of free trade agreements

In order to be able to evaluate the environmental effects arising out of the realisation of a free trade agreement, a step by step approach must be taken. The first step must consist of an analysis of the expected *economic* changes. These include assumptions and predictions about changes in the flow of trade, patterns of production, consumption, and investment, etc. On this basis, a second step can be taken to evaluate the implied environmental effects.

The following section 2.3.1 looks at existing methodological approaches to assessing the environmental effects of free trade agreements¹⁸. Following this, in section 2.3.2, further development of the methodology will be considered.

2.3.1 Existing approaches

2.3.1.1 OECD (1994)

- **Representation**

The OECD study already dealt with in section 2.1.4 represents a generally applicable method for evaluating the environmental effects of trade agreements. This approach is intentionally general, in order to provide a number of options. An important criteria for the methodological approach is therefore the flexible and practical applicability of the procedure. In the OECD study, the method used is an adapted (project-oriented) *Environmental Impact Assessment* (EIA). Of course, this cannot be carried out in such detail because of the complexity and greater geographical dimension as compared to a project EIA. It is much more important to identify the direction and scale of the expected environmental influences.

An evaluation of environmental effects, according to the OECD study, can be carried out in a number of consecutive steps:

1. **Description** of the environmental status of the basis of available data.
2. **Prediction** of use of resources, emissions, environmental quality, on the basis of the trade agreement, based on the models and other prognosis and simulation techniques.
3. Playing through **scenarios** for environmental effects, in order to test hypotheses and predictions.
4. Supplements in the form of sector or geographic region related **case studies**.
5. Application of **policy evaluation techniques** (e.g. cost-benefit-analyses).

The OECD study recommends fixing procedures for **monitoring** and **follow up**, in order to observe the implementation of the **measures** suggested in the environmental report. These can show as changes in the trade agreement, instruments for securing the environment, or supplementary mechanisms (environmental legislation, ecological taxation, ecological funds,

¹⁸ In section 2.1, only the profiles for the evaluation of environmental effects were examined.

financial or technical support for environmental technologies, etc.). Questions of the **description** or **evaluation** of the trade agreement are presented as checklists. They are summarised in blocks.

First, a preliminary *screening* of the subject trade agreement is carried out, in order to select the affected goods, processes, sectors, and regions, and the typology and geographical range of the potential environmental effects.

Blocks 2 to 5 refer to the main categories of **environmental effects** (see 2.1.4), whereby questions about regulatory effects should be specially tailored to fit the free trade agreements. The should be divided into:

- general questions about free trade agreements, taking into account the objectives of sustainable development, environmental principles such as the principle of being prepared
- trade-related questions such as restrictions, regulations on environmental protection, exceptional regulations
- questions on instruments of environmental policy, such as product standards, state support for the private sector in the field of environmental protection, economic instruments, and other measures (e.g. the effects of trade related investment measures (TRIMS) on environmental policy
- questions of timing, such as reporting obligations, arbitration rules, implementation of environmental legislation and standards, necessary changes in the trade agreement.

• **Criticism of the OECD (1994) approach**

The approach of the OECD is clearly categorised in its general structure, and is convincing. A few remarks on its implementation seem appropriate.

For the application of the suggested method of *Environmental Impact Assessment* (EIA) to a political context, instead of the hitherto usual project reference, there is, as yet, no analytical structure. For this reason, a detailed operational structure, from the collection of data to its evaluation, has not yet been formulated. This is also addressed in the OECD study.

The idea of extending the method of an EIA, which because of its development is project oriented, to political and especially to cross-border questions was already dealt with in the Espoo convention of the UN-ECE of 1997. Here, criteria are also specified for the environmental significance of activities, for the evaluation, and for arbitration in case of disputes. In the suggestion of the EU commission for a *Strategic Environmental Assessment* (SEA) reference is made to economic and social subjects, whereby an EIA only represents a part of the whole concept (Feldman,1998). In wide areas, therefore, the OECD approach is more an SEA approach than a project-oriented EIA.

Within the OECD approach of 1994 a rather unspecified **methods pool** for the evaluation of the environmental effects is offered, without closer specification and explanation (e.g. "models and other techniques for predicting the consumption of resources, scenarios, policy evaluation techniques"). This conforms to the intention of the OECD, which foresaw the countries, depending on the scope of the trade agreement, carrying out an analysis on the basis of their own assessment of the scope for choice.

The checklists cover practically exclusively analysis of the text of the trade agreement (with the exception of section 1, *Preliminary Screening*). The evaluation is thus carried out without any **reference to the location** for measures, programmes, and plans, which arise out of the trade agreement. This aspect is only partially addressed in the section "Structural ef-

fects/geographic structure". Without this kind of reference, it seems to us that an evaluation of environmental effects cannot be adequate, since it is often the case that the proximity of sensitive ecological systems, and the current condition of water, earth, air at a given location is decisive for certain negative environmental effects.

The *checklists* address aspects of **town and regional planning** only implicitly (e.g. in the sections of "*Policy Response*"). The same applies for the planning of essential changes in the infrastructure. Although addressed in the methodological part of the OECD approach, the *checklists* include neither a time axis for the beginning of evaluation, nor a *monitoring* or *follow-up* process. The beginning of the evaluation, in most assessments, should take place as early as possible in the negotiation process. This, however, is made difficult if the planned environmental policy conditions and objectives are not known more exactly.

In the category of "product effects" the **analysis of specific products** is addressed. A *comprehensive* identification of product effects before or during the negotiations for the free trade agreement would seem to be unrealistic in practice. It would be much more useful to examine possible changes in product groups, for which customs categories could be useful.

In the category of "structural effects", changes on the micro-economic level are addressed. It would be very difficult to quantify these before implementing a free trade agreement. The postulate of a process which can be practically implemented, mentioned at the beginning, therefore seems to be questionable.

A major weakness of the OECD paper is that the **indicators** for the evaluation of environmental consequences are not explained, and environmental effects are only addressed in general terms ("pollution, health, safety, use of resources"). Neither is there a hierarchical ordering of effects. Objects for protection, environmental quality objectives are neither defined, nor required in the evaluation.

2.3.1.2 CEC (1999)

- **Representation**

The authors of the CEC study suggest a "*Pressure State Response*" approach for the evaluation of environmental effects arising from the NAFTA agreement (PSR, see section 2.1.5). This is designed to enable an analysis of the influence of free trade on the four media of air, water, soil, and the biotic environment. **Environmental indicators** serve the evaluation of environmental strain. The influence of environmental strain must, however, according to the opinion of the CEC authors, be seen in connection with environmental relief measures, such as environmental management systems. Depending on the geographic region, the sum of environmental strain and environmental relief will vary. It is especially important to identify the regions where low levels of net strain cause high levels of irreversible damage to the environment. Analogously, small environmental relief measures can be very useful.

The environmental media are examined individually in the CEC study. This is usual. Relevant indicators should be identified, which can be comparable within the NAFTA region, and be of special importance.

For the medium **air**, the model has the following indicators:

- evaluation of the air quality: concentration of the surrounding air and emissions (TSP/PM₁₀, CO, SO₂, O₃, NO_x, inorganic toxic metals, organic toxic substances: VOC, PAH, dioxin)
- Evaluation of acid rain: SO₂, NO₂
- Evaluation of influences on the climate and the ozone layer: CO₂, FCKW, N₂O, CH₄.

Standard indicators for **water quality** are BSB, content of suspended matter, nitrates, phosphates, ammonium, excremental coli organisms, heavy metals, toxic organic substances (PCB, Dioxin). For the water supply, probe rates and use are the basis for the assessment (separated for ground and surface water, treated and untreated, and according to sectors).

The evaluation of **land use** is carried out using the indicators of consumption of land for hazardous and non-hazardous waste, changes in the use of the land, erosion, land improvement measures, and land use methods. For evaluation of the **quality of the soil**, use of pesticides, organic substances, changes in the structure of the soil, over-use of marginal soils, irrigation, salination, desertification, erosion, and soil contamination by hazardous and non-hazardous waste are taken into account.

The **biotic environment** is

- evaluated generally in terms of loss of species, endemic species, endangered species, reduction and division of living space, conversion of rural space into urban space, legally protected areas, and
- evaluated specifically in terms of the condition of the forests (distinctly for each type of forest): proportion of forest, deforestation rate, reforestation rate, successful regeneration, timber volume, average yearly increase compared to felling rate.

In addition, the CEC suggests **sector-specific indicators** for use in individual case studies. The systematic approach to the evaluation of **human health** must also be increased. The authors recommend using the maximum possible number of indicators and data which can be extracted from other CEC programmes.

- **Criticism of the application of CEC (1999)**

The CEC study comprehensively examines environmental effects arising out of the NAFTA agreement within the agreement zone, on the basis of selected products: maize (sweet corn) growing, the electricity market, beef farming - all in the form of case studies.

The evaluation basis used for environmental effects is the *Pressure State Response* model (PSR), which can be regarded as appropriate for the purpose. Media-related **indicators** are suggested. Their selection and relevance is not, however, systematically derived. Methodological basics, such as definition, sourcing, calculation, and evaluation of data, availability of data, are not explained. The indicators are not designed for a general free trade agreement, but are limited to the NAFTA region. Transfer to Europe or to integration zones between developing countries would require changes in the indicators.

In the CEC studies, only environmentally related indicators are used. There are no social, economic, or institutional indicators. Neither are there any indicators for human health. This means that many of the effects of the agreement, including some mentioned in the CEC study, are not covered. In our opinion, there are too many indicators for one area of problems or for single media, which makes it difficult to handle in practice.

2.3.1.3 World Resources Institute (WRI) (1997)

- **Representation**

The World Resources Institute (WRI) (1997) applies a method consistent with the 1994 OECD study. An attempt is made to analyse and evaluate the environmental effects arising out of trade agreements in the Latin American and Caribbean region (LAC). The aim is to inform politicians at an early stage of probable consequences of various trade policy regulations. One aim of the *ex-post* investigation is the identification of "*hot spots*" - i.e. sectors with the highest concentrations of environmental effects. In the industrial sector, these are metal-lurgy, industrial chemicals, and non-metal products, although the growth stimulated by free trade agreements in other sectors is greater.

The trade agreement is empirically examined from different points of view:

- Sectoral and inter-sectoral view: generate correlation between sectoral trade activities and environmental effects, identify priority sectors, time-line analysis
- Geographical view (within the LAC region): differentiated view of individual countries with different emphases in their trade relations
- Link-up of several sectors and regions: e.g. harmonisation efforts in guarding against hazards
- Regulatory structure: adaptation of legislative measures to trade and environmental policy objectives (e.g. technology transfer of environmental technology, certification systems, and ecological labelling).

Fourteen media-related categories of damaging substances are given as **indicators**:

- Air emissions: particles, PM10, CO, SO₂, NO₂, VOC, metals, toxic substances
- Water emissions: metals, BSB, suspended solid particles, toxic substances
- Deposits of toxic waste and metals in the soil.

These indicators are related to eight selected export sectors in industry and commerce. The results are presented quantitatively as emissions **for each export sector**/export industry. For each indicator, the sum of all emissions for each sectors is shown. This makes it possible to identify sectors with high and low overall emissions in relation to each 1000 employees.

In addition, the portion of the emissions arising out of export production is shown **for each country**. For each indicator there are then the same quantities of emissions as the sum for all sectors. From this can be derived the geographical distribution of emission-intensive export sectors. This is followed by a grouping of individual countries of the LAC region according to their membership of various regional trade agreements (e.g. Mercosur, Andean Pact) and a link to their export data.

The results of the case study for the industrial sector show *no* clear connection between export growth and overall emissions in relation to each 1000 employees. For the extractive sector (agriculture, forestries, mines, fisheries), because data are not available, and because of methodological problems (e.g. case studies in which the influences of trade liberalisation were not separately noted, or missing countries studies on the sector level) only qualitative evaluations were made. For example, an identification and geographical differentiation of "*hot spots*" has been made for the LAC region. The *environmental pressures* are lack of nourishment, salination, erosion, deforestation, reduction in vegetation, water shortage, agro-chemical pollution. In these areas, intensified agricultural activity, arising out of intensified trading relations,

leads to expected increases in soil degradation. A further qualitative evaluation is made with the example of Venezuela, in the form of a matrix. Selected sectors (columns in the matrix) are compared with various categories of trade agreements (rows in the matrix). The fields in the matrix differentiate with regard to prognosticated economic development between:

- potential for growth in this sector
- potential for strong growth in this sector
- no potential for growth in this sector.

Trade agreements are divided into:

- free trade conditions with environmental standards ("environmental pacts")
- free trade conditions without environmental standards
- no free trade

Criticism of the WRI (1997) approach

Although an *ex-ante* evaluation was aimed at from the beginning, the study only really provides an *ex-post* observation of the LAC region. It is also imaginable that future-oriented estimates could be carried out according to this method. A quantitative description of the environmental condition by means of emission indicators is only carried out for the industrial sector, the extractive sectors being only quantitatively analysed. With a view to extending the application, the question can be put here of whether suitable indicators and valid data specially for these countries, or for developing and emerging countries in general are available or can be derived.

The authors of the WRI study themselves come to the conclusion that changes in two very important areas have not been converted, namely in the areas of technological effects (reduction of emissions) and environmental policy, with the categories of allocative efficiency, *scale*, of business activity and composition of production. By reference to emissions per 1000 employees, the technology effects have been held constant. An effect caused by environmental policy measures was not considered. Without considering the levels of environmental and economic policy and technology effects, a sectoral qualitative and quantitative view of effects has little significance. This is especially true for trend predictions.

In the study, no coherent concept for evaluation of environmental effects for all sectors is developed. For the industrial sector, for which indicators for quantitative descriptions are used, references to the location and possible infrastructural changes go unmentioned, just as in the OECD (1994) study. On the other hand "*hot spots*" of land degradation by the extractive sectors are taken into account. Other indicators, such as human health, destruction of species, water reserves, are not examined.

2.3.1.4 Driving force State Response approach (DSR) of CSD

Presentation

Agenda 21 identifies in its 40 chapters all important policy areas of sustainable development. More than 170 states have passed this action programme. Progress in the application is observed by the *Commission for Sustainable Development*, (CSD). The CSD has developed a system of **sustainability indicators** in four categories (or "themes"): economic, social, ecological, and institutional indicators. With these indicators (actual condition indicators) an attempt is to be made to represent and designate complex contents. The named categories have three types of indicators allocated to them: *driving force indicators*, *state indicators*, and *re-*

sponse indicators. As a structure for indicator systems, the *Driving Force State Response* approach (DSR) is widely accepted internationally.¹⁹

For the economic categories of "transfer of environmentally compatible technologies, co-operation, and strengthening of human resources" (Agenda 21, Chapter 34), the following indicators have been selected:

- Driving force indicators - import of capital goods
 - foreign direct investment
- State indicators - portion of the environmentally compatible imports
 of capital goods
- Response indicators - support by technical cooperation

For chapter 18, "Protection of quality and quantity in fresh water resources, individual indicators are named:

- Driving force indicators - annual intake of ground water and surface water
 - domestic per capita consumption of water
- State indicators - ground water reserves
 - concentration of excremental colibacteria in fresh water
 - biochemical oxygen requirements in waters
- Response indicators - degree of water treatment
 - density of hydrological network

The German Council of Environmental Advisers (SRU 1998) has established that "By comparison of intense environmental strain, condition, and response data with environmental policy objectives, and environmental action objectives, target indicators can be formed. These form an important information basis for the scale and the achievement of the targets." Only the combination of suitable environmental indicators with environmental policy objectives will allow the quality of environmental reporting to be increased substantially. The environment council indicates that the selection and development of a framework of descriptive environmental indicators should be decided scientifically. In a subsequent process, in which social groups are involved, environmental policy objectives are to be determined, which can be used for the aggregation and standardisation of individual indicators.

At the 4th international workshop on CSD indicators for sustainable development in 1998 in Prague, the German report noted that many of the indicators in the CSD list had little relevance for highly industrialised countries. There were also big gaps in the list of indicators with regard to trade and environment. It was not always possible to separate driving force and state indicators for these subjects.

Application of indicator systems in integration zones

As many states are concerned to implement the action programme Agenda 21, and this process is being observed at an international level, it would make sense to apply an internationally widely recognised indicator system. The outlined CSD approach, or the closely related PSR

¹⁹ Compare the relation to the Pressure State Response approach (PSR) of the OECD, described in section 3.3.2.

causal model of the OECD (*Pressures, State, Responses*, OECD 1993c; see section 2.3.1.1) can be used for the posing of questions about the evaluation of the environmental effects of integration agreements, since they allow a link-up of scientific, environmental policy, and economic objectives. The environmental council notes in this respect that a link between the economy and the environment is possible via the model of sustainable environmentally compatible development (SRU, 1998).

An important advantage of the CSD environmental indicator approach is that in the context of the work of the CSD, a process of scientific agreement is taking place on an international level. By the year 2000, a current pilot phase should have been completed, in which 15 countries in Europe, Africa, Asia, and South America have been involved. The CSD Secretariat has produced the "Guidelines for the Test Phase" and the "Method Sheets". These include for every indicator, definitions, meanings, bases for calculation, and availability of data. They are intended to ensure a standardised data collection system.

The *European Environmental Agency* (EEA) will also soon produce a report on the environment within the European Union ("*Environment in the European Union at the Turn of the Century - EU98*") in which the DSR approach will be widened to a *Driving Forces Pressures State Impact Responses* Approach (DPSIR) (EEA 1999). The indicators are embedded in the *Integrated Environmental Assessment* (IEA). This is intended to enable a reporting system to be developed which will provide horizontally comparable results and reference indicators for the environment in Europe. The report is intended to process and evaluate environmental influences which arise out of social changes (e.g. time lags between legislative measures and investments, and the effects thereof), and socio-economic changes (e.g. economic growth, restructuring of economies within the EU). This would provide a methodological instrument very similar to the DSR approach, with a strong data base, in order to be able to analyse economic activity in the context of free trade agreements.

It may be assumed that the different economic performance and the environmental experience of different countries will mean that the availability and quality of data will vary. Since the DSR approach for the evaluation of sustainable development, or the DPSIR approach, are based on international scientific and political co-operation, the indicators and the data are checked on a broad level, and any gaps are closed. This contributes to a permanent improvement of quality. It is also to be expected that the transferability and adaptation of indicators and data, such as e.g. production-related emissions, effects of infrastructure measures, will also be made possible to other countries. Environmental identification systems are described in the ISO standards, section 14000 (BMU 1997) as a part of an enterprise environmental management system.

2.3.1.5 Task force of the European Union

At the end of 1988, the Council of the Environmental Ministers of the EU set up a *Task Force* to assess the environmental effects of the European Single Market (*Task Force* 1993). The study is partly based (in a simplified form) on the structures established in OECD 1994, and examines on the one hand various sectors with regard to the environmental effects to be expected from them (processing industry, energy industry, transport, tourism, agriculture), and supplements this with a separate analysis of the waste sector. On the other hand, a locational, regionally related view is set against the sector view. Both approaches examine, at different levels of intensity, the effects on the environmental media. A case study related to the chain of causality liberalisation \Rightarrow growth \Rightarrow energy consumption \Rightarrow emissions is used to carry out an

exemplary, thorough, econometric analysis. We do not go into the consequences for environmental policy here.

2.3.1.6 Other approaches

The **UNEP** has not yet developed any special approaches to the evaluation of environmental effects arising out of free trade agreements. In UNEP (1997) there is only the remark that an EIA is to be carried out not only for projects, but also for policy, planning, and programmes. As already mentioned, the **World Bank** also has no suggestion for the evaluation of environmental effects of trade. The **EU Commission** has called for an evaluation of the planned new WTO round. The first results are expected at the beginning of 2000.

2.3.2 Development of an extended methodological application for EIA

2.3.2.1 Experience so far

Knowledge of the growth effects of regional integration, as described in section 1.2, as well as of the environmental effects of growth, as described in the preceding sections of this chapter, are based on the *ex-post* analysis of real integration zones. On this basis, *ex-ante* studies can provide prognoses of anticipated growth and environmental effects of integration. An *Environmental Impact Assessment* (EIA), as described in OECD 1994, should ideally be carried out before, or at least parallel to the contractual negotiations on a regional integration agreement, in order to obtain information about possible environmental problems as soon as possible, and to provide appropriate *policy responses*, which can be integrated in the agreement. EIAs are thus policy-oriented analyses, designed to estimate the environmental effects of planned integration agreements. They are intended on the one hand to identify opportunities to prevent or ameliorate negative environmental effects, and on the other hand (which is an important strategic effect) to identify *win-win* situations (WWF 1998a:4).

The idea of the EIAs is not new. As early as in 1989, a work group of the EUC was concerned with the environmental effects of the common market ("1992" - *The Environmental Dimension*, Brussels, 1990). EIAs for trade agreements are also recommended by the OECD ministers in the 1993 "*OECD Guidelines on Trade and Environment*": "*Governments should examine or review trade and environment policies and agreements with potentially significant effect on the other policy area*" (OECD 1994). A large number of EIAs have so far been carried out at a national and local level (compare the experience of the *Environment and Development Resource Center* 1998, WWF 1999).

EIAs of regional integration agreements have so far only been formally binding for NAFTA. The corresponding NAFTA study is part of a working programme of the *North American Commission for Environmental Cooperation* (CEC). This *comprehensive* environmental analysis was only carried out *ex post*. In spring 1999, the CEC presented a report (CEC 1999) on the basis of the three year (!) work of a traditional top-heavy work group. This made the difficulties of processing the complex problems clear. In the EU, there have so far been no regional EIAs, although the EU Commission has committed itself to them.²⁰ The European Commission has ordered an environmentally-related evaluation of the coming WTO round,

²⁰ EU Commission, Communication on Trade and Environment, 1996, quoted in Environment and Development Resource Center 1998.

and also plans one for the *Transatlantic Economic Partnership* with the USA. An *ex-ante* evaluation of the Mediterranean Free Trade Zone has been promised by the EU, but not yet begun.

It is probably easier to agree an EIA in a separate environmental agreement, rather than as part of a trade agreement. It should be carried out involving all *stakeholders* (including the governments involved, NGOs, private industry) and be widely and publicly discussed in order to achieve the required participation of civil society. The analytical results of the EIA should ideally be realised in a regional environmental monitoring system. Real changes in environmental quality and cross border effects of production or use of resources, and their causes, can be observed by an environmental monitoring system, as has been agreed in many regional agreements.

In order to estimate the environmental effects of an integration project, it is necessary to allocate the complex connections to at least two interlinked levels of effect:

Liberalisation \Rightarrow Growth
 Growth \Rightarrow Environment

Further finer definitions may be necessary, e.g.:

Liberalisation \Rightarrow Growth
 Growth \Rightarrow Energy consumption
 Energy consumption \Rightarrow Emissions

In reality, it is extremely difficult to quantify the effects of integration.

2.3.2.2 Structure of an EIA for regional integration zones

An EIA for regional free trade agreements should be carried out as early as possible, before or during the contractual negotiations. This requires appropriate financial resources and the political will to take the results of the EIA into account in the contractual negotiations. The procedure must be transparent and should enable public participation.

An analysis of environmental effects expected to arise from an integration agreement should consist of **six steps**:

1. analytical estimate of the *economic* effects of the regional integration agreement,
2. *Categorisation* of sectors and groups of products with regard to their potential ecological effects. If the second step in the analysis should indicate (hypothetically) that there will be no environmental effects, the following steps would be unnecessary,
3. *Screening*: description of the environmental situation before integration (*status quo ante*),
4. *Gap analysis*: description of potential positive and negative effects of the prognosticated *economic* development on the environment on the regional and national level, to identify priority problem areas, contrasting of the expected environmental situation with alternative measure scenarios,
5. *Policy responses*: Evaluation of alternative environmental policy options, taking account of the targeted environmental policy objectives, derivation of concrete action recommendations, including institutional and regulatory aspects,
6. *Monitoring and controlling* of environmental effects in a time line.

This approach differs from the existing method, described in section 2.1.3, in the following points:

- It is based on the concrete subregional and local action levels.
- It provides more concrete **indicators** which can be used to describe the environmental *status quo* and to detect changes.
- It is based on *gap* analyses which arise out of various *first*, *second*, and *third best* scenarios, which also include dynamic reactions and changes in the state environmental, economic, and infra-structure policies.

Step 1: Estimate of economic effects of regional integration agreements

The analysis of the approaches of the OECD, WRI, and CEC described in section 2.2 makes clear the need for economic prognosis before the environmental assessment. An estimate of the economic effects (consumption, production, trade, investments) is already connected with considerable uncertainties. A transfer of available case studies to other integration zones is only possible within limits. The effects observed for NAFTA, for example, provide only very limited evidence for a more intensive Mercosur integration.

A more exact limitation and isolation of various influential factors which have an effect on the economic variables is very difficult, on the one hand when there is an overlap between multi-lateral (GATT), bi-lateral, and regional liberalisation measures, on the other hand because environmental policy measures are often connected with a change in internal economic national policy. In a case study carried out by WWF it was, for example, established that the changes in maize production in Mexico were on the one hand caused by the opening of markets in the context of NAFTA, and a re-structuring of Mexican agriculture (WWF 1998a:19f.) on the other hand. Hunter (1997b) comes to the conclusion for APEC that the economic consequences of regional trade liberalisation are overlapped by the consequences of global liberalisation of trade, so that the environmental consequences of regional trade liberalisation could not be evaluated. The WTO also remarks: "*The reasonable conclusion to draw from a literature which identifies many potential forces pulling in opposite directions is that it is impossible to generalise - that is, to predict*" (WTO 1995:51).

As a matter of principle, it would be desirable to be able to summarise an economy in a model so that it would be shown as a whole, and 'correctly'. There are, for example, a large number of econometric business cycle models which try to do this. They all have in common that they can only be partial models, since they have to ignore certain aspects of reality. The decision about which components are accepted (and how), and which not, have an arbitrary quality. They especially cannot take into account the regional and sub-regional structures of an integration zone. Even when each sub-region is analysed separately, the interdependencies between the part-regions are cut out.

A regional integration zone, with its complex internal structures, and with its complex external relations, is very difficult to capture in a model. For this reason, total prognoses for the whole integration zone will only be able to provide a framework. It is much more important not to predict the economic effects as a lump sum, but to relate them to the real local or sub-regional levels of action. In spite of the loss of stable statements about inter-sectoral cross-connections, one will often have to resort to **case studies related to branches and locations**, as the probable concentrations of economic effects in certain locations will, in many cases, greatly overlap with the branch structure.

Independently of this, in practice, partial, analytical equilibrium models are used, with the help of which changes in certain variables and the reactions of other parameters can be simulated. A large number of aspects have to be assumed. A problem is posed by the interdependences and auto-correlations which exist in reality between the variables, which, in terms of model technology, are usually "frozen" by a *ceteris-paribus* side condition, thus leading to a certain remoteness from reality. Induced dynamic effects in particular can only be shown unclearly.

In the field of foreign trade, on the theoretical level, simplified two-country two-goods models of the Heckscher-Ohlin type are still popular, in order to analyse such effects as creation of trade and diversion of trade. Already the inclusion of the *factor* perspective, indispensable for a common market, complicates the approach greatly. Independently of this, such approaches are normally comparative-static - i.e. they do not explain dynamic changes arising out of an integration effort, such as learning effects. These can perhaps be examined in isolation, although this would mean that cross connections to other variables would have to be neglected.

In section 1.2, the direct, indirect, and the static and dynamic effects of trade liberalisation (product effects, technology effects, growth and scale effects, (infra-) structural effects, regulatory effects) are shown. These should be evaluated as comprehensively as possible, as they represent the core of the causes of environmental effects. Especially the dynamic effects, which, e.g. include changes in the **infrastructure**, are very difficult to assess *reliably*.

Changes in the flows of trade, and, to a certain extent, growth effects, can be estimated with *Applied General Equilibrium Models* (AGEMS) - usually in the form of partial equilibrium models - (Applied General Equilibrium Models). Many influences, such as national macro and sector policies, or at a multi-lateral level, the results of the WTO/GATT negotiations, have to be accepted as constants. Central factors of influence for economic effects are the changes in absolute and relative prices in the goods traded, which, with regard to assumed elasticities of price, lead to reactions in supply and demand, and thus lead to changes in production and consumption and structures and the flow of trade. In addition, changes in (direct) investments and locational changes of production also have to be estimated. All quantitative estimates of economic effects of regional integration are largely based on comparative statistical Viner assumptions, and cannot deal with the dynamic effects of integration described in section 1.2, neither for the integration zone, nor for third countries (WTO 1995:45).

The prognosis of economic effects should identify the sectors or products, for which significant changes in supply or demand are expected because of liberalisation of trade. These are often the sectors or products which were categorised as "sensitive" before the liberalisation and were thus given special protection. It is primarily necessary to deal with the expected changes on the level of product categories (e.g. on the basis of customs tariff systems). The prognosis of economic effects can therefore only be selective and must concentrate on the most important economic changes. This necessary restriction always contains arbitrary elements. The (*ex-post*) evaluation of the effects observed in NAFTA on the basis of just a few selected sectors (CEC 1999a) demonstrates this clearly.

The speed and the scale of liberalisation at first influences the trade structures. In the longer term perspective, dynamic effects are noticeable which have consequences for the structures of consumption and production, and include competitive and technological effects. Changes thus induced on the level of macro and sectoral policies (energy, taxes, subsidies, standards) can be dealt with in sub-models, with the help of which various scenarios can be simulated.

Many of these effects are very difficult to quantify, and can at best be estimated as tendencies. The economic effects of regional integration shown in section 1.2 indicate only a general direction, and are difficult to compound in to a model. As with all partial or (quasi) total models, the solidity of the results therefore depends on how realistic the selected assumptions and model structures are and on the accuracy of the data inputs. For this reason, the development tendency of estimates is often established soundly whereas the precise data are very uncertain.

In spite of often great disaggregation, models of this kind, if they are to remain handleable, are still greatly aggregated. For this reason, assumptions about behaviour, which play a part in determining the functional relationships between different variables, have to be simplified to conform to typical ideals. Many aspects of reality therefore have to pass in the stage of the construction of the model through the eye of the needle of simplification. A central problem lies in the inadequate availability of information (e.g. on elasticity), so that hypotheses have to be used. Many can be made more concrete, or be modified in the course of time by time-series or other observations, but many cannot.

The model-theory prognosis apparatus, which is used, among other things, on the national level to predict business cycles, is always short-term-oriented. The term is usually restricted to one year. This is not the place to go more deeply into the econometric aspects, but the tendency is for the effects of trade creation and trade diversion to show in the medium term, making it difficult to integrate them in the model structure. This is also shown by experience with the integration prognoses for the EU and NAFTA (compare this with an overview of the models tested in connection with NAFTA by Kehoe/Kehoe, 1995). The difficulty in determining causal effects are shown in an exemplary manner by the large number of *ex-post* analyses with regard to NAFTA, which often rely on assumptions (Schirm, 1997:71).

Against the background of prognoses for economic integration effects, the second step is to analyse from which sectors and groups of products ecological effects emerge.

Step 2: Categorisation of sectors and groups of products according to their potential ecological effects.

Changes in the economic variables are only ecologically relevant if they have a positive or negative effect on the environment (WWF: 1999:11). The focus should always remain ecological. Three categories are formed for this purpose:

- Sectors, products, or product groups without significant environmental influence (e.g. financial services).
- Sectors with a low level of environmental effect (e.g. electro-technology, electronics, mechanical engineering, food products, telecommunications).
- Sectors with significant environmental influence (e.g. agriculture, forestry, fisheries, energy, steel production, basic chemistry, infrastructure, tourism).

It should be established what type of environmental effects are involved in relation to air, water, soil, bio-diversity, human health, etc. Furthermore, an analysis should be carried out to establish if the main environmental effects occur in the production, trade or consumption of the goods concerned, and if the effects are local, cross-border (regional), or global. This will have consequences for the *policy responses*.

The selection criteria for the products or sectors to be analysed include the direct environmental relevance, especially the economic or political relevance for the integration zone as a

whole - e.g. with regard to intra-trade, for a certain member country, or for certain geographically identifiable sub-regions. "*Hot spots*" will be identified in many cases.

Step 3: *Screening* - a description of the environmental situation before integration

The anticipated environmental effects can only be usefully evaluated in comparison to the *status quo ante*, i.e. the environmental situation before the implementation of trade liberalisation measures. Whether steps 3 (description of the *status quo*) and 4 (anticipated effects) are each carried out for different environmental media or problem areas, or are to be carried out in systematic isolation, cannot be judged in general. In any case, a **screening of the status** (*scanning*) should be carried out to provide a description of the environmental status and the context in which the integration agreement is incorporated. A "rough analysis" refers to the geo-ecological definition and presentation of relevant regions and sub-regions (humid, mountainous), and descriptions of large areas (steppe, natural forest, coast). This is to be supplemented by a "fine analysis" with "close-up pictures" of especially environmentally relevant branches from a sectoral point of view, and from a sub-regional point of view by definition and description of "*hot spots*". This break-down to the sub-regions, and, as far as possible to the local areas of action must be carried out congruently in steps 3 and 4.

Indicators are needed to describe the environmental situation and changes in it. The system of indicators to be used is a very central aspect of every *Environmental Impact Assessment*. Three types of indicators are always to be differentiated: the first type refers to *environmental damage* (de-forestation, transformation into steppe); the second the identification of environmental pollution by *emissions* (CO₂); the third to measurement of the *use of resources* (use of soil, water). The Environmental Report (1997) of the Council of Experts on Environmental Issues lists the following ecological problem areas:

- use and protection of soil
- pollution and protection of the air
- water conditions and water protection
- pollution of food
- noise
- waste

The use of resources must always be treated as a sub-item, or be dealt with separately. UN (1996) takes its orientation from Agenda 21 and differentiates 14 environmentally-related groups of indicators, and supplements these with 7 institutionally-oriented ones. The OECD (1994c) uses 103 indicators. An assessment must be made of how much additional information can be gained by increasing the effort put in to collecting data. The indicator system of OECD contains a so-called PSR causal model. The *Pressures* caused by human activity create a qualitatively and quantitatively describable *State* of the environment and of the natural resources, which triggers *Responses* by the players.²¹ Use of resources and emissions of pollutants are seen as *Pressures*. Examples of indicators of this kind are:

○ **Use of resources:**

- Water consumption (private households, agricultural irrigation, industrial processes, cooling of power stations, depletion, pollution, reduction of oxygen levels by heating)
- Area of agricultural land (soil damage, degradation, erosion, desertification, over-grazing, deforestation, clearing)

²¹ Compare with the Driving Force State Response (DSR) of the UN Commission for Sustainable Development described in section 3.3.1.4.

- Primary energy use (fossil fuels: coal, oil, natural gas; atomic energy, hydro-energy, bio-energy, solar energy).
- **Input of pollutants:**
 - Energy-related CO₂ emissions (air)
 - Waste and use of land (soil)
 - Fertilisers nitrates, phosphates, potash, lime, nitrates washed out of the soil into the ground water (soil and water).

If a DSR approach (e.g. DPSIR) is to be used to evaluate the environmental effects of an integration agreement (see section 2.3.1.4), there is first the problem of selecting relevant subjects in the categories of economy, social aspects, ecology, and institutions, and suitable individual indicators. These must be relevant and have priority for the whole integration zone to be evaluated. In individual cases, the list of CSD must be supplemented by indicators (e.g. traffic). The following figure 2/2 shows the optimal requirements of indicators and makes a suggestion for selection in the framework of the task posed.

Analogous to the evaluation of sustainable development, a maximum of ten to twelve, preferably, however, fewer indicators should be identified for each subject. An important step is to check the quality of the existing and required data base and the validity of any indicators which may already be used in the member countries. There are normally serious data problems with regard to the up-to-dateness, completeness, and reliability of information. This applies for economic and ecological data. For many aspects, there are no timelines which could be used to observe significant developments and changes. While there are normally useful environmental data for urban areas, the data base for rural areas is usually much less reliable (the **urban bias**). In the regional context, the data are normally of different types, and seldom compatible. This results in unfavourable conditions for evaluation and judgement.

Fig. 2/2: Requirements for indicators

	Selection of free trade agreements
Ability to collect data with reasonable effort	+
Consideration of mutual influence between environment, economy, and social aspects	+
Easily comprehensible	+
Clear overview	+
Sensitivity of indicators to changes over time	+
International compatibility	+
Availability of data and time series	+/-
Relation to Agenda 21 (model for sustainable development)	-
Flexibility/openness of the conceptual framework	-
Consistency of the various sub-areas	-

+ high-priority criterion - low-priority criterion for a pilot phase

The significance of the indicators therefore has to be tried out. The data records for individual indicators have to be related to the scenarios of economic development in the integration zone. Timelines must be identifiable for monitoring purposes. The results must be finally aggregated, in order to be able to identify key indicators to serve the formation of environmental

policy in the whole integration zone. In so far as indicators are to be summarised in an index, weighting problems will occur.

An indicator is only significant in relation to a standard or in a cross-comparison with other countries. In order to achieve comparability in the second case, it is usual to take the population figures or the GDP as the reference base. In order to identify the effects of regional integration, at least national, but if possible even deeper differentiating indicators are required. An important problem is the demarcation of the effect induced by the trade agreement from other effects, which do not arise out of the trade agreement.

The methodological problems of collecting data, calculation, and evaluation of data are considerable and place great demands on the institutions responsible. There will often be training requirements in this respect in order to *build capacity*.

The environmental effects of individual **sectors** can be regarded as modules. The procedure can then be carried out in a similar manner as in *Life Cycle Assessment (LCA)*. For a large number of branches and sectors there are already suitable means of evaluation for an LCA. This, however, requires a locational reference for the investigations. The Wuppertal Institute has set itself the task of calculating material applications and material flows in production within and between the countries, in order to be able to derive balances of material flow.

For the evaluation of emissions and effects in relation to products, as well as the LCA, a series of instruments has been developed in recent years, which can also be used in countries which have only a low-level data base. These include e.g. the evaluation method for sources of air, water, and soil contamination, developed by the WHO (WHO 1982). Systems for environmentally significant statistics are described in the ISO standards, series 14000, as a part of the environmental management system for enterprises (BMU 1997).

Step 4: Simulation of alternative environmental situations

From the cross-section of sectors and products which have a significant potential effect (conditioned by integration) both in terms of economy and ecology (steps 1 and 2) arise the "critical" environmental effects of regional integration. The procedure is basically very similar to an EIA, as used at the project level. The project involved here is the intended integration, the effects of which are examined in all respects relevant to the environment. This is also done in an EIA. The systematic difference is to be found above all in the complexity of an intended integration agreement, and in the interdependence of economic, technical and demographic effects, which are not to be found in a project EIA, and which in a regional EIA must, on the one hand, lead to aggregations, and on the other to omissions.

There is a methodological problem in the distinction between *impacts* and *effects*. Effects can be observed, described by indicators, and can thus be prognosticated fairly well. An example would be emissions of SO₂. Whether and how these effects will lead to impacts, i.e. *consequences* for the environment - e.g. by causing acid rain damage to forests - can normally not be clearly prognosticated.

Independently of this specification, environmental effects should be identified on all relevant levels (*Environmental and Development Resource Centre 1998*):

- On the regional level, whereby local, cross-border (regional and global) effects should be taken into account.
- On the regional level, whereby the contributions of individual countries to global and cross-border effects are observed.
- On the national level, whereby local effects are taken into account.

The prognosticated environmental effects of regional integration on the product and sectoral level can be represented in a matrix with the environmental media and regional inputs in a three dimensional perspective. The product or sector level is only represented conceptually (Figure 2/3). The environmental effects assigned to the fields are described and commented on by appropriate indicators. Whether the environmental effects are short or long-term, whether there are any lags in the reactions of the indicators, and whether there are any overlaps with external long-term and global effects (climate, desertification) should also be taken into account. The question of long or short term is also dependent on the speed of liberalisation. It is possible that short-term negative effects (use of resources caused by growth) may be at least partially compensated for by longer-term effects (increase of resource productivity by technological change).

Case studies on the environmental effects of regional integration agreements which have already been implemented in part or in full have thus far hardly been carried out. The *Commission on Environmental Cooperation* (CEC) of NAFTA and the WWF (1998) have presented first analyses which refer to individual products or sectors, for which influence by NAFTA can be proven.

Fig. 2/3: Examples of environmental effects

Region	Capital city	District A	District B
Problem area			
Water		Cooling water intake by new power station. Contamination of water by port facility.	
Air	CO ₂ emissions caused by traffic		Particle emissions caused by industrial location
Eco-systems			Division by planned highway, etc.

From the assessment of the status quo and the prognosis of ecological effects, trends can be deduced which can be expected to occur if no environmental policy measures are taken. This could be referred to as the "*business as usual*" or perhaps the "*worst case scenario*". The trends arising from this first level of a **risk analysis** have to be contrasted with the potential developments which could be expected if alternative environmental policy measures were taken. Although it is politically often difficult to adhere to, the prognoses should emanate from realistic assumptions, erring on the side of conservatism, rather than from exaggerated

optimism, in order to avoid the creation of unrealistic expectations (management of expectations). Problem areas and risks should be clearly stated.

The different scenarios should be played out on a second level risk analysis with alternative applicable measures. These should be categorised according to theoretical and operative aspects. The theoretical *first best* measures are those which go directly to the cause of an environmental problem, and which may provide a solution to it. Examples would be minimum and maximum standards for production in the exporting country. *Second best* measures are thus those which do not fulfil these conditions, but indirectly provide a comparable result - e.g. ecological duties in the importing country. *Third best* are back-up measures which can be put in place if the other two are not possible - e.g. eco-labels, which, however, only have a much weaker environmental effect, etc. A further example is environmental certificates as *first best* measures, which for practical reasons (institutional or operative restrictions) could not hitherto be implemented, so that as a replacement a theoretical *second* or *third best* measure then becomes, on the operative level, practically a *first best* measure. The categorisation of a measure as *first* or *second best* depends on the real case conditions.

Out of the risk analyses I and II, with the comparison of the various measure scenarios with combinations of *first*, *second*, and *third best* alternatives with the business-as-usual scenario arise alternative possible **deviations (gap analysis)** between developments influenced by the measures and those which are not. The consequences arising from the eco gap analyses are evaluated in the next step.

Step 5: Evaluation and Policy Responses (suggestions)

In order to close the identified gaps on the basis of the risk-analysis, concrete proposals are made for suitable measures on the national and regional level (*Policy Responses*) in order to avoid or minimise negative effects of regional integration on the environment, and to promote positive effects. For this **change management**, an **evaluation** of the alternatively expected environmental policy effects on the regional and national level has to be carried out, whereby the possibility of implementing *first*, *second*, or *third best* measures plays a key role. Operative aspects can displace strategically desirable solutions and theoretical *first best* measures in this practice-oriented evaluation. Suggestions for the measures to be taken must be oriented to the **environmental quality objectives**. Setting these objectives implies the definition of **minimum environmental standards** in the non-technical, especially qualitative sense, and in the quantitative technical sense.

Suggestions for measures are ecological **risk management**. A zero-risk option is ruled out because free trade and integration will certainly mean environmental effects. Strategically, the concern is with risk prevention, and risk reduction. On the other hand, a (cross-border) risk transfer is partly possible, provided that contrary agreements have not been made.

In the process of discussion on environmental effects of regional integration which are to be expected according to the alternative scenarios, civil society must be included. **Participation** and **transparency** increase the general political acceptability of intended free trade zones. The *policy responses* to be suggested are intended to cover both the strategic (longer-term) level and the operative (short-term) level of environmental policy. An important aspect is the question of whether the (suggested) measures which are considered to be necessary can be implemented on the national level, or whether inter-state cooperation, or regional agreement is required, since the latter are to be coordinated with the regional integration in the sense of the principle of prevention. The required pre-conditions and economic (especially financial)

implications should be made clear in order to provide the ecological analysis with an economic basis.

In the framework of these policy-oriented suggestions for an *Environmental Impact Assessment*, it is essential to define more clearly the measures which will be necessary on the national **legislative** and **regulatory levels**, both in environmental legislation and in other areas (removal of subsidies, granting of tax incentives). Parallel to this, recommendations should be formulated about which aspects should be included in the regional integration agreement, and how.

The recommendations for action should, on the whole, take into account the economic, social, and political framework conditions, and especially the **institutional capacities** in the sense of the *ability* and the *will* to take action on the part of the possible players or institutions. In Chapter 3, it is made clear that certain instruments can often not be applied on the basis of inadequate institutional capacity. This also applies analogously for the carrying out of environmental monitoring and dealing with the indicator systems.

As the environmental implications of integration agreements can only be imperfectly estimated, the precaution principle for the application of measures and instruments should prevail. Scientific knowledge, especially in the environmental field, provides the basis for measures and instruments, especially with regard to sanitary, phytosanitary and safety standards (IISD 1994). In spite of lack of certainty, special problems must be solved, especially in cases in which wrong decisions could have serious consequences (this is especially true for climate problems). Avoidance of negative environmental consequences of integration agreements is in the foreground. At the same time, the posed flexibly, so that they can be adapted to constantly changing conditions.

Step 6: Monitoring and controlling

An *Environmental Impact Assessment* (EIA) in preparation and as a basis for regional integration agreements is not a one-off effort. The prognosticated environmental effects must be continually *monitored* in their dynamic development and changes *screened* in order to be able to take *controlling* measures where necessary. In order to support the transfer from taking corrective measures to taking preventive measures, a central aspect of an *ex-post* environmental effect analysis should be the identification of causalities. This will make it possible to identify the effects caused by trade or integration, and to take them more into account as the integration process is deepened. Independently of current environmental monitoring, an environmental review should be carried out in connection with further steps towards integration, e.g. in the transfer from a free trade zone to a customs union, and a later realisation of a common market. These follow-up measures should be firmly embedded in the integration agreement.

3. Brief description of the most important regional integration agreements

In the following sections, the most important regional integration agreements will be presented. In the **appendix** to this study, there is an overview of the regional and inter-regional integration agreements included in the WTO. The general and the economic aspects of the integration agreements are examined more closely. This will be supported by general statistical data and by an analysis of statistical data with reference to the development of internal and external flows of trade of the integration zone concerned, which are documented in a separate volume. The general presentation will be supplemented by the development of environmental policy in each integration zone. For some integration agreements, there is a large range of information available on this. For others, the information base is less wide and the situation with regard to the data less transparent.

3.0 Summary evaluation

Environmental protection is included in different ways in the various regional integration agreements. Not least, since the UN conference in Rio de Janeiro in 1992, environmental protection has become, at least as a model, an integral part of nearly all agreements. Especially in the **newer** and **workable agreements**, environmental aspects are included, which reflects the growing importance of the environment in international policy, both in the industrial and the developing countries. The scope of the environmental policy subjects is impressive, as are the often wide-ranging environmental policy aims and intentions. In many cases, however, there is a big gap between these and their implementation in practice.

The individual regional integration agreements pursue very different political and economic aims. This is partly explained by the variety of their internal structures, but also by the differences in the method, and scale of the way in which environmental protection is treated and regulated in the context of regional free trade and integration agreements:

- Seen as a whole, the **scope of regulation**, defined as the extent to which environmental aspects are included, is great.
- The **depth of regulation**, defined in terms of the authority of regional institutions, to determine environmental standards in the member states, is, with a few exceptions, low.

Concerning the quality of integration agreements with regard to regional environmental policy, it is not the environmental effects resulting from trade liberalisation, but the *inadequate implementation of existing environmental regulations* which is responsible for the modest status of regional environmental policy. There are four significant criteria here:

- The level of development of the members of a regional free trade zone
- The homogeneity or heterogeneity of the members
- The size of the integration zone
- The intensity of integration aimed for.

These criteria are mostly interdependent.

3.0.1 Range of regulation with regard to environment

Environmental policy **protected goods** are taken into account in different ways. The definition of protected goods depends on the awareness of environmental problems and the concrete needs for environmental protection in the integration zone. Protection of national environmental goods, apart from in the EU and NAFTA, is left entirely to the individual member states.

The necessity for a solution to **cross-border** environmental problems is included in all relevant integration agreements, and is usually the environmental policy core. While, among others, ASEAN, Mercosur, MCCA, and ECOWAS have limited environmental policy aims (e.g. protection of forests in ASEAN and MCCA), the EU, the Lomé Convention, NAFTA (ozone layer), and APEC (oceans) include global protection aims, whereby the protection is usually related to the implementation of existing multi-lateral environmental agreements. Figure 3/1 summarises the protected goods which are included in the relevant agreements.

Fig. 3/1: Depth of integration and scope of regulation*

Depths of integration	Protected Goods		
	National	Regional	Global
<ul style="list-style-type: none"> Preferential Systems 			
SAARC	-----	-----	
EU-Lomé	=====	=====	=====
<ul style="list-style-type: none"> Free Trade Zones 			
MCCA		=====	
NAFTA	=====	=====	=====
APEC	-----	-----	-----
ASEAN		-----	
SADC	=====	=====	
ECOWAS	-----	-----	
EFTA	=====	=====	=====
<ul style="list-style-type: none"> Customs Union 			
MERCOSUR		=====	
CARICOM	-----	-----	
<ul style="list-style-type: none"> Economic Union 			
EU	=====	=====	=====

*) The thickness of the lines corresponds to the depth of regulation. See also figure 3/2.

In regional integration agreements, there are different reasons for including environmental policy. This was dealt with in detail in Chapter 1. Some aspects should be emphasised again here:

- Environmental protection is understood in many developing countries as an objective (improvement of environmental standards in the sense of sustainable development), and at the same time applied as an instrument. An environmental orientation is expected to enable better access to the markets of the industrial countries (Central America, APEC, EU-Lomé) and (on the basis of real necessity) to receive support in solving environmental problems from the industrial countries in the form of technology transfers and financial support.
- Environmental protection is included in the free trade agreement in the context of the general political coming together and strengthening of negotiating power to the outside (ASEAN, Mercosur).
- Agreement on the exchange of information and spread of "best practice" political approaches and instruments (APEC, ASEAN, Mercosur, NAFTA, EU) can be achieved relatively easily.

3.0.2 Depth of regulation with regard to environment

The more importance is placed on environmental protection, and the greater the depth of integration (i.e. the more the economic and political advantages of the regional integration are made use of), the wider tends to be the scope of regulation, and the greater the depth of regulation in the agreement with regard to environmental protection, with the exceptions of EFTA and the EU-Lomé Convention. The implementation of regulations in practice has at present only been achieved in the EU and EFTA. In time, and with the exception of Mexico, this will also apply for NAFTA. Figure 3/2 gives an overview of the relationship between the depths of integration and regulation.

Paradigmatically, the environment and the economy are understood as harmonious areas. Regulation of conflicts which arise in connection with trade and environment is usually dealt with outside the integration agreement. The effects of environmental policy on trade, on the other hand, are central to the agreement. Only the EU and NAFTA go into the relationship between trade, competitiveness, and environment.

Figs. 3/3 and 3/4 make clear that a comprehensive and in depth consideration of environmental protection only takes place in the context of the EU and NAFTA. In most agreements, environmental protection is mentioned, and basics are included, but the integration of environmental into the agreement is in general at a low level. It is restricted in most cases to the co-ordination and implementation of a few special projects aimed at solving special regional environmental problems.

Nearly all regional integration agreements include a political dialogue on questions of environmental policy, especially when a large number of developing countries is involved. Most of these agreements, however, are at present at the level of environmental policy consultations. In ASEAN and APEC, mutual information and consultation are central to the environmental policy co-operation.

Fig. 3/2: Depth of integration and depth of regulation

Depth of integration	Handling of environmental protection in free trade agreements				
	Indirect regulations	Principle/vision	Direct regulations	Bodies/institutions	Concrete instruments
<ul style="list-style-type: none"> <i>Preferential systems</i> 					
SAARC	-----	-----			
EU-Lomé	=====	=====	=====		
<ul style="list-style-type: none"> <i>Free trade zones</i> 					
MCCA					=====
NAFTA	=====	=====	=====	=====	=====
APEC	-----	-----	-----	-----	-----
ASEAN	-----	-----	-----	-----	-----
ECOWAS	-----	-----			
SADC	=====	=====	=====	=====	
EFTA	=====	=====	=====	=====	=====
<ul style="list-style-type: none"> <i>Customs Unions</i> 					
Andean Community	-----	-----			
Mercosur	=====	=====	=====	=====	
CARICOM	=====	=====	=====	=====	
<ul style="list-style-type: none"> <i>Economic Unions</i> 					
EU	=====	=====	=====	=====	=====

Fig. 3/3: Institutionalisation of environmental policy in regional integration agreements

Fields of Action	Agreements
Political dialog	APEC, Central America, SADC, NAFTA, EU, Mercosur
Determination of objectives and principles	
Voluntary obligations to implement and improve own national environmental policies	EU, NAFTA
environmental policies as horizontal policy	EU, APEC, Lomé
Solution of specific environmental problems	EU, NAFTA, APEC, ASEAN, Central America, SADC, Lomé, ECOWAS
Institutionalization	
Ministerial Meetings	APEC, EU, NAFTA, Mercosur, Central America, SADC
Working groups	Mercosur, SADC, APEC, ECOWAS
Own operational institutions	EU, NAFTA
Environmental agreements	EU, NAFTA (NAAEC), APEC

Fig. 3/4: Processes and instruments in environmental policy

Instruments	Agreements
Participation	EU, NAFTA, Mercosur
Transparency (reporting obligation)	EU, NAFTA
Environmental Impact Assessment (EIA) of integration	EU, NAFTA
Environmental Impact Assessments of projects and programmes	EU, NAFTA, SADC, EU-Lomé, Mercosur,
Spreading of information on EIA	ASEAN, Mercosur, NAFTA
Environmental Information Systems	EU, NAFTA, AESAN
Environmental action plans	EU, MFTZ (MAP) NAFTA, APEC, ASEAN, Central America
Eco-labels	EU (regional), NAFTA (national)
Eco-Audit/ISO 14001	EU (regional), NAFTA (national), ASEAN, Mercosur
Transfer of technology	EU, EU-Lomé, APEC, ASEAN
Technical and financial cooperation (environment)	NAFTA, APEC, EU-Lomé
Cooperation in solving specific environmental problems	EU, NAFTA, ASEAN, Central America, SADC, EU-Lomé, ECOWAS
Dispute settlement	EU- European Court of Justice NAFTA/CEC-reports (<i>submission, factual record</i>), FTC-Panel on trade-relevant topics

The setting and implementation of standards in all regional integration agreements except the EU is left to the contracting countries. Developing countries in particular do not adequately implement their environmental policies, which has a feedback effect on the regional regulation. Only in NAFTA subsidiary agreements there is an explicit regulation that the countries commit themselves to implementing the environmental laws. There are, however, no formal sanctions in the event of failure to do so.

The institutionalisation of regional environmental policy takes place largely through regular meetings of ministers. These meetings may discuss controversial questions or a more complex harmonisation of environmental policy. If additional institutions are established, they usually have neither authority, nor the ability to impose sanctions in order to implement the agreed environmental regulations. NAFTA and the EU are exceptions.

The participation of the civil society in regional environmental policy has only been achieved to a very limited extent. In the EU, NAFTA, and in Mercosur, consultation is possible. In the EU and NAFTA, reports are published, giving decision-making processes some transparency.

3.0.3 Typology and categorisation

Four criteria emerge from the evaluations of the most important regional integration agreements described in the following sections. These criteria can determine the type and scope of the environmental policy components in regional integration agreements. They are:

- The intended intensity of integration
- The state of development of the members
- The homogeneity or heterogeneity of the members
- The size of the integration zone.

These criteria are at least partly interdependent. On the whole, their structure is very similar to the conditions for success which are decisive for economic integration (see section 1.8).

3.0.3.1 Targeted intensity of integration

The decisive determining factor for both the conceptional formation of regional environmental policy and for its implementation is the targeted intensity of integration. This applies both formally and informally.

Formally, the targeted intensity of integration with regard to types of regional integration (free trade zone, customs union, common market, economic community - see section 1.6). The result is not surprising, that groups of states with deeper integration intentions (e.g. the EU) also pursue wider-ranging environmental policy aims than integration zones concerned primarily with trade liberalisation. An important difference exists between purely commercial integration (free trade zone, customs union) and deeper integration, including mobility of factors (common market, economic community). The increasing depth of integration demands agreement between states, and at least an approach to harmonisation in various policy areas, making harmonisation of environmental policy easier.

The informal aspect is more important than the formal one. Integration zones which only aim to achieve a formally lower level of integration (e.g. NAFTA as a free trade zone) in fact pursue a clearly more intensive co-operation and integration policy. On the other hand, the environmental component is only weakly represented in groups of countries which are formally pursuing a deeper level of integration (MCCA, EAC, ECOWAS). This relates to the factual profile of the integration agreement and (which is the more important aspect) also to the determination and the political will to implement the integration agreement in reality. It is therefore not possible to identify a clear connection between the formal nature of the integration agreement and the intensity of environmental policy.

The intensity of integration should therefore rather be interpreted informally than formally. The stronger the will to implement the agreement, and the stronger the power of the governments involved to do so, the more real and effective the regional environmental policy will be in reality. Integration zones with a lower integrational dynamic also tend to place less emphasis on eco-logical aspects.

3.0.3.2 Level of development of members

There are five integration types with regard to the level of development of members: the first is that of agreements between industrial countries (IC/IC); second agreements between developing countries (DC/DC); third between newly industrialising countries and developing countries (NIC/DC); fourth between industrial countries, newly industrialising countries, and developing countries (IC/NIC/DC).

Fig. 3/5: Level of development of the member countries

Integration type	Examples
IC/IC	EFTA, EU
DC/DC	SAARC, ECOWAS, CARICOM, SICA,
NIC/DC	SADC, Mercosur, ASEAN, CEFTA
IC/NIC/DC	NAFTA, EU-Lomé, APEC, MFTZ

In all types of agreement, sustainable development and environmental protection are included as independent objectives of the regional integration, and as regulations for the protection of the environment. In the integration agreements between industrial countries, there are relatively high environmental standards, which apply for at least some of their members. It seems that the internal group pressure to adapt is stronger here. It is therefore remarkable that highly developed environmental policy concepts are also to be found in South-South agreements (ECOWAS, SADC). In these cases, however, there is usually a considerable gap between the environmental policy intentions and their implementation in practice.

This also demonstrates that integration agreements which are influenced by industrial countries are more differentiated with regard to including possible fields of action and instruments. Figure 3/6 shows the links between the depth of regulation and the level of development of the integration partners.

Fig. 3/6: Level of development of integration partners and the depth of regulation of environmental protection

Type of Integration	Regulations on environmental protection				
	Indirect regulations	Principles/ Vision	Direct regulations	Bodies/ Institutions	Specific instruments
• <i>North-North</i> EU	—————	—————	—————	—————	—————
• <i>North-South</i> NAFTA	—————	—————	—————	—————	—————
EU-Lomé	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
APEC	—————	—————	—————	—————	—————
• <i>South-South</i> Mercosur	—————	—————	—————	—————	—————
CARICOM	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
ASEAN	—————	—————	—————	—————	—————
ECOWAS	- - - - -	- - - - -	—————	—————	—————
SADC	- - - - -	- - - - -	- - - - -	- - - - -	—————
SAARC	—————	—————	—————	—————	—————
SICA	- - - - -	- - - - -	—————	—————	—————

3.0.3.3 Homogeneity of members and size of the integration area

Similarities or differences between the members of an integration zone play an important part in determining the probability of success in implementing regional environmental policy in two ways:

In spite of considerable structural economic differences between the member states, the EU shows a (relatively) effective environmental policy. This is especially because the economically and politically more powerful EU member countries press for a high level of environmental policy, but are also prepared to support weaker integration partners. First steps in this direction can also be observed in NAFTA.

Where the integration partners have similarly low priorities with regard to environmental policy, it is not surprising if the real environmental policy is clearly different from perhaps fine sounding environmental concepts (ASEAN, ECOWAS).

The size of an integration zone plays a less important role because of the geographical dimension than because of the probability that an increasing number of countries involved means that the differences between them will also be greater. This aspect is therefore closely related to the considerations above.

3.0.3.4 Conclusions

Three important conclusions can be drawn from the analysis of real environmental policy with regard to the type of the integration zones examined:

- The intended depth of formal integration tends to also determine the intensity of environmental co-operation. In a common market, regional environmental policy has a relatively more comprehensive foundation than in a free trade zone, in which the primary aim is commercial integration. NAFTA is an atypical example in this respect.
- A formally deeper form of integration is, however, no guarantee for an effective environmental policy. In terms of results, the political commitment and the willingness of the member countries to actually implement environmental policy, including the provision of financial means to do so, is more important than formal typology. Many economic communities which have formally deep integration aims show clearly that in reality this is the reason for un-sufficiently rooted regional and national integration policies
- For an effective regional environmental policy, it is also necessary for economically strong member countries to support weaker partners in the integration zone.

The most important regional integration agreements are presented in the following order:

Europe (section 3.1):

- European Union (EU)
- European Free Trade Association (EFTA)
- Central and Eastern European Free Trade Area (CEFTA)
- Baltic Free Trade Association (BFTA)

North America (section 3.2)

- North American Free Trade Association (NAFTA)

Latin America and the Caribbean (section 3.3)

- Asociación Latinoamericana de Integración (ALADI)
- Mercado Común Centroamericano (MCCA)
- Comunidad Andina (CAN)
- Caribbean Community and Common Market (CARICOM)
- Mercado Común del Sur (Mercosur)

Asia and Australia (section 3.4)

- Association of South-East Asian Nations (ASEAN)
- South Asian Association for Regional Co-operation (SAARC)

Africa and the Middle East (section 3.5)

- Economic Community of West African States (ECOWAS)
- East African Community (EAC)
- Common Market of East and South African States (COMESA)
- Southern African Development Community (SADC)

Inter-regional agreements (section 3.6)

- EU-ACP (Lomé Convention)
- Asian Pacific Economic Co-operation (APEC)
- Mediterranean Free Trade Zone (MFTZ)
- Free Trade Area of the Americas (FTAA)
- EU-Mercosur.

The presentations will cover on the one hand the important aspects of integration and on the other hand the regional environmental policy. For NAFTA, Mercosur, and the Mediterranean Free Trade Zone, the analysis of environmental policy is carried out separately in detailed case studies in Chapter 4. A large number of further agreements are presented in the context of the introductory regional overview.

3.1 Europe

3.1.1 European Union (EU)

3.1.1.1 Important aspects of integration

The EU, with its member states Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom, is, with regard to the depth of integration, the most developed free trade agreement. With the realisation of the single market, and the highly advanced realisation of an **economic community** (synonym: **economic union**), the EU has reached a depth of integration not achieved by any other integration projects.

The original basis of integration was the Agreement on the **European Community for Coal and Steel** (Paris Treaty, 1951). The contractual core of European integration are the **European Economic Community** (EEC), and the **European Atomic Community** (EURATOM) (the so-called Treaties of Rome, both in 1957). In 1967, the organs of the three communities were united in the **Fusion Treaty** into the European Community (EC). In 1972, the United Kingdom and Denmark left EFTA and, together with Ireland, joined the EEC. In 1981, Greece joined the EEC, followed by Spain and Portugal in 1986 (southern expansion). In 1987, the **European Act of Unity** concluded the creation of a European Single Market. This was realised on 1st January 1993. In 1992, an agreement was made with the remaining EFTA states on the creation of a **European Economic Zone** (the treaty came into force in 1994), which is practically very similar to a common market, although it is formally a free trade zone, as there are no common external tariffs.

The 1992 **Maastricht Treaty** (EU Treaty) is the contractual basis for the further development of the EC towards economic and monetary union, the **European Union** (EU), with the three pillars of the EC treaty (formerly the EEC treaty), common foreign and security policy, and co-operation on domestic and legal policy. The **Treaty of Amsterdam** of 1997 secured the Maastricht Treaty with a stability pact. The third step of the currency union on the basis of the Maastricht Treaty began on 1st January 1999, and will be concluded by the middle of 2002. The customs union with Turkey has been in force since 1995. The anticipated joining of associated Eastern European states (eastern expansion) is only a question of time. The Czech Republic, Estonia, Poland, Slovenia, Hungary, and Cyprus have already been invited to negotiations. The EU is carrying out bi-lateral negotiations with various states and groups of states

(MERCOSUR, Mexico, Canada, South Africa). A transatlantic partnership with the USA is under consideration.

The EU is a **multilateral** agreement with a **very large market**, and because of its size has not only regional but also enormous global political and economic significance. The EU is also in a special position with regard to the structure of the member states. Together with EFTA, the EU is the only agreement which consists solely of industrial countries, and is in this respect **homogeneous**.

Section 3.6 deals with free-trade oriented inter-regional co-operations between the EU and other groups of states.

3.1.1.2 Environmental policy

(a) Legislative foundations

The integration of environmental protection in the common policy of the EU goes back to the beginning of the 1970s. At the Paris summit of 1972, the introduction of the **Environmental Action Programmes** was agreed. In 1973, the general directorate for the environment was formed. With the first Action Programme for Environmental Protection of November 1973, the members at the time declared:

"The European Economic Community (EEC) has in particular the task of promoting an harmonious development of economic life within the community, and a lasting and balanced economic growth, which, in future, will not be imaginable without effective combating of environmental pollution and environmental strain, or without an improvement in the quality of life and environmental protection. The improvement in the quality of life and the protection of the natural environment are part of the central tasks of the community."²²

Only the coming into force of the Uniform European Act on 1st July 1987 gave environmental protection law in the EU its own positive basis of competence, and environmental protection became, together with the existing areas of policy, an equally valued **community task**. The Maastricht Treaty of 1992 made this more concrete and extensive. EU environmental law has developed very dynamically in the last 25 years, bringing with it, however, considerable splintering, with many gaps and inconsistencies.

The EU treaty sets environmental protection as a common objective (Article 174 EEC, [Amsterdam]²³). The basic principles of EU environmental policy are especially the principle of prevention and the polluter-pays-principle (PPP). In any case, the principle of subsidiarity applies, according to which the community only takes action if the member states cannot pursue the agreed environmental protection aims at the level of the individual states, or if the community can carry out the tasks better.

Aspects of environmental protection are to found via the so-called **cross-sectional clause** in nearly all areas of EU policy and action. The so-called horizontal environmental protection measures are those which were not devised for a special environmental medium, but are to work across the medium, e.g. the requirement for Environmental Impact Assessments.

²² unofficial translation

²³ References to the EEC are always to Amsterdam Treaty of 1997 (EEC [Amsterdam]).

Analogously to the depth of integration, the EU has achieved a depth with regard to the integration of environmental aspects which have not been reached by other free trade agreements. Except in the implementation of international agreements, the EU presents itself (in contrast to all other free trade agreements) as a player in multilateral negotiations with environmental relevance.

(b) Environmental protection as an objective and a basic principle

The Maastricht Treaty of 1992 of the EU determines the environmental policy aims of the community:

- Maintenance, protection, and quality improvement of the environment.
- Health protection.
- Prudence and economic viability or thrift in the use of natural resources.
- Promotion of measures on the international level with the intention of solving regional and global environmental problems.

Environmental policy is an independent, firm part of European integration with the aim of harmonising environmental policy, and is oriented towards the highest national environmental standards in the community.

The Amsterdam Treaty of June 1997 took up a number of changes and extensions to the EU Treaty with regard to environmental protection aspects. One of these is the clear orientation towards the principle of "sustainable development", which was included into the basic principles of the EEC (Article 2).

On the one hand, the Amsterdam Treaty set a clear political trend, increasing the value placed on environmental protection. On the other hand, however, this trend "was not accompanied by any implementable instruments suited to bring forward a sustainable environmental policy" (DNR 1997:30). In accordance with Article 175 on procedures for co-operation, decisions on matters concerning the environment will be made by qualified majority vote. However, according to Article 175:2, unanimous decision in the Council is required if the matter at hand is concerned with taxation, spatial planning, or would have a "significant" effect on energy policy.

The environmental law of the EU is designed to take national and regional structures into account, in order to allow for national environmental standards at different levels. This makes it possible for countries with a high level of protection to maintain it, and also recognises the problems of countries with low environmental standards in adapting to community standards. Protection clauses, minimum standards, and mere environmental protection principles are cases in point.

Water protection is an area with the oldest and most comprehensive system of regulations. Combating air pollution, on the other hand, was only included in a guideline in 1980.

(c) Organs and institutions

The most important legal organ of the Community in the field of environmental policy is the **European Environmental Council**, whose members are the national ministers responsible for environmental matters. The General Directorate XI of the **European Commission** is re-

sponsible for environment, nuclear safety, and civil protection. Further instruments of the promotion of the environment are the European Environmental Agency (1990) and the Environmental Information System (since 1997).

(d) Instruments

The basis for fixing EU common environmental protection standards is, in the first place, Article 174 EEC. The Environmental Action Programme of the EU determines the framework of European environmental policy. Among other things, it determines instruments.

The EU has the following non-fiscal instruments at its disposal:

- **Guidelines** which must be converted into legal or administrative regulations by the individual nations within a given period.
- **Directives** which are binding and immediately applicable in all member states.
- **Decisions** which are binding for those to whom they are addressed.
- Non-binding **recommendations** and decisions.

The harmonisation of national environmental standards by bringing laws into line takes place largely by means of directives and guidelines. The guideline is the instrument most widely used for setting common environmental standards. In the environmental protection legislation of the Community, for example, guidelines are used to set maximum values, maximum concentrations, or threshold values for dangerous substances in an environmental medium, from industrial plants, or in products. This study will not go into the relationships between different legal levels of supra-national community law and national law.

Two aspects are problematic in this connection. On the one hand, the stipulations made in the context of environmental protection policy of the EU, because of unclear and undefined concepts, regulations couched in general terms, are not precise enough to achieve conversion into appropriate measures at the national level. Furthermore, at the national level, there is often the problem of a lack of will to implement the community guidelines, so that guidelines which have already been agreed upon are not endowed with the necessary national legal status (compare below "arbitration of conflicts" in this respect).

If higher environmental requirements are placed on a **product** in one state than in the other states of the Community, then there is the general risk of a downward harmonization of environmental standards, or the protection of a country's own market against products which do not meet the national standard, in order to prevent competitive disadvantages for the country's own economy. In this connection, the EU, in the context of transitional regulations, can grant grace periods, in order to allow individual nations time to adapt to higher standards. This can prevent a fall in standards to the "lowest common denominator". There are analogous considerations for the production sector.

(e) Special regulations for environmental protection

- **Cross-section clauses**

Via the cross-sectional clause, all other sectoral policies are obliged to include environmental protection in their considerations. In the Amsterdam Treaty, the cross-section clause was adapted to the model of "sustainable development": "The requirements of environmental protection must be taken into consideration in determining and carrying out common policies

and measures as described in Articles 3 and 174, especially with regard to promoting sustainable development.." (Article 6, EEC; cross-section clause).

Sectors with special relationship to the environment in the EC are agricultural policy, regional policy, energy policy, industrial policy, transport policy, but also taxation policy, whereby, however, the basic criticism remains that environmental police is not given sufficient consideration in these sectors (DNR 1997:11).

- **Depth and width of regulation**

In the context of European environmental policy, responsibilities with regard to environmental protection are divided between the European institutions and the integration partners - i.e. European environmental policy reaches just as deeply into national affairs with regard to environmental protection as the national environmental policy itself does. All environmental media and all sectoral policies are included. Individual nations, however, still have the possibility to determine stricter norms and standards than the EU. "National initiatives" are therefore still possible.

- **Dispute Settlement**

It is, as a rule, the duty of the European Commission to check, on the one hand, the implementation of EU guidelines on the national level, and, on the other hand, to check that national legislation and regulations conform to EU law. In addition, member states can have disputes with other member states, or with the EU, solved by the European Court of Justice. The European Court of Justice is the final court of appeal for disputes between member states, and between member states and the EU.

On the basis of the integration described above of the aim of sustainable development and environmental protection into the principles and objectives of European policy, a potential area of conflict arose between the fields of environmental protection and the free movement of goods, or trade in general, as was shown, for example, by an order to recall drinks packages in Denmark. In this case, the European Court of Justice came to the conclusion that restriction of the free movement of goods for the sake of environmental protection is, to a limited extent, justified. The implication of this is that it is, in principle, possible to take environmental policy measures on a national level, even if these have an effect, even a restrictive one, on trade.

3.1.1.3 Evaluation

European environmental policy is relatively new, having only been in existence for about 25 years. For some member states, it was the first impulse towards a national environmental policy. Until the Uniform European Act, it was lacking any legal foundation in primary community law, and the coherence of its contents still leaves much to be desired. Even the Fifth Environmental Programme of 1992 relates to the fact that there was still seen to be a "lack of an overall policy coherence", and that the problem that the pressure to achieve unanimity often led to compromises, and to measures which were difficult to implement in practice (COM (92) 23 Vol.II, p. 82). Although in international terms, European environmental policy is already very well developed, environmental policy, in comparison to other sectoral policies, still plays a secondary role in the EU. This is reflected in the rather scant personnel and financial resources accorded to the General Directorate for the Environment.

Whereas the formal implementation of common environmental policy in national law can be checked relatively easily (the member states have to present regular reports, even though delays in doing so are usual), the material test of whether the guidelines have in fact been fully and correctly *enforced*, is very weak and - correspondingly - unsatisfactory. This task should, as a matter of principle, fall to the Commission which, however, generally only reacts to private complaints and to questions from the European Parliament, and is hardly in a position to monitor all the realities of the national states. This highlights the limits of a decentralized implementation control.

Various agreements and current negotiations have relevance beyond the region, in which the EU, in the spirit of "open regionalism", probes bilateral relations with third countries or with other integration zones. Examples of this are the relations between the EU and Mercosur, or between the EU and South Africa. Such efforts offer a platform on which European environmental standards can gain trans-regional significance.

3.1.2 European Free Trade Association (EFTA)

3.1.2.1 Important aspects of integration

The European Free Trade Association (EFTA) was founded in 1960 as a counterbalance to the EEC by countries who, for reasons of political-military neutrality, did not want to join the EEC (Austria, Denmark, Norway, Portugal, Sweden, Switzerland, the United Kingdom). Finland became associated in 1961. Since then, EFTA has been reduced to Iceland, Liechtenstein, Norway, and Switzerland, caused by the "drifting away" of other members to the EU, and is now the so-called "rest of EFTA".

It was the aim of EFTA to combine the advantages of regional integration of trade with the largest possible degree of national (economic) policy sovereignty. Intra-trade has, in fact, increased significantly. The EFTA countries make up a free trade zone with a *small* market, and of currently only small economic significance. In relation to the level of development of its member states, EFTA is relatively *homogeneous*.

Since the 1970s, the attention of EFTA has concentrated mainly to the outside, in the direction of the EU as it now is. The EU has concluded a web of bilateral agreements with the individual EFTA states, which are basically similar (e.g. with regard to rules of origin), but contain many individually detailed regulations. With Switzerland alone, well over 100 bilateral agreements have been concluded. In 1994 the EU and EFTA formed the European Economic Zone (EEZ), which is for all practical purposes a free trade zone.

The current activities of EFTA are in three main areas:

- Monitoring and management of relations between the member states on the basis of the Stockholm Convention.
- Management of the agreement between the EEZ and the EU.
- Relationships to "third party"-states: Alongside the EU, EFTA has the largest number of mostly bilateral agreements with other states (14 bilateral free trade agreements and six further co-operation agreements) (see Appendix: Eastern European Agreements of EFTA).

3.1.2.2 Environmental policy

In EFTA, integration of environmental protection aspects is not achieved in the EFTA agreement itself, but on the basis of the agreement forming the EEZ and the Uniform European Act. The environmental chapter of the EEZ treaty contains almost word for word the aims and principles of environmental policy, including the cross-sectional clause, of the corresponding articles of the EEC. Environmental policy and the integration of environmental aspects into the general policy of EFTA are thus in most parts identical with that of the EU.

Economic co-operation between the two integration zones also includes environmental protection. Responsibility is in the hands of the institutions established in the context of the EEZ, on the EFTA side in particular the **EFTA Surveillance Authority** and the **Standing Committee of the EFTA States**. Within *Subcommittee IV* an environmental work group exists.

The implementation of norms, guidelines and standards (especially those with reference to the environment) of the EU and EFTA is carried out by the **Joint Committee**, formed of representatives of the EU and EFTA (EFTA Secretariat 1998: p. 3 ff.) The main task of the *EFTA Surveillance Authority* is to monitor the implementation of the EEZ rules in the individual EFTA states. Beside the basic rules for the freedom of goods, persons, services, and capital, there are also specific rules for special sectors (fisheries, agriculture) and regulations in the environmental sector. The EFTA states are obliged to report to the Surveillance Authority on transformation into national law (EFTA Surveillance Authority 1998: 5f).

3.1.3 Central European Free Trade Area (CEFTA)

3.1.3.1 Important aspects of integration

In the process of political changes in the countries of Central and Eastern Europe, there was a meeting in 1990 at Visegrád in Hungary, attended by Poland, Hungary, the Slovak Republic and the Czech Republic (at that time still one state) in order to found a free trade zone (**Visegrád countries**) and to apply for membership of the EU. In March 1993, the **Central European Free Trade Area** (CEFTA) of the Visegrád states come into force, later to be joined by Slovenia and Romania. Bulgaria has applied for membership. The EU has taken up negotiations with the Czech Republic, Poland, and Hungary. These countries, together with Estonia, Slovenia, and Cyprus, are therefore on the "*fast track*" to membership of the EU. Romania and the Slovak Republic have concluded agreements with the EU with the same aim in view.²⁴ EFTA was the model for this **pluri-lateral** CEFTA agreement. The CEFTA free trade zone has - even if with a large number of exceptions - been mainly realised.

The reasons for founding CEFTA were political as well as economic. On the one hand, the trade liberalisation agreement was intended to revitalise internal trade, since the internal flows of trade were not only suffering under the collapse of the economy in Eastern Europe, but also a diversion of trade in the direction of the EU had taken place as a result of the European Agreements. The agreement therefore removed a trade policy imbalance (Borrmann, 1995:57). On the other hand, from a political point of view, the pressure for regional integration, especially from the EU, is to be seen, and also the possibility of a certain "regional independence" between the political blocks of Russia and the EU (Gibb/Michalak, 1994: p. 120 ff).

²⁴ There are also European agreements with Bulgaria, Latvia, and Lithuania.

CEFTA forms a *small market*. Its significance is on the political rather than on the economic level. The structure of the integration zone can therefore be regarded as **homogeneous**, but at a low level of development. All the countries involved are transforming economies, whereby Poland, Hungary, the Czech Republic, and the Slovak Republic have made the most progress towards market economies.

3.1.3.2 Environmental policy

The intended eastern expansion of the EU is a good example of how a regional expansion can go hand in hand with a deepening of integration in hitherto non-integrated areas of policy. Since CEFTA countries are seeking full membership of the EU, they are committed to the principles of the environmental policy of the EU. In their present stage of association with the EU they are, however, not obliged to take on the relatively high standards of EU environmental policy. Foreign direct investors, however, must use *best practice* standards. The candidates for membership must carry out considerable reforms of their production structures, and also of their sources and market offers. A decision by the EU about full membership will therefore also depend on whether the CEFTA countries (the same applies to other candidates for membership) succeed in removing the present deficits in environmental legislation and in the enforcement of legislation. Environmental policy, along with agriculture, finance, justice and internal affairs, is one of four priority areas for co-operation. The opportunities for keeping environmental policy niches open are getting smaller and smaller.

At present, in the view of the European Commission, the candidates for membership show considerable deficits in environmental protection, although environmental policy has become an integral part of economic policy in the Eastern European reform countries. This means that they will either have to postpone their applications for membership, or that they will have to be granted exceptional terms (waivers) officially. The latter, however, could have a serious effect on the credibility of the priority of environmental protection in the EU (MFTZ Environment Monitor 1.1999:4).

3.1.4 Baltic Free Trade Zone (BFTZ)

The Baltic Free Trade Zone (BFTZ), founded in 1992, includes Estonia, Latvia, and Lithuania. It is intended to build it up into a common economic zone. At present, there are still restrictions on trade between the member states. By July 2000, an agreement is planned on the free movement of services in the Baltic. Because of the crisis in Russia at the beginning of 1999, there was controversy about the customs barriers for agricultural products.

Estonia was invited to talks about entry into the EU in 1997. Latvia and Lithuania are expecting similar invitations in the near future.

3.2 North American Free Trade Agreement (NAFTA)

3.2.1 Important aspects of integration

The North American Free Trade Agreement (NAFTA) came into force in 1994 between the USA, Canada, and Mexico. The aim is to achieve a **free trade zone** in compliance with GATT, the removal of internal customs barriers and other trade barriers, the promotion of fair competitive conditions and the increase of investment opportunities. Deadlines of adaptation are fore-seen, in part by 2010. NAFTA has a secretariat in Washington DC and offices in Ottawa and Mexico City.

The NAFTA members are very different. Internal trade relations are clearly dominated by the USA. The USA generates almost 90 % of internal GDP, 67 % of all NAFTA exports, and receives 74 % of all NAFTA imports. The partner states realise nearly half of their imports amongst each other, but the USA is by no means as dependent on the intra-trade as Mexico and Canada are, both of which make approximately 80 % of their exports to the USA. The USA makes only approximately one third of its exports to its NAFTA partners. Canada, with a national debt of almost 90 % of GDP, is one of the most indebted countries in the western world. Mexico is, in fact, between the stage of a developing and a newly industrialising country, in spite of its membership in the OECD, the "club of the industrial countries".

The NAFTA agreement has priority over other agreements, in so far as these may be in contradiction of it, with the exception of the WTO/GATT agreement. There has been a free trade agreement on automobiles between the USA and Canada since 1965, which was extended to a general free trade agreement in 1989. The establishment of NAFTA created the nominally largest regional economic zone in the world (Altmann/Kulesa, 1998:148 ff.; Weintraub, 1997; Schirm, 1997). The free trade zone has global significance because of its size. It is unique in the fact that with the USA, Canada, and Mexico, three countries with different levels of development have come together. The coming together of two industrial countries with a newly industrialising country has led to a *relative heterogeneous* structure, emphasised by the size of the USA; the GDPs of Canada and Mexico together make up only 16 % of the GDP of NAFTA.

The NAFTA agreement stipulates the free movement of goods, services, and capital. The freedom of the factor of labour, and the direct transfer of funds to Mexico to help with adaptation measures, are not yet foreseen. Neither is a common external customs tariff a part of the agreement. For the first time, a trade agreement included **environmental policy**. In parallel agreements, environmental policy and social policy consequences of economic integration were taken into account, in order to defuse the internal political debate on NAFTA in the USA (see the case study on NAFTA in section 4.1).

NAFTA regulates and extends economic connections between the partner countries which mostly existed before the agreement came into being, and thus lays the foundations for the further development of relationships. There was already a factual integration before 1994, which was not restricted to the exchange of goods, but also included direct investment and production (Maquiladora industry²⁵) and migration ("*silent integration*") (Schirm, 1997:76).

²⁵ The term "Maquiladora industries" refers to the industries along the US-Mexican border - see case study in Chapter 4.

For this reason, the further economic prospects of NAFTA are regarded as being good. There are several factors in favour of this view:

- The USA, Canada, and Mexico have long-term and compatible interests with regard to a higher level of competitiveness in their economies.
- The USA and Canada have secured cheap labour for themselves through NAFTA, and better access to the Mexican market.
- Mexico has gained access to the US market, to new technologies, and to direct investments.
- The economic policy strategies of the member states, with their market economy orientation, are largely identical.

Inter-regional exports from **NAFTA** as a whole have increased from 41 % (1990) to 49 % (1997). Imports have increased from 33 % to 40 % in the same period. Growth rates in both sectors are approx. 10 %, more in parts.

The interest of the **USA** in NAFTA is, in contrast to the other two partner countries, mainly of a foreign policy nature. Economic success is hoped to stabilise Mexico, making it an even more reliable partner. Also, international *bargaining power* has been increased by NAFTA. Since even before NAFTA external tariffs between the three countries were low, the trade effect of the establishment of NAFTA was not very great in the short term. Canada is the most important, Mexico the third most important trading partner of the USA. A certain amount of trade creation has been observed since the creation of NAFTA. This, however, is a continuation of a trend which was observed before the agreement came into effect. The share of inter-regional imports into the USA as a part of total imports rose from 24 % (1990) to 29 % (1997). Exports rose from 28 % to 32 % in the same period.

The discussion around falling earned incomes in the USA as a consequence of low wage levels in Mexico, is largely exaggerated, although not entirely without cause. The pull-effect in the north of Mexico is taking place at the expense of the "loser" regions in the south of the country, and also leads to increased migration to the USA. To counter adverse effects, the Trade Adjustment Assistance Programme was created. On the whole, however, NAFTA will probably have only minor effects on employment and income in the USA.

Canada's interest in NAFTA was not very pronounced, since the formerly existing free trade agreement already ensured access to the most important export market, and earlier trade strategies had already largely been removed. Canadian participation in NAFTA was largely to formally secure the *status quo*, and to avoid any negative consequences of a free trade zone only between the USA and Mexico. This is emphasised by the fact that Mexico initiated the NAFTA negotiations, and concluded a preliminary treaty with the USA in 1990, which Canada also subscribed to (under pressure) in 1991. There are intensive trade connections between Canada and the USA. More than 80 % of Canada's exports go to the USA. 66 % of Canada's imports come from the USA. Growth impulses have taken place above all in the automotive industry, telecommunications, and financial services. On the whole, from the Canadian point of view, intra-trade has not increased significantly since 1994, because of the already existing free trade zone before NAFTA. The growth, however, has been continuous. The Mexican market had and has only a marginal significance for Canada.

Mexico is a prime example of how a weak member of a free trade zone can benefit from stronger partners. The creation of trade in Mexico has been more pronounced, especially

by increasing exports to the USA. 76 % of Mexican exports to the USA. 70 % of Mexican imports come from the USA. In particular the Maquiladora²⁶ along the border process semi-finished goods imported from the USA into finished industrial products, mainly automobiles and electronic goods. The importance of the Canadian market for Mexico has also increased, although on a much lower level. Much more important, however, is the increase in direct investments, and not only from the partner countries. For Mexico, the NAFTA agreement is, above all, an investment agreement (Schirm, 1997:62). In terms of regional policy, NAFTA membership for Mexico means a certain separation from Latin American integration processes. This has been emphasised by Mexico's acceptance into the OECD and APEC, and by free trade negotiations with the EU. For Mexico, there are, however, considerable social tensions, some open, some partly concealed, which will certainly not be able to be solved by trade effects. There are on the one hand, therefore, risks for Mexico arising from internal and economic policy. The biggest danger to the success of integration, on the other hand, comes from uneven distribution of the effects of growth among the partner countries, and, in Mexico's case, from the disadvantages suffered by the low-income population and the adaptation costs, which are not lessened by a distribution policy. If no solutions are found to these problems, the legitimacy of NAFTA could suffer.

Some **third countries** (New Zealand, Australia, smaller Latin American and Caribbean countries) are afraid of a diversion of trade in favour of the NAFTA countries. In order to counteract this, Chile, for example, has applied for membership of NAFTA. And this application may well be granted in the medium term, because it has been promised, and because Chile, from the point of view of the USA and Canada, can only have insignificant influence on the development of NAFTA. Mexico, however, is much more cautious on this, because it fears trade diversion effects.

Although it is the first time that a trade agreement has been concluded between three such different countries, the clear lack of symmetry has not been taken into account adequately. The competitive pressure for Mexico is, however, not nearly as great as it is sometimes claimed to be. This is because in the time before NAFTA, after entry into GATT in 1986, import duties were unilaterally reduced in a cautious, but significant way, so that the corresponding effects were spread over time. Critics have said that the prior regional and sectoral analyses were not adequate. The ecological and social safety measures were said to be particularly inadequate (Urrutia, 1995:218).

3.2.2 Environmental policy

The consequences of the free trade agreement for the environment will not be limited to the situation in the border region between the USA and Mexico, which is always especially emphasised in discussions on the subject. Changes in patterns of consumption and production, and in technical standards, will have especially important effects for Mexico, both negative and positive.

Environmental policy in the context of NAFTA and its environmental policy consequences are discussed in detail in the **case study on NAFTA** in section 4.1. Some economic aspects will be analysed in more detail.

²⁶ "Maquilar" in Spanish means to "make up" (as in facial make up).

3.3 Latin America and the Caribbean

Since the beginning of the Uruguay round, the interest of developing countries in regional integration has again increased sharply. The first integration agreement in Latin America was the *Asociación Latino-Americana de Libre Comercio (ALALC; Latin American Free Trade Association, LAFTA)* founded in 1960, and converted in 1980 into the *Asociación Latino-americana de Integración (ALADI)* (section 3.3.1). Also in 1960, the Central American States founded, as a counter-balance, the Central American Common Market (*Mercado Cumún Centroamericano; MCCA*) (section 3.3.2). The aim of this **first phase** of regionalism in Latin America was the removal of internal trade barriers and the creation of free trade zones. At this time, the trade policy of Latin American states was marked by restrictive practices, and the promotion of import substitutes. The limitations of the national markets, however, impeded the application of scale effects. Integration zones thus seemed to be the solution, also making it possible to give industries the chance to develop behind the safe walls of protection.

The **second phase** of Latin American regionalism is characterised by sub-regional approaches, after the ALADI continental approach threatened to stall. In 1969, the **Andean Community** (*Comunidad Andina, CAN*, section 3.3.3) was founded as a reaction to the failure of the ALALC. *The Caribbean Community and Common Market, CARICOM* (section 3.3.4), founded in 1973, is striving towards an integration of the Caribbean area, after the member states were excluded from the moves towards integration in Latin America.

The continent-wide *Sistema Económico Latinoamericano (SELA)*, founded in 1975, as a misleading name (Schirm: 33), since it was not any kind of "system" for organising or structuring the Latin American Economy, but much more a kind of political forum for the representation of Latin American interests against the industrial countries. These days, SELA plays only a marginal role in the Latin American integration process.

The replacement of ALALC by the foundation of ALADI (*Latin American Integration Association, LAIA*) in 1980, marked the beginning of the **third phase**, which was influenced by the economic crisis of the 1980s, and in which a series of bilateral and sectoral agreements were concluded, especially complementary agreements. In this phase, many states turned away from import substitution towards externally-oriented trade policy. The aim was, above all, the revival of intra-regional trade.

In 1991, the *Mercado Común del Cono Sur (Mercosur)* was founded (section 3.3.5), starting the **fourth phase** of Latin American Integration efforts as a reaction to the founding of NAFTA. The initiatives towards integration in the 1990s in the context of **open regionalism** reflect the trend towards binding agreements in bilateral agreements and to real sub-regional co-operation. Significant elements of this are the export-orientation and an approach towards the USA or NAFTA. In 1993, Brazil suggested the foundation of an *Asociación de Libre Comercio Sud-Americana (ALCSA, South American Free Trade Area, SAFTA)*. This plan was supported by the Mercosur members, but abandoned in favour of bi-lateral co-operation agreements (Mercosur with Chile, Bolivia, and the Andean Group). Concerning the interests of the associated countries, it is clear that the alliances are of a strategic nature, aimed to achieve involvement in the power potential, e.g. with regard to FTAA (see section 3.6.4) without formal membership. Various free trade agreements, between Mexico and Chile, Mexico and Costa Rica, Mexico, Columbia and Venezuela, Mexico and MCCA/CACM supplement the picture. Venezuela wants to join CARICOM.

3.3.1 ALADI/LAFTA

The Latin American Integration Association, LAIA (*Asociación Latinoamericana de Integración*, ALADI) was founded in 1980 by the Montevideo treaty by eleven countries Argentina, Bolivia, Brazil, Chile, Ecuador, Columbia, Mexico, Paraguay, Peru, Uruguay, and Venezuela. The headquarters are in Montevideo, Uruguay. ALADI includes all South American states and Mexico. Only Guyana, Surinam, and French Guyana (which belongs to France and thus to the European Union) are not members of ALADI, which is the successor of the *Asociación Latino-Americana de Libre Comercio* (ALALC) (*Latin American Free Trade Association*, LAFTA), which was founded by the Montevideo treaty of 1960.²⁷ The aim was to reduce internal trade barriers and the creation of a free trade zone by 1973. Co-operation between industries was in the forefront of the partnership, which was based strongly on the strategy of import substitution. As the member countries, however, did not keep to the plan, neither in terms of time nor content, the progress made in reducing customs tariffs at the beginning soon stalled. The date for achievement of the free trade zone was postponed from 1967 to 1980. When the free trade zone was not achieved by 1980, ALALC was converted into ALADI. The failure of the ALALC approach of "integration without taking into account the world market" was a direct consequence of the failure of import substitution industrialisation (Esser, 1994).

ALADI had the aim of stimulating free trade, but without concrete measures and without firm deadlines. The long-term aim of ALADI is the establishment of a common market for the Latin American member countries and Mexico. This aim is to be achieved step by step by creating a preference zone consisting of

- a regional preference frame,
- various agreements with a regional agenda, and
- a large number of bilateral and multilateral preference agreements on goods and sectors within ALADI.

The heterogeneous status of the member states is catered for by various exceptional regulations, granting concessions to the least developed countries. Economic integration has not made much progress. Intra-trade increased from 7.7 % in 1960 to 13.2 % in 1991 (with a clear drop between 1980 and 1990), a large part of which is due to trade between Brazil and Argentina (UNCTAD 1996:127).

One characteristic of ALADI is the flexibility of its aims (essentially, only GATT conformity is required), which allow country-specific exceptions and bilateral and sub-regional co-operation. In the now approximately 30 bilateral and multilateral preference agreements, only a few ALADI members are contractual partners of other states. The internal preferences of these agreements are not passed on to the other member states. Agreements with regional range are characteristic of contracts made between all members of ALADI or between individual (or several) members and other states or organisations. For these agreements, the principle applies that all achieved preferences are automatically passed on to all other members of ALADI. For this reason, Mexico left the preference zone in 1990 because of its approaching membership of NAFTA.

The aim of achieving a free trade zone has thus failed, although ALADI is still formally in existence, fulfilling the function of a political and legal framework for the various co-operation efforts in Latin America. ALADI is a forum for questions of Latin American inte-

²⁷ The founding members were Argentina, Brazil, Chile, Mexico, Paraguay, Peru, and Uruguay. Columbia and Ecuador joined in 1961, Venezuela in 1966, and Bolivia in 1967.

gration, and a clearing house for the bilateral and sub-regional mechanisms of trade liberalisation and integration in Latin American states whose governments are seeking compatibility of their trade policies with ALADI framework (Schirm, 1997).

ALADI has not yet developed any significant **environmental policy** initiatives.

3.3.2 Mercado Común Centroamericano (MCCA)

3.3.2.1 Important aspects of integration

As a reaction to South American efforts to achieve integration, the Central American states of El Salvador, Guatemala, Honduras, and Nicaragua founded the *Central American Common Market*, CACM, (*Mercado Común Centroamericano*, MCCA) in 1960. Costa Rica joined in 1963. In spite of the name, there was never actually any intention of forming a common market in the real sense of the term, with mobility of factors of production, but only a customs union. The MCCA is **plurilateral** and includes **relatively homogeneous** countries.

The MCCA is the third largest regional integration zone in the world after the EU and NAFTA. In the 1960s, because of the rapid lowering of customs tariffs, and the increasing trade in goods, it was considered to be the most successful integration project between developing countries. As early as 1965, external customs tariffs were largely harmonised, and internal trade largely liberalised, excluding, however, agriculture. In the first ten years, intra-trade increased from 7.5 % to 26.8 % (UNCTAD 1996:133). The early increase in trade, however, could not hide the fact that the economies of the Central American Countries are strongly oriented towards the USA. Furthermore, the gains of co-operation were strongly in favour of the more developed countries, which led to repeated tensions, and to the so-called "football war" between Honduras and Salvador in 1970 and to Honduras leaving. Honduras has since had observer status. Economic integration of MCCA has since then stagnated. Intra trade sank to 15 % by 1989, the intended common market was never created. MCCA was reduced more and more to the role of a political forum. A series of armed conflicts between and within the Central American countries, together with the debt crisis of 1980, and the reinstatement of internal non-tariff trade barriers, led to the practical end of the MCCA.

Only at the beginning of the 1990s was there a new impulse for co-operation in Central America by the peace process, the changes in economic policies caused by opening of markets to the outside world, and the formation of NAFTA. The creation of NAFTA aroused fears in Central America of being cut off from the most important trading partner, the USA. The high value of intra-trade at the beginning has not been achieved again since. One motive for the revived co-operation in Central America with a sharpened economic focus has been the desire to achieve more negotiating strength against the USA by common activity in the framework of regional co-operation. The new co-operation in Latin America was shown in 1993 by the founding of the *Sistema de Integración Centroamericano* (SICA). It formed the superstructure for political and economic co-operation (MCCA) in Central America. The Central American co-operation since the early 1990s has included uncountable bilateral trade and co-operation agreements within and outside the region, both on the side of MCCA, and on the side of the member countries, which has led to a splintering of the integration process. At present, the MCCA states, together with Belize, Panama, the Dominican Republic, are trying to form a Central American Union.

In terms of foreign policy, Central America follows the interests of the USA, as demonstrated by the alliance for sustainable development concluded in 1994 between the Central American states. This alliance includes co-operation in the area of environmental protection, democratisation, and combating drugs trade. Political co-operation is mainly used to gain external aid and economic concessions from the EU and NAFTA (Schirm, 1997).

3.3.2.2 Environmental policy

In the framework of the MCCA economic agreement, there is no explicit reference to environmental problems or to a common environmental policy. In some states (e.g. in Costa Rica) environmental protection is embedded in the constitution. Costa Rica has been especially active in conservative environmental protection, and has an impressive network of national parks. This, however, is not continued on the regional level. In the face of a number of serious natural catastrophes in the past, and the increasing "El-Niño" problem, the state presidents have had talks on common catastrophe prevention measures. These have, however, so far led only to modest starts. A co-ordinated regional environmental strategy cannot be seen (Minkner 1999). Concrete initiatives only occur bilaterally (forestry resources, anti-erosion measures, rural development, water and drainage projects) or by pressure of external events, and are not always successful. In Tegucigalpa (Honduras) not long ago, the airport had to be closed because of smoke from bush fires. The environmental situation shows grave human intervention. Urgently needed forestation measures are progressing only very slowly and at a very low level. Agreement on a regional environmental policy would seem to be difficult because of the difficult situation with regard to social policy in most of the countries, with the exception of Costa Rica.

The alliance, concluded in 1994 between the Central American states for sustainable development, included environmental protection. In the context of SICA (*Sistema de Integración Centroamericano*) meetings between ministers take place ever three months. These are co-ordinated by CCAD (*Comisión Centroamericana de Medio Ambiente y Desarrollo*) in Guatemala, and are concerned with developing guidelines and programs for the conservation of the rain forests.

3.3.3 The Andean Community (CAN)

3.3.3.1 Important aspects of integration

In 1969, Bolivia, Chile, Ecuador, Columbia, and Peru founded the Andean Pact with the treaty of *Cartagena*. Venezuela joined in 1973. This pact was formed because the countries involved saw the development of ALADI/LAFTA as unsatisfactory, since it benefited mainly the larger of the South American countries. One aim was to create a sub-regional customs union, but was never achieved. Another aim was to build up their own complementary industrialisation. In 1976, Chile, under Pinochet, left the organisation to pursue its own free trade policy. Peru suspended its membership in 1991, because no agreement could be reached on the planned customs union. The Andean Pact was not able to show any significant successes.

The Andean Community (*Comunidad Andina*, **CAN**) is a part of the new integration under the motto of open regionalism in Latin America. The Andean Community is a **plurilateral** integration zone. Member countries are Bolivia, Ecuador, Colombia, Venezuela. Peru's membership has been suspended since 1992. The Andean Community consists of **structurally** relatively **homogeneous economies**, although Colombia and Venezuela are dominant.

The Andean Pact, concluded in 1969, fell into the second phase of Latin American efforts towards integration, which was characterised by efforts towards sub-regionalism of trade liberalisation in the context of ALALC (*Asociación Latinoamericana de Libre Comercio*) (see section 3.3.1). The Andean Pact was an ambitious project to integrate the countries involved with a strong institutional structure, with a clear supra-national component. The aim was to achieve a customs union and the common treatment of foreign capital and the co-ordination of national (economic) policies. In the 1970s, intra-Andean trade grew, but the political will to integrate was no longer present in the countries involved. Business activity and structural factors, including increasing debt of Latin American countries, led to a steep fall in intra-Andean trade in the 1970s and 1980s, although these had already stagnated at a low level (under 4 %).

In 1989, legal and institutional innovation was introduced, which modified the approach to integration. The degree of institutionalisation was reduced, and instead, political co-operation was established at the highest level. The partially intended supra-national character was replaced by regionalism. Political efforts concentrated on economic integration by means of trade. Investment policy was practically put back into the hands of the member countries. Harmonisation of national economic policy and efforts to balance economic differences between the countries were abandoned. In 1992, this process resulted in the formation of a free trade zone with a reduced common external customs tariff, although different staged adaptation periods for countries and sectors were agreed.

In 1995/1996, it was possible to counter a new internal crisis in the Andean Pact, caused by external and internal political conflicts in the member states, with reforms. These reforms aimed to bring other block within and outside the region closer together and to create a common Andean market (*Mercado Andino Común*). This reform was institutionalised in the Andean Integration System (*Sistema Andina de Integración*). The integration model previously pursued was abandoned in favour of **open regionalism** (Schirm 1997).

Economically, this integration, in comparison to the background conditions, was relatively successful. Internal trade increased moderately, and the share of finished products is at present 85 % (Bodener, 1996:259). Because of the rather modest economic inter-connections, reflected, for example, in the low level of direct investments, economic integration will be limited. Future development of the Andean Community will, for this reason, be characterised by approaches to Mercosur and NAFTA for double memberships of the members (Venezuela and Colombia have their own free trade zone, to which Mexico is informally connected; Bolivia is seeking membership of Mercosur; renewed membership of Chile can be excluded, as Chile has turned to NAFTA and Mercosur). These double memberships could, however, be the causes of internal conflict, which could further intensify the already existing domestic and foreign policy tensions. In 1997, the member states, together with the states of MCCA, decided on a mutual opening up of markets, which, however, has not yet been realised.

3.3.3.2 Environmental policy

Given the background of economic development policy at the beginning of the integration process, it is not surprising that environmental aspects have not been included directly in the co-operation agreement. In the foreground was the raising of the economic standard of living; environmental considerations had no significance at this time. In 1983, however, the treaty's Commission made a commitment to environmental protection in the Treaty of Cartagena, involving a more rational use of soil, forests, vegetation and animal life, which was codified as part of a change in the basic treaty. At the same time, it was established that a development between environmental protection and economic development, to which regional integration was intended to make a contribution, involves an "insoluble connection". Apart from declarations of intent to formulate and implement a common environmental policy, no further progress was made. There is no regional environmental policy to speak of.

3.3.4 Caribbean Community and Common Market (CARICOM)

3.3.4.1 Important aspects of integration

As early as 1958, a federation of British Commonwealth Island States was founded in the Caribbean. This, however, broke apart in 1962, and the islands became independent. In 1965, Antigua, Barbados, the Bahamas, Trinidad and Tobago, and British Guyana founded the *Caribbean Free Trade Association (CARIFTA)*. The Windward Islands (Dominica, Grenada, Saint Lucia, Saint Vincent), Jamaica, Montserrat, Saint Kitts, and Nevis/Anguilla²⁸ joined in 1968, Belize (British Honduras) in 1971. As the reduction of customs tariffs within the free trade zone was not achieved to a sufficient extent, CARIFTA was transformed into **CARICOM** (*Caribbean Community and Common Market*) by the Treaty of Chaguaramas in 1973. The aim was to achieve a common market. The Grenadines joined in 1974, the Bahamas in 1983, the British Virgin Islands in 1991, the Turks and Caicos Islands in 1991, and Surinam in 1995.

The *East Caribbean Common Market (ECCM)* was founded in 1968 by Antigua and Barbados, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, in order to represent their specific interests. This organisation, however, made very little impact as a sub-regional integration zone within CARICOM, and was converted into the *Organisation of Eastern Caribbean States (OECS)* in 1981.

CARICOM is very **heterogeneous**. The present 34 members include communist Cuba, totally impoverished Haiti, and the rich islands of Trinidad, Tobago and Barbados, and the Dominican Republic, which occupies first place in regional bank ratings. It would be very difficult for CARICOM to work together in one political direction. It is a community of independent states which try to co-ordinate and implement sectoral policies with the help of common institutions. The aim was to set up a free trade zone with protection on its outer borders. CARICOM, however, after its foundation, did not get any further than the level of its predecessor, CARIFTA, with regard to trade liberalisation. The cause of this is the **relatively homogeneous structure of the economies**, in spite of different levels of development, and the often identical profiles of products the member states have to offer (James, 1996). Intra-trade has reached a level of 10 %.

²⁸ Leeward Islands: Antigua and Barbados, Saint Kitts and Nevis, Montserrat.

International trade of the countries is oriented towards the USA and Europe. The region has come to enjoy a wide range of economic privileges which reinforce this international orientation, rather than promoting regional integration. In 1984, the USA opened up its markets for many products from the CARICOM region by the *Caribbean Base Initiative*, initiated by the security interests of the USA in this region. The EU granted the former colonies favourable market entry conditions by the Lomé Convention. CARICOM's only successes in the 1970s and 1980s were common efforts on infra-structure projects and in the fields of tourism and energy (Schirm, 1997).

In the 1990s the concept of CARICOM was more strongly adapted to the world market with the aim of creating a common market. External tariffs were lowered to a common level in 1996, free movement of qualified staff and securing of social standards were agreed. Further areas of co-operation were the promotion of industry, transport, communication, tourism, agriculture, health, education and **environmental protection**. In spite of the long-achieved liberalisation in the trading of goods within CARICOM, intra-regional trade has not increased. The product structures and the resources of the Caribbean countries are still not complementary (with the exception of Mexico), so that, in spite of trade liberalisation, stronger inter-regional trade is unlikely.

CARICOM is of only of slight significance in the global context, but has been quite successful in terms of economic integration, and today, after a difficult phase of stagnation during the debt crisis of the 1980s, is really on the way to an economic and currency union, expected to be achieved at the turn of the millennium. This success can be traced back to the turn away from import substitution and the liberalisation of the economy, including the dismantling of external trade barriers.

The *Association of Caribbean States (ACS)* was founded in 1994, including all 40 states of the Caribbean. Its aim is to use the economic advantages of geographical proximity and to increase the international trade potential of the member states. The political and economic interests of the member states, however, diverge greatly, so that prospects for more intensive co-operation between the member states are not good.

3.3.4.2 Environmental policy

Environmental protection in **CARICOM** is not named explicitly as an aim of integration, but occurs in the common work areas of co-ordination of sectoral policies and technical co-operation. In 1990, a contract was concluded on the protection and use of natural resources. As well as direct co-operation in the field of environmental protection, there is also co-operation in the fields of infrastructure, agriculture, tourism, industry, transport, energy, science and technology. There are also common programmes for health protection.

On the institutional level, *conferences of environmental ministers* have been held since 1989, and have created a *Standing Committee* of ministers of the environment. This co-operation led to the *Agreement of Port-of-Spain* on management and maintenance of the environment. In spite of general agreement on the principle of priority of environmental protection, real measures are restricted to individual projects. In 1989, *Caribbean Environmental Health Institute* was founded to support these projects. The first Global Conference on the Sustainable Development of Small Island Developing States took place in 1994, which identified the specific environmental problems of the region.

In comparison to CARICOM, the **OECS** emphasises environmental protection very clearly. The essential economic sectors, agriculture and tourism, are very dependent on the environmental situation. In 1986, a Natural Resource Management Project was founded (with German support), which became a government authority in 1988. Activities are primarily in the area of technical support for the member states. Parallel emphasis is placed on state environmental policy in the field of research and use of maritime resources, especially fish stocks.

3.3.5 MERCOSUR

3.3.5.1 Important aspects of integration

The *Mercado Común del Sur* ²⁹ (Mercosur) came into effect with the Treaty of *Asunción* in 1990 with the protocol of *Ouro Preto* by Argentina, Brazil, Paraguay, Uruguay in 1995. Bolivia and Chile are associated. Other states in the Andean region are considering membership. With regard to the interest of the associated countries (Chile, Bolivia, the Andean group) it becomes clear that this is a strategic alliance, designed to achieve participation in the regional power potential, e.g. with regard to FTAA, without formal membership (compare section 3.6.4).

In the Mercosur integration projects, the member states intend to improve their competitiveness on the world market in the face of regional block formation. Economic integration is therefore at the centre of the Mercosur treaty (Schirm, 1997) with the economic primary aim of creating a free trade zone to promote and expand inter-regional trade. Steps towards political integration are at first excluded. In spite of this, the conclusion of this integration agreement is remarkable above all against the background of almost 150 years of very serious tensions and rivalries between Argentina and Brazil, which have been replaced by concerted foreign policy efforts and economic co-operation. This development has also certainly led to stabilisation of weak democratic structures after years of military rule.

Mercosur is - measured in terms of GDP - the third strongest regional integration zone, after NAFTA and the EU, in front of ASEAN. Approximately 235 million people live in the Mercosur area, 48 % of the total population of Latin America. Together with the two associated states of Chile and Bolivia, Mercosur generates approximately 65 % of the creation of value in Latin America. The creation of value by the four Mercosur states alone exceeds the aggregate GDP of the South East Asian states by two and a half times, and that of the sub-Saharan African states by four times. China has reached only 80 % of the GDP of Mercosur. The structure of the economies is **extremely heterogeneous**. Argentina and Brazil are "huge" and relatively highly industrialised, whereas Paraguay and Uruguay are small or very small economies with little industry. 97 % of the GDP and the population are in the two big countries. Mercosur is dominated economically and politically by Argentina, and, above all, by Brazil, so that Argentina fears a "cannibalisation" of its economy by the big neighbour, Brazil (Außenwirtschaftsbrief 2/99:6). Progress of integration is primarily a matter between Brazil and Argentina. Given the relatively small Mercosur market it is improbable that, in the event of a crisis, Brazil would refrain from taking measures to stabilise its own economy because these would have a negative effect on the process of integration. Brazil accounts for 63 % of Mercosur exports, Argentina for 32 %. Uruguay and Paraguay play only a marginal role. Argentina and Brazil account for 93 % of the population and the GDP of Mercosur (Schirm

²⁹ Sometimes also known as *Mercado Común del Conosur*, which would exclude Brazil [*cono* = (southern) horn]. In Portuguese: *Mercado Comum do Sul* (MERCOSUL).

1997), Uruguay and Paraguay account for only 7 % of GDP. For the integration process, Mercosur as a whole is therefore less important than developments in Brazil.

Mercosur is intentionally only slightly **institutionalised**. Supra-national institutions with decision-making powers are not foreseen, neither is a common budget, or an inter-regional financial balance. Formal co-ordination mechanisms for the alignment of economic policy do not exist. In the *Ouro Preto* additional protocol signed in 1994, the member states agreed to maintain inter-governmental decision-making structures (Roett, 1999:11). The **Council of the Common Market** (*Consejo Mercado Común CMC*), in which the ministers of foreign affairs and the economies meet, is - after the non-institutionalised summits between the heads of state - the highest body. Representatives of business also take part in its meetings (Tussie/Vásquez, 1998:235).

The executive organ is the **Group of the Common Market** (*Grupo Mercado Común, GMC*), which is led by the ministers of foreign affairs and represents the market to the outside world (Goyos/de Noronha, 1993) with a large number of commissions, including those for communication, mines, technical standards, financial matters, transport, infrastructure, *environment*, industry, agriculture, energy, labour law, health, culture, migration, employment, and social security. The implementation of the decisions is left to the member states. Since 1994, however, Mercosur has had **supranational** status in its negotiations with third parties. Limiting institutionalisation to the executive makes participation of the people in the integration process more difficult. The question arises of whether the weak institutional structure is up to the expected demands of a common market.

After many failed attempts at integration in Latin America, the willingness of Mercosur to push forward with integration was obviously underestimated. The aim is to form a common market with internal complete freedom from customs duties, a common external customs tariff, with common norms and standards, and a harmonised economic policy. At present, Mercosur is at the stage of a flexible customs union with a partially free trade zone for goods and services. Important sectors, however, are excluded from free trade. A full common market, with mobility of factors of production, is intended for the next millennium, but is still far from realisation. Free movement of labour is not in place, public procurement and protection of intellectual property have not yet been harmonised, etc. In 1997, the member states, together with the states of the Andean Pact, agreed on a mutual opening of their markets, which, however, has also not yet been realised.

In terms of free trade, Mercosur has been successful. While the economic relations of the member states to each other had been weak in the past, inter-regional trade increased significantly from approx. 3.8 billion US dollars in 1990 to 111.8 billion US dollars in 1997 (bfai). Argentina and Brazil became each others second biggest suppliers and markets, in spite of unfavourable accompanying macro-economic circumstances: Argentina having coupled the exchange rate of the Real to the US dollar, while Brazil adapted the exchange rate to the rate of inflation. Bilateral trade between Argentina and Brazil is, because of many exceptional regulations, only partly competitively oriented. From 1990 until 1994 there were unilateral decreases in customs duties as a result of an economic and political mutual approach, above all between Argentina and Brazil.

In terms of a customs union, the results for Mercosur are ambivalent. There are only the beginnings of a common foreign trade policy. A common external customs tariff towards third countries will only be realised in a few years' time, since there are a large number of exceptional regulations (for about 300 types of goods for each country, Roett, 1999:11ff.). The

integration treaty excludes some important aspects for the time being, including those relating to public procurement. At present, Mercosur is bound together as an incomplete customs union by elements of trade liberalisation within the integration zone with increased protection against other countries. It therefore has effects of both trade creation and trade diversion, but the intra-trade has developed much more dynamically than the total exports of the member states. These, however, should by no means be interpreted as integration effects. Even before the customs union came into effect, the Mercosur countries showed a remarkable increase in trade (Sangmeister, 1999:73). The beginning of the customs union coincided with the crisis of the Mexican peso in 1994, which had a braking effect on the willingness to invest in Latin America and left its mark on the intra-regional flow of trade in Mercosur.

On the whole, however, the intra-trade shows a continuous absolute and relative growth. The proportion of intra-imports since 1990 has increased from about 15 % to 22 % of total imports of the Mercosur countries, intra-exports from 11 % to 20 %.³⁰ Bilateral trade between and with Argentina and Brazil has played the largest part in this. The specific data for the individual countries also show that extra-regional trade in all Mercosur states is still more important, and shows a stronger dynamic than intra-trade. Approx. 21 % of exports go to the EU, 25 % to the other ALADI states, 15 % to North America, 14 % to Asia, and, as mentioned above, 25 % is intra-trade (Roett, 1999:18,63 ff.). These figures also show the strong multilateral orientation of Brazil and Argentina, whereby Argentina has stronger trade contacts within ALADI than Brazil has.

Parallel to these developments, flows of direct investments have increased significantly (Blomström/Kokko, 1998). It is, however, not surprising, that they are mainly concentrated on Brazil and Argentina, while the smaller partners, Paraguay and Uruguay, show much weaker developments. In Argentina, the consistent privatisation policy proved to be a strong pull-factor. In Brazil, the development of direct investments was dynamic, but with large fluctuations.

The missing will to co-ordinate national economic policy, especially with regard to currency, and the monetary instability of Argentina and Brazil, are the most uncertain factors influencing the integration process in Mercosur. The effects of the Mexican peso crisis were dealt with mainly at the national level, repeatedly producing bilateral problems (Roett, 1999:14,17). The economic connections between the economies must be further increased, e.g. by setting up a common infra-structure and a mutual agreement mechanism for macro-policies, such as e.g. taxation policy. There are, however, few real developments here. So far, the member countries have carried out their development strategies largely independently of each other and without a shared plan for integration. At the summit meeting in Asunción in June 1999, a commission was set up to discuss the convergence criteria for the common market.³¹ This is not expected to have much effect. While national economic autonomy allows more flexible responses in the national interest, it also slows down the integration process. The long-term aim of a common market is maintained, but a co-ordinated and detailed structural plan for this does not exist. Whether it will actually happen will depend on the interests of Brazil and Argentina.

It is unlikely that the integration process set in motion in Mercosur will be revised, even if there is at present still a long list of exceptions from the rules devised in the context of a customs union. The integration agreement also still excludes some important aspects e.g. with

³⁰ In comparison: the intra-exports of NAFTA are approx. 50 % of total exports, those of the EU are about two thirds.

³¹ In analogy to the EEC, they refer to the government deficit, the rate of inflation, debt, and interest rates.

regard to public procurement. The way to the realisation of a common market will therefore be a very long one. A remaining condition will be the creation of supra-national institutions with a consultative function, or with regulatory authority. At present, there are, however, no prospects for this, not least because of the strong asymmetries in the distribution of economic and political power. On the other hand, there is increasing recognition that Mercosur must achieve a higher profile on the international stage. The costs for the build up of the integration zone are therefore, in contrast to previous efforts, likely to be much higher, making a further dynamic development of the integration more difficult. There is, however, no lack of ostentatious declarations of the will to carry on the integration policy.

Progress in integration is therefore being made at a low and non-intensive level. So far, only a few enterprises, mainly highly-competitive ones, have become involved in trade exchanges and investments (Esser, 1994). In some areas, specialisation effects have taken place, which provide a basis for economic integration. The incentive for trade is hindered by a qualitatively and quantitatively inadequate transport infrastructure, conditioned by decades of isolation and the conflict-ridden wrangling between Argentina and Brazil for primacy in the region. Efforts to achieve an improvement of the infrastructure were, in the past, characterised by bilateral and multilateral contracts outside the scope of the Mercosur treaty. Only recently have there been focused regional initiatives, particularly with the planned "Hidrovia" (waterway) Paraná-Paraguay and the planned highway from Sao Paulo via Uruguay to Buenos Aires, which have clear environmental policy implications.

Compare section 3.6.5 below on free trade oriented bi-regional co-operation of Mercosur with the EU.

3.3.5.2 Environmental policy

See section 4.3 for a **case study** on the environmental policy in Mercosur.

3.4 Asia and Australia

The first approach to real integration in the Asian region was in 1965 with the free trade zone between Australia and New Zealand, which was replaced by the *Closer Economic Relations and Trade Agreement*, **CER**, in 1983. The free trade zone, however, allowed a large number of non-tariff trade barriers, some of which were removed in 1990 only.

In 1967 there followed the Association of South East Asian Nations (**ASEAN**), which passed *ASEAN Preferential Trading Arrangements* (**PTA**) in 1977 and 1979, with partial liberalisation for a limited 'positive' list of goods.

In 1975, Bangladesh, India, Laos, the Philippines, South Korea, Sri Lanka, and Thailand signed the **Bangkok Agreement** (*First Agreement on Trade Negotiations among Developing Countries of ESCAP*). The first project ideas had been discussed since 1963. The aim was the gradual liberalisation of intra-trade. The agreement presented to GATT in 1976 was then not ratified by Thailand and the Philippines. In 1984, there was a revitalisation of the hitherto largely unsuccessful efforts. In 1985, besides the five states of the "first round", Thailand, the Philippines, Indonesia, Iran, Malaysia, Nepal, Pakistan, and Papua New-Guinea signed. In 1993, a "third round" began, which also intended to extend the agreement. Intra-trade has remained modest at 11 %. Prognoses for the future, in the face of internal conflicts (e.g. be-

tween India and Pakistan) are cautious. None of the various versions of the Bangkok Agreement contain any specific regional **environmental policy**.

In 1985, eight countries in the Indian sub-continent founded the *South Asian Association for Regional Cooperation (SAARC)*: Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka. Little progress has been made since (Aryashinha, 1999). [Compare section 3.4.2].

In 1992, 10 Central Asian countries founded the *Economic Cooperation Organisation (ECO)*: Afghanistan, Aserbaidzhan, Iran, Kasachstan, Kirghizia, Pakistan, Tadschikistan, Turkey, Turkmenistan, Usbekistan. The ECO is the successor of the *Regional Co-operation for Development (RCD)*, founded by Iran, Pakistan, and Turkey in 1964, which remained dormant until 1979. The collapse of the USSR provided the background for a wider approach to co-operation. On intra-trade there are only declarations of intent, but no data. In spite of the environmental sounding name "*ECO*", there is no recognisable **environmental policy**, but of the eight committees, there is one called *Committee for Cooperation on Environment and Health*.

In 1991, ASEAN decided to create a free trade zone by 2003 (**AFTA**).

In 1994, the members of the *Asian Pacific Economic Cooperation Forum (APEC)* decided to create an open inter-regional trade and investment zone by 2010 for the industrial countries and by 2020 for the developing countries. This was to include the countries of North America, the Pacific, Asia, Latin America, and Australia. The APEC agreement included various references to **environmental policy**.

The Asian area accounts for approx. one fifth of world trade. Many countries have tried to stimulate trade by creating special economic zones. In recent times, *sub-regional economic zones* (SREZs) have been formed as "growth triangles", which do not include trade preferences, but do include inter-state agreements, special allowances, and common build up of infrastructure, in order to promote industrial location.

3.4.1 Association of South-East Asian Nations (ASEAN)

3.4.1.1 Important aspects of integration

The *Association of South-East Asian Nations* (ASEAN) was founded in Bangkok in 1967 by Indonesia, Malaysia, the Philippines, Singapore, and Thailand (ASEAN-5)³². Brunei was admitted in 1984, Vietnam in 1995 (ASEAN-7), and Laos and Myanmar (formerly Burma) in 1997 (ASEAN-9). Cambodia may be expected to join too, but has so far been rejected for political reasons.

With around 485 million consumers ASEAN is, in terms of population, the largest of the five big regional integration zones (ASEAN, NAFTA, EU, Mercosur). It is, however, only a loose association of very different countries. ASEAN was founded more for geo-political reasons than for economic ones. It was founded against the background of the massive Indian-Chinese border conflict of 1967 as a block of anti-communist states. Only from 1976 onwards did the economic aspect come into the foreground. In 1977 and 1979, *ASEAN Preferential Trading Agreements (PTA)* were signed, which, apart from industrial policy, were an essen-

³² "ASEAN-4" refers to the NICs Indonesia, Malaysia, Philippines, and Thailand.

tial element of ASEAN policy. Because of the implementation mechanism, which gave responsibility for the implementation of the measures to the countries involved alone, the PTA were not very effective.

After 25 years of existence, the degree of integration in ASEAN is low. Because Japan and China are not members, the integration zone lacks political and economic power. ASEAN is primarily an association to protect economic and security policy interests in the South East Asian region (Hernandez, 1999). Its structure is heterogeneous in nearly all respects. Economically, Singapore has an approximately 25 times higher per capita income than the Philippines, and 100 times higher than Vietnam. This, however, has not been an obstacle to the political coming together of the South East Asian states, all of which have a strong tendency to international trade. Intra trade even fell slightly, from approx. 22 % in 1960 to 20 % in 1990. It has since "recovered" slightly. External trade is much more dynamic. Direct investments in ASEAN concentrated on Malaysia, Thailand, and Singapore. In real politics, however, the member countries have only been able to make and implement decisions on a limited scale. This has been because of political and economic barriers between the member countries and because of weaknesses in the organisational structure of ASEAN.

Trade liberalisation, as a core element of the wide co-operation between the South East Asian States, has not yet been able to invoke any real vitalisation of inter-regional trade (Öjendal, 1997). The causes of this are to be found above all in the economic structure of the member states. In spite of large differences in the levels of development, the economies of the ASEAN states are **homogeneous** in that they compete with each other, rather than complement each other on the international goods and capital markets. In spite of this, their real structures are **heterogeneous** in many respects. For this reason, each country has avoided reductions in customs duties with large economic repercussions. Alongside the trade liberalisation activities, the ASEAN states work together in the fields of agriculture, forestries, food, minerals, energy, and tourism.

A reform of the co-operation has been carried out since 1992. This is designed, among other things, to increase the slow pace of trade liberalisation, in order to improve the competitiveness of the ASEAN states on the world market. In 1992, the *ASEAN Free Trade Area* (AFTA) was founded and has been at the centre of integration ever since. With the help of a *Common Preferential Tariff* (**CEPT**), AFTA is to be realised by an accelerated reduction of tariffs. The target date for almost barrier-free trade was originally set for all member states for 2008, but brought forward to 2003 in 1994. The AFTA agreement includes agriculture. It also includes strengthened micro-regional co-operation in the so-called growth triangles, the promotion of co-operation between industrial enterprises, and the liberalisation of services (David, 1995). Since autumn 1997, the short-term solution of the finance, currency, and economic crisis in South East Asia has been at the centre of ASEAN's concerns.

In ASEAN, until 1992, the question of economic integration was never (or never seriously) raised (Dietrich, 1998:307). Neither were there any significant integration effects. If Singapore is put aside, intra-trade is a mere 5 % (Dosch/Wagner, 1999:54), due to the low level complementary nature of the economic structures. When Singapore is included, intra-trade is up to 20 %. On the basis of a negotiation mode between the national elites, each of the members of this organisation have achieved the greatest economic success for itself, and together for the region a conflict-avoidance structure, regardless of many unsolved problems (East Timor, human rights, etc.). There are many differences to other integration agreements:

- ASEAN is an Asian form of international co-operation. It is, above all, a forum for confidence-building measures, consultation, and discussion in an atmosphere of mutual respect, not primarily intended to reach decisions and resolve conflicts, but more to exchange views and reach consensus (Pretzell, 1994; Narine, 1997; Hernandez, 1999). The implementation of non-binding decisions is therefore left to the individual member states.
- In contrast to the only slight internal effectiveness of ASEAN, the organisation is much more effective in representing the interests of the South East Asian nations to the outside world, when the represented interests of the member countries are the same. This was, for example, the case in international agricultural policy and the rejection of social clauses (Rüland, 1995).

3.4.1.2 Environmental policy

In the Bangkok declaration of 1967, the foundation stone of ASEAN, broad co-operation in a number of areas is foreseen. Environmental protection has been a part of this co-operation since 1977. Regulations for environmental protection exist in the context of the *ASEAN Environmental Programme (ASEP)* which also serve as "*policy guidelines*" for national policy (Touché, 1998:153; Schucher, 1998). ASEAN does not interfere in national policy. There are no direct mechanisms or institutions for implementing environmentally-relevant decisions, but efforts are made to co-ordinate national policies, above all to solve cross-border environmental problems (e.g. air pollution and forest fires). So far, however, it has not been possible to establish an efficient catastrophe management system. Each country has its own national ASEAN office, with the task of pushing forward the implementation of ASEAN decisions. Implementation of such decisions is carried out by the countries involved. These, however, are generally not equipped with adequate staff or financial capacity, nor with any authority to implement or enforce environmental aims, or to monitor such implementation (Touché, 1998:50; Seda, 1993). Recently, co-operation in urban development has also been intensified in order to counter the huge environmental problems in the metropolitan cities.

In 1978, the ASEAN Environmental Committee³³ was founded, which has been working on the various *ASEAN Environmental Programme (ASEP)* since 1981. These are passed at the meetings of the ministers. In 1978, an environmental programme was also decided for the South Pacific region (*South Pacific Regional Environmental Programme, SPREP*) in order to support the many small island states, which lack financial means, in developing a plan for sustainable development. This programme itself, however, was only given very inadequate financial means. Increased co-operation in the field of the environment has only been seen since the beginning of the 1990s. In 1990, the involvement of environmental aspects in national economic planning was decided upon. In 1994, a committee of experts was established, the *ASEAN Senior Officers for the Environment*, as was the *ASEAN Strategic Plan of Action (ASPEN)* for the years 1994 to 1998. In this context, regional environmental standards for the measurement of air and water pollution were established, and information system built up, an index of dangerous chemicals compiled, and agreements made on cross-border transport of waste. IN 1995, ASEP V decided to integrate trade with environmentally-friendly technologies in the ASEAN programme for the reduction of customs duties (Touché, 1998:46). The latest initiatives have included activities to implement national economic labelling programmes and ISO 14000.

³³ At first in the context of the ASEAN Committee on Science and Technology, ASEAN-COST.

A special problem with regard to the harmonisation of environmental law are the different legal systems with which the ASEAN countries are associated (Islamic, British, Dutch, Spanish, US law, and local common law). This is probably also the reason why a large number of studies, reports, and recommendations have been worked on ("pen pushing"), but have led to very little in the way of binding rules. On the whole, ASEAN has been very active in developing soft instruments, which are based on co-operation and agreement. Thus, the concepts for action plans and agreements regarding sustainable development should be emphasised, but these agreements lack obligation, or possible sanctions, and above all adequately financed institutions (Coulthard, 1998:297).

On the whole, ASEAN efforts to achieve a regional environmental policy are recognisable. Whereas positive developments can be clearly seen on the level of strategic objectives, there are serious problems of implementation. The ASEAN countries pursue environmental protection policies at the national levels with very different degrees of intensity and very selectively. While consensus still has to be reached about which environmental objectives it is sensible to pursue, there are large differences with regard to practical implementation (Fariz/Nordin, 1999).

3.4.2 South Asian Association for Regional Co-operation (SAARC)

3.4.2.1 Important aspects of integration

At the instigation of Bangladesh, a summit meeting took place in 1985 at which SAARC was founded. The member countries are: Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. The member countries are among the poorest in the world, and are, in this respect, economically **relatively homogeneous**. There is a tendency in South Asia towards opening up and liberalisation of the economy, but the implementation of the free trade zone has so far made very little progress. The economic structures are based very strongly on substitution. There is very little intra-regional trade (Nepal over 20 %, Maldives around 8 %, all other members under 3 %). Trade with industrial countries, other Asian states (ASEAN countries) and countries in the Middle East is much more important for the larger countries, India and Pakistan (Wagner, 1996; Bhargava et al. 1995).

A SAARC *Preferential Trade Agreement* (**SAPTA**) serves as a framework. In order to bring it to life, a *South Asian Free Trade Area* (**SAFTA**) was agreed on in 1997, to be realised by 2001. The smaller countries would benefit most from an opening of markets with the bigger countries. A parallel bi-regional co-operation with ASEAN is also intended.

The aims of SAARC are to promote development and growth, the improvement of general standards of living in the region, and the satisfaction of basic needs using the members' own resources. There is, however, hardly any real cooperation on these issues. The foundation of SAARC was primarily a matter of **political objectives**, such as the allaying of political tensions, especially between Pakistan and India, and between India and Sri Lanka. These aims are pursued by consultations in the form of summit meetings, although success is unreliable. In the face of the chronic tension between India and Pakistan, intensified by the nuclear tests in May 1998, and the outbreak of open warlike hostilities in May 1999, SAARC will probably, for the time being, remain nothing more than a forum for discussion, with no convincing ability to solve bi-lateral problems.

The region is characterised by increasing economic disintegration (Bhargava et al., 1995), intensified especially by considerable political tensions between India and Pakistan, which lead to warlike confrontations. The main causes of this are the big structural differences between the member states, and in particular the dominance of India. This is exacerbated by the fact that a number of ethnic groups feel that they are separated by borders which they see as artificial. This leads to migration and terrorism, and is a very bad basis for regional integration.

3.4.2.2 Environmental policy

An often proclaimed main focus of the work of SAARC is environmental protection, since economic growth and improvement of the conditions of life as aims of SAARC can only be realised if environmental considerations are taken into account. In general, the co-ordination of national environmental policies is aimed at. Meetings of environmental ministers are taking place with this in view. Consultations are taking place to solve or avoid cross-border environmental problems, such as flooding (Jheena, 1999). A higher-level regional and, above all, effective environmental policy is, however, not yet in sight (Couthard, 1998:288). As in the field of economics, SAARC has also not got beyond the stage of planning and reaching agreements in regional environmental policy (Dosch/Wagner, 1999:78).

3.5 Africa and the Middle East

Many integration efforts include states in Africa and the Middle East. The overview is incomplete, because many of the states, at the time when these agreements were made, were not members of GATT, and the reports to the WTO are therefore either incomplete, or have not been made at all (WTO 1995:37). The following summary therefore has no claim to be complete.

In the process of globalisation, the marginalisation of Africa has become very clear. The increasing tendency to form trading blocks in other regions of the world economy gave an incentive to efforts to revive economic integration in Africa. In Africa as a whole, there are more than 100 institutions concerned with very different aspects of regional cooperation in a large number of double and multiple memberships. Especially in Africa, the terms "economic community" or "common market", assumed to mean that there is the aim to achieve integration, may, in reality, have no such significance. Not even a free trade zone has been achieved so far.

In 1945, the *Arab League* was formed by 21 states. In 1957, it concluded an *Agreement for Economic Unity*, and envisaged an *Arab Common Market (ACM)*. The ACM agreement came into force in 1965 between Egypt, Iraq, Jordan, and Syria. Libya, Mauritania, and Yemen joined later. In 1971, internal customs duties were abolished, but a common external tariff has still not been established to date.

After the independence, approaches to integration among African countries were characterised above all by efforts to maintain links established during the colonial period. In 1959, Dahomey (today Benin), Upper Volta (today Burkina Faso), the Ivory Coast, Mali, Mauritania, Niger, and Senegal the *Customs Union of West African States (CUWAS)*, *Union Douanière de l'Afrique de l'Ouest, UDAO*). This was replaced in 1966 by the *Union Douanière des Etats de l'Afrique de l'Ouest (UDEAO)*. The countries had a common currency (except Mali), a common central bank, and internal free trade.

UDEAO was never fully realised, and was replaced in 1973 by the *Communauté Economique de l'Afrique de l'Ouest* (**CEAO** - *West African Economic Community*, WAEC). The CEAO is based on the Franc-CFA zone, founded in 1948, and supported by France, whose members united in 1963 in the *Union Monétaire Ouest-Africaine* (**UMOA**). With the exception of Mauritania, all CEAO states are also members of UMOA. The aim of CEAO was to establish a common market, not least as a counterbalance to the development of Nigeria. It has, however, not moved beyond being a partial free trade zone for agricultural produce and raw materials, and a preferential trading zone for some industrial goods. Movement of capital, however, has been liberalised. CEAO was a relatively successful integration effort, even though intra-trade did not exceed about 11 %. CEAO has not developed any visible regional **environmental policy**, but does run a common solar energy centre in Bamako, Mali. In 1994, CEAO was changed into the *Union Economique et Monétaire Ouest-Africaine* (**UEMOA**), which intends to achieve economic and monetary integration in six steps: (1) preference zone (1996); (2) free trade zone (being developed); (3) customs union; (4) common market, with mobility of goods and factors; (5) convergence of economic policies; (6) economic and monetary union (monetary union has already been achieved). There is, however, no time schedule for these steps.

In 1959, Congo-Brazzaville, Gabun, the Central African Republic, and Chad formed the *Union Douanière de l'Afrique Equatoriale* (**UDAE** - *Equatorial Customs Union*, ECU). Cameroon joined in 1961. The customs union established in 1962 was extended to the free movement of capital and harmonisation of tax incentives for enterprises, and in 1964 to the co-ordination of industrial development. This led in 1966 to the *Union Douanière et Economique de l'Afrique Central* (**UDEAC**), which Equatorial Guinea joined in 1985. The "customs and economic union" is far from realisation. Intra-trade is at around 2 %, but has increased noticeably since internal trade liberalisation. In 1990, Cameroon, Congo, Gabun, and the Central African Republic introduced a common external customs tariff. A remarkable aspect of this was the *Single Tax System*, which allowed enterprises which applied to be exempted from all other tax payments, with a unified tax being levied only when the goods were sold to the final customer. This was replaced in 1995 by a reformed *Generalised Preferential Tariff*. As members of the franc zone, the states are also members of the CFA monetary union. There is no apparent **environmental policy**.

In 1967, the countries of former British East Africa - Kenya, Tanzania and Uganda - united to form the *East African Economic Community* (**EAEC** - also known as the *East African Community*, **EAC**). Because of internal disparities, the EAC was dissolved in 1979, but revived in 1999 in the context of EAC-II.

In the 1970s, under the auspices of the Organisation of African Union (OAU) and the UN Commission for Africa (ECA), various approaches to economic cooperation and integration were made. In West Africa alone, there are some 40 inter-state organisations and institutions, many of which were founded in colonial times. In 1973 Liberia and Sierra Leone founded the *Mano River Union* (**MRU**), which Guinea joined in 1980. Although it was conceived as a customs union, there was neither a dismantling of internal customs duties, nor the establishment of a common external customs tariff. Trade liberalisation in the MRU zone is therefore insignificant; intra trade is less than 1 %. Apart from various co-operation projects in the fields of agriculture and forestries, the MRU has not developed any recognisable **environmental policy**.

In 1975, the *Economic Community of West African States (ECOWAS)* was formed. It includes the CEAO countries (Benin, Burkina Faso, Ivory Coast, Mali, Mauritania, Niger, Senegal), the MRU, Cap Verde, Gambia, Ghana, Guinea-Bissau, Nigeria and Togo. ECOWAS abolished customs duties for agricultural produce and handicraft products in 1981, and agreed on a schedule for the abolition of customs duties for industrial products, which, however, was never achieved. A revised ECOWAS II agreement was signed in 1993.

In 1976, Burundi, Rwanda, and Zaire founded the *Communauté Economique des Pays des Grands Lacs (CEPGL - Economic Community of the Great Lake Countries, ECGLC)*. In spite of the name, a real economic community was not the aim of this organisation, but only an informal co-operation. Intra-trade was always insignificant (less than 1 %). Apart from common projects in the areas of agriculture and energy, there was no recognisable **environmental policy**. Many structures have been destroyed by the civil war.

In 1981, the EAC countries and 13 other states (Angola, Burundi, Comoro, Djibouti, Ethiopia, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Somalia, Sudan, Swaziland, Zambia, and Zimbabwe) formed the *Preferential Trade Area for Eastern and Southern African States (PTA)*. It was even intended to achieve a common market by the year 2000.

In 1984, Kuwait, Saudi Arabia, Bahrain, Oman, Qatar, and the United Arab Emirates formed the *Gulf Cooperation Council (GCC)* with a free trade zone for industrial goods and agricultural produce. The per capita income of about US\$ 8,000.- is remarkable. An intended common customs tariff has so far only been partially realised. Intra trade fluctuates between 5 % and 7 %. No specific **environmental policy** is evident.

In 1984, Burundi, Cameroon, the Central African Republic, Chad, Congo (-Brazzaville), Equatorial Guinea, Gabon, Rwanda, Sao Tomé and Principe formed the *Communauté Economique des Etats de l'Afrique Central (CEEAC - Economic Community of Central African States, ECCAS)*, with the aim of creating a customs union and, later, a common market. Intra-trade stagnated at 2 %. There is no evidence of priority having been assigned to **environmental policy**.

The Maghreb states of Algeria, Libya, Mauritania, Morocco, and Tunisia agreed in 1989 to establish an Arab Maghreb Union (AMU) (also known as the *Maghreb Economic Area, MEA*). Intra-trade, 3/5ths of which is in finished goods, is not highly developed (below 10 % for Tunisia, which is ahead of all the others in this respect). Since 1992, cooperation discussions have been taking place with the EU. **Environmental protection** is not mentioned in the text of the treaty under discussion.

One of the most recent and most ambitious attempts is the *African Economic Community (ACP)*, which was founded in 1991 by 52 African states and intends to establish a common market in six stages over a maximum of 35 years (the treaty only came into force in 1994). **Environmental protection** is addressed in connection with the conservation of natural resources and explicitly with regard to co-operation.

In 1994, 21 states decided to establish a common market between East and Southern African States (*Common Market of East and South African States, COMESA*), with a free trade zone from Egypt in the north to Swaziland in the south. At the routine summit conference in Nairobi in May 1999, the participants decided to abolish customs borders in COMESA by the end of 2000. It was agreed to achieve monetary union by 2004, which, however, must be seen

as wishful thinking. In the five years since the founding of the community, not even half of the COMESA states have implemented earlier decisions of the community (dpa).

3.5.1 Economic Community of West African States (ECOWAS)

3.5.1.1 Important aspects of integration

The Economic Community of West African States (ECOWAS I) was founded in 1975 and included all 16 West African states (Benin, Burkina Faso, Cape Verde, Ivory Coast, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo). The aim was to achieve a common market by 1989, and economic union in the long term. To date, however, not even a free trade zone has been realised. In the face of the slow progress towards integration, a new agreement (ECOWAS II) was concluded in 1993.

The **aim** of the integration efforts in the context of the ECOWAS multilateral agreement has since become a **monetary and economic union**. A customs union is intended for 2000, to be followed in the next five years by an economic and monetary union with a regional central bank (UNCTAD 1996:18ff).

In West Africa, there are overlaps between three integration agreements: ECOWAS, CEAO/UEMOA, and MRU (see below). There are many double memberships. It is symptomatic that all three have developed rules on origins. In 1991, ECOWAS was therefore made the "*Principle Institution*" and "*Supreme Body*" for all the three regions.

If Nigeria is excluded, the member countries have a relatively **homogeneous** structure: mostly small countries with mostly small markets, low levels of production and income. Nigeria, with its economic potential, is also a political hegemonic power (van den Boom, 1997:67). The average per capita income in the region is around US\$ 375 (1990), with thirteen countries classified by the UN as "least developed countries".

Intra-regional trade within ECOWAS has only a low level of significance, making up only just 10 % of exports at the beginning of the 1990s. The intra-regional trade within ECOWAS, however, makes up about 72 % of the total trade with African countries, that is the main export markets within Africa (UNCTAD 1996:21).

3.5.1.2 Environmental policy

Environmental damage caused by poverty is on an enormous scale in Africa. For many African countries, export of fossile and mineral raw materials is an essential source of foreign exchange (including Sierra Leone, Mauritania, Liberia, Togo, Niger, Nigeria, Guinea, Botswana - Bruhns/Kappel, 1992:5), meaning that these raw materials are systematically consumed. This means not only a depletion of resources, but also a strain on the environment by destruction of the landscape, pollution of water and air. Monocultures for *Cash Crops* promote land degradation and soil erosion.

The revised ECOWAS II agreement of 1993 took in co-operation on environmental protection as a new element. The aim is the protection, conservation, and the promotion of the natural environment in the region by suitable policies on the national and regional level, and the creation of suitable institutions.

In the context of the creation of 8 specialised technical commissions, regional environment is to be served by Commission 3, "*Environment and Natural Resources*". The tasks of this commission include the preparation of common programmes and projects, harmonisation and co-ordination of these projects, and the monitoring of the implementation of relevant parts of the agreement.

The environmental cooperation relates essentially to the fields of use of natural resources (especially the provision of water for drinking and other purposes), combating special ecological problems in the region, and control of desertification. The ECOWAS II agreement forbids the import of and trade in dangerous and poisonous waste. To this end, a "*regional dump-watch mechanism*" is to be introduced (UNCTAD 1996:24).

On the whole, co-operation in the field of environmental protection within ECOWAS has so far not gone beyond the carrying out of individual projects with regard to specific regional problems.

3.5.2 East African Co-operation (EAC II)

The *East African Co-operation (East African Community, EAC II)* is the second real attempt to achieve regional integration in East Africa. The first approaches to an East African Unification process were started in 1948, under British leadership (Knirsch/Beez, 1999). After some earlier efforts towards sectoral cooperation, the *East African Community (EAC)* was formed in 1967, including Kenya, Uganda, Tanzania. In spite of the grand name, the members were allowed to impose import duties to protect their own industries. In order to promote the weaker partners, Tanzania and Uganda, the *East African Development Bank* was founded in Kampala. The three national currencies were united in a currency union, in which they were mutually recognised as means of payment. Various mutual (state) institutions, such as the post and telephone corporation, East African Railways, and *East African Airlines*, developed, in part, into efficient organisations. In spite of this, there was no harmonious common path of development. The three states were too different, and pursued interests which were too much at variance. Kenya was too politically and economically dominant, Tanzania turned to socialism, Uganda sank into chaos after Idi Amin's putsch. The cooperation therefore effectively collapsed in 1971, although the formal dissolution was protracted through 1978 to 1984.

As well as the unequal economic conditions, the political will to achieve a more intensive co-operation was also lacking. This situation was intensified by personal animosities between the presidents of the three states, a factor which must not be underestimated. The EAC was more a project of the governments than of the people. It was therefore not possible to develop an East African identity. Civil society was as little involved in the integration process as private industry.

With the renewed foundation of *East African Community II*, a new phase began (in July 1999, the draft version of the contract, from August 1998, is due to be signed). The conditions seem to be more favourable this time: there are no more serious ideological differences, the IMF and the World Bank co-ordinate economic policy in all three countries (we cannot go into this in more depth here), the systems are more or less compatible. The new impetus is to be seen against the background of the wish to create a counterbalance to the SADC, and, above all, to South Africa. From 1989, various, some private, initiatives attempted to revitalise the EAC. In 1994, a common secretariat was founded in Arusha, which is also today the headquarters of

the EAC. Visa requirements were abolished, there are discussions about the introduction of a common passport, and cross-border traffic has been simplified.

The aim is to achieve a common market, with monetary union, eventually being developed into a political federation. The states agree on co-operation on the political, economic, cultural, and judicial levels, as well as on security questions. Special importance is given to co-operation on questions of environmental protection.

The EAC is clearly modelling itself on the EU. The highest organ of the EAC is the *Summit*, consisting of the heads of state, which meets twice a year and makes decisions by simple majority vote. The *Council* consists of cabinet members responsible for regional development in the member countries. It meets twice a year and makes decisions by simple majority vote. A *Coordinating Committee* consists of Secretaries of State and appoints sectoral *committees*. Like in the EU, there is an *East African Community Court*. The *East African Community Assembly* consists of 27 members, who must not be members of the national parliaments. It decides on measures for the implementation of the community agreement, which, however, have to be approved by the heads of state of the member countries. The executive organ of the community is the secretariat in Arusha.

By the year 2000, all customs duties, taxes, and other trade barriers between the states are to be abolished. A common external customs tariff is to be established by 2004, and customs procures harmonised. To guard against dumping or subsidies, compensation levies can be raised, in accordance with GATT/WTO. Tanzania has an average external customs duty of 30 %, and can expect considerable losses in revenue. In Uganda and Kenya, it is also 15 - 20 %. The ruling party in Kenya has deliberately allowed domestic sugar production to collapse and dwindle, and finances the state budget by a duty on sugar imports. There is not yet any agreement on real permitted counter-measures, in case the common market produces disadvantages for individual countries. The principle of making counter-measures possible, is, however, included in the contract. This, however, poses a considerable risk of delays, because this important point will play a long-term role in defining the political acceptance of the community. A compensation system, with regional or structural funds on the European model will probably be impossible for financial reasons.

In regional trade, at first, the national currencies will be used parallel to the clearing unit, the *East African Currency Unit*, precursor of a later common currency. In this respect, however, a real vision of how to implement it is still lacking. With regard to the factors of production, capital movements and the capital markets are to be freed from all restrictions. Migrants are all to be guaranteed freedom: they can travel to neighbouring states, take up residence there, work there. In a range of sectors, mutually agreed policies are to be pursued, including agriculture, industry, health, tourism, infrastructure. The member states are committed to an environmental policy designed to ensure the sustainable use of environmental resources. Common foreign and security policy is provided by an additional defence agreement.

This is not the place to go into the community agreement in more detail. The prospects for flourishing trade within the community are limited by a substitutive economic structure, without any great depth of production. Kenya's weight, however, means that an asymmetrical development can be expected. In addition, industry is under pressure from imports of foreign finished goods. Although EAC II has hardly any formal existence, neighbouring countries are pushing to get into the integration zone. Rwanda and Burundi are showing interest in membership. This could exacerbate the existing internal problems, as the three core member countries have huge debt problems.

With regard to **environmental policy**, the assembly is a weak institution, and it is to be doubted that it has the power needed to achieve implementation. The triangular structure also makes it difficult to push through a majority decision against the will of the third members, without the latter feeling marginalized. It should be emphasised, however, that the intentions of cooperation are not restricted to the economic level alone, as was the case in the previous community. This gives environmental policy a good chance.

3.5.3 Common Market for Eastern and Southern Africa (COMESA)

The *Common Market for Eastern and Southern Africa* was formally founded in 1994, replacing the *Preferential Trade Area for Eastern and Southern Africa (PTA)*. The PTA³⁴, founded in Lusaka in 1981, was a first step in a phased development strategy. As well as the abolition of tariff and non-tariff trade barriers, common rules of origin are to be defined, a harmonised customs system, and a common duties value system and harmonised customs procedures applied. In a second step, the PTA was then to be converted into a common market by the year 2000, referring to support for the *African Economic Community (ACP)*. This was founded in 1991 by 52 African states, and is the most comprehensive and most ambitious integration project in Africa. Although the common market has already been formally founded, its real implementation is far from having been achieved. So far, not even the criteria for a free trade zone have been established in the PTA.

The *Preferential Trade Area for Eastern and Southern Africa (PTA)* is an integration zone with a large and varied membership structure: Angola, Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Comoros, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, Somalia, Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe.

Because of the intention of forming a common market, the aims of PTA/TCOMESA include the introduction of a common external customs tariff, the development of regional infrastructure, and the promotion of inter-regional investments. A deepening of integration is to include mobility of factors and the harmonisation of technical standards and quality norms, harmonisation of value added and consumer taxes, harmonisation of company law, laws relating to intellectual property, investment law and company taxation. Eventually, monetary union with a common currency is to be achieved.

After a relative boom in 1980, intra-trade fell by half, from 12 % to approx. 6 %.

- **Environment**

In spite of the clear economic orientation, the text of the agreement refers, in the main areas of regional co-operation, to natural resources, energy, and the environment. The ecological system of the region is to be conserved for present and future generations, in order to counter deforestation, erosion, pollution of soil, water and air. The approach aims in particular at efficient management and preservation of resources of minerals, forests, maritime and *wildlife* resources, including protect of species and genetic variety. Alternative sources of energy are to promoted and used.

³⁴ The founding members were Ethiopia, Djibouti, Kenya, Comoros, Malawi, Mauritius, Zambia, Somalia, Uganda. The number of members later rose to 22 - see below.

3.5.4 Southern African Development Community (SADC)

3.5.4.1 Important aspects of integration

Political changes in South Africa lead to new constellations between the partly competing, partly complementary regional integration efforts. The most important integration today is the SADC. One of its main characteristics is a functional concept of integration. As well as expected trade effects, common infrastructure projects (railways, ports, roads) and communication projects are to be realised. The individual member countries assume sectoral responsibilities - e.g. Lesotho for the use of land, preservation of soil and water resources (environmental protection); Angola for energy development, including alternative sources of energy; Zimbabwe for natural resources and securing of food (Max/Peters-Berries, 1999).

The origins of the *Southern African Development Community* (SADC) go back as far as 1910 and the still functioning *South African Customs Union* (SACU). Members of SACU are Botswana, Lesotho, Namibia (1990), South Africa and Swaziland. Apart from Botswana, all these countries belong to the rand zone, with the Central Bank of South Africa as their common central bank. SACU will probably be incorporated into the SADC, although there are still problems of agreement and adaptation (see below).

The SADC was founded in 1992 in Windhoek, Namibia, by Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia, and Zimbabwe. These were later followed by the Seychelles, Mauritius, the Democratic Republic of Congo³⁵ and South Africa. The roots of the SADC go back to 1980 and the foundation of the *Southern African Development Coordination Conference* (SADCC), to which the ten founder-members of SADC also belonged. SADCC was founded in order to reduce economic dependency on South Africa, without a free trade zone or any other form of economic integration being planned. Apart from the front-line anti-apartheid states of Angola, Botswana, Mozambique, Tanzania, Zambia, and Zimbabwe, Lesotho, Malawi, Swaziland, and Namibia were also members. With the abolition of apartheid, SADCC was replaced in 1992 by SADC. Since South Africa became a member in 1994, the organisation has become much more *heterogeneous*, and has a very asymmetrical structure. On the other hand, the South African economy is an important driving force for regional integration, and has, at least at the regional level, gained considerably more political significance.

One of the decisive factors forcing the formation of the SADC was the "competing model", the *Preferential Trade Area for Eastern and Southern Africa* (PTA), which was reconstructed as the *Common Market for East and Southern Africa* (COMESA) (see section 3.5.3). Developments of recent years have led to a SADC gaining considerably more importance over COMESA (Dieter, 1997, p. 163).

The main aims of SADC are the promotion of economic growth and development, reduction of poverty, and increase in the standard of living of the people in the region by regional integration. The trade protocol concluded in 1996 foresaw the formation of a free trade zone by the year 2006. The promotion of inter-regional trade is in the foreground. In 1988 - before the founding of SADC - 95 % of all exports went to countries outside the SADC. This proportion today, statistically influenced by the entry of South Africa, has been significantly reduced, and intra-trade correspondingly increased. In spite of slow effects of trade, direct investments

³⁵ Congo has, however, so far not ratified any of the nine additional protocols (mines, energy, transport, environment, narcotics, etc).

in some of the countries have doubled since the founding of SADC, above all from the EU (80 %, especially from Germany and the UK), the USA, and Japan.

In spite of the wide differences between the member states, SADC is seen as a "pilot project" for development in Africa. If regional integration in South Africa does not succeed, then the vision of a *Pan-African Economic Community* will be postponed indefinitely.³⁶ Furthermore, the SADC is seen as an indicator for the economic development of the whole continent (Dieter, 1997, p. 7). Current observers (Marx/Peters-Berries, 1999, p. 54) emphasise sub-regional conflicts and personal tensions between leaders of state in South Africa and Zimbabwe, which split the SADC into two camps, and predict a slackening of the pace of integration. Only a few of the sectoral protocols have so far been ratified by a sufficient number of member countries. Some important protocols (e.g. finance and agriculture) are missing completely. It is clear that the enthusiasm of the administrative élites in the areas is much less than that of the presumptuous declarations of intent by the politicians. The most important protocol is the trade protocol, which foresees the creation of free trade zone eight years after its coming into force. So far, ratification is not in view, nor is there any agreement with regard to the type and scope of the rules for exceptions, which will be required for each country. This is made additionally difficult by the existence of SACU, the customs union within the SADC (see above) and by a large number of bilateral trade agreements between the member states.

The integration zone is characterised by a proportion of agricultural production, both in terms of the proportion of production and the use of land. Production structures in many countries, are, however, still characterised by subsistence farming. Many fields have been over-farmed and tend to desertification and erosion. There is also common land, which is traditionally over-grazed. Side by side with this, there are monocultural farms, whose main negative contributions to the environment are over-fertilisation and pollution of the ground water. As in many other places, many attempts to achieve improvements are hindered by the enormous pressure of population growth.

3.5.4.2 Environmental policy

The SADC is an example of the development of a regional environmental policy in the context of less formal co-operation, which is not aiming at deeper integration. As early as 1986, in the context of SADCC, the programme for agriculture and food security was supplemented by a natural resources component. This involved environmental aspects being explicitly recognised for the first time at the regional level. The member states developed a cross-sectoral development strategy for protection of nature, environmental monitoring, and sustainable management of natural resources. This strategy was designed to serve to co-ordinate and support national measures. A central weakness was seen in the need to mobilise external donors, which prevented several initiatives from getting off the ground.

In founding the SADC, environmental protection was explicitly included: environmental protection is integrated into the agreement as a basic principle: "(...) achieve sustainable utilisation of natural resources and effective protection of the environment." (Art. 5, Sect. 1g). The member states seek to harmonise their political and socio-economic policies and plans towards this aim, and in particular to push forward the institutional development of environmental protection. In connection with the specially emphasised areas of regional cooperation, environment is emphasised specifically (Art. 21, Sec. 3):

³⁶ In 1991, the African Economic Community was founded by 52 African states. It is intended to create a common market in six stages.

- food security, land and agriculture,
- infrastructure and services,
- industry, trade, investment and finance,
- human resources development, science and technology,
- **natural resources and the environment,**
- social welfare, information and culture, and
- politics, diplomacy, international relations, peace and security.

To co-ordinate and harmonise the national policies within SADC, in the context of the creation of the *Sectoral Committees of Ministers*, environmental protection was also institutionalised. For this purpose, the Commission for Environment and Land Management was founded in Lesotho. Further commissions with reference to the environment were set up in the sectors of transport and communication, energy, food, agriculture and resources, livestock management, and disease control. The environmental committee has so far initiated a number of projects "*intended to bring enlightenment, knowledge and alertness about the environmental conditions of SADC countries*" (web site: sadc.org, 1996). Special emphasis is placed in the remarks on environmental protection on "*sustainable management of natural resources*". It is also emphasised that economic development is a necessary precondition for sustainable development. To this end a direct relationship is required between those who manage, use, and profit from the resources.

The SADC is one of the few integration agreements to refer explicitly to sustainable use of ground resources. The *Environment and Land Management Section* (ELMS) is of special significance in this respect: "*The ELMS has an even bigger mandate with the increasingly competitive region waking up to the realities of the global market characterised by regionalism. The emergence of new industries will mean that a review of national legislation is conducted constantly.*" (SADC, Summit Brochure 1996). The ELMS was involved on the international level in the UN conference in Rio de Janeiro in 1992 in the drafting of Agenda 21 (UNCTAD 1996:77). A *newsletter* provides information on developments in aspects of regional environment.

SADC environmental projects are concerned, among other things, with compiling data, information, and knowledge, creation of teaching and research institutes in the member states, supporting the member states in strengthening and building up institutions, and in preparing *Environmental Impact Assessments* (EIA).

Explicit sanctions and enforcement rules for the implementation of environmental protection measures are not available. Article 33, section 1, however, provides the (theoretical) possibility of imposing sanctions on member states who implement policies which contradict the principles and aims of SADC. Local observers, however, see only a loose connection between integration and environment on the basis of the SADC agreement:³⁷

"Trade and environment are taking place independently of any interactions between the two. So that while SADC Ministers responsible for environmental matters are working towards region-wide accession to an compliance with MEAs, they are doing so without regard for the trade implications of for WTO obligations. Conversely, the Trade Ministers do not take cog-

³⁷ "Apart from the broad reference in Article 31:4(c) setting out the responsibilities of the Trade Negotiating Forum (inter alia to establish linkage between trade liberalisation as well as other areas of sectoral co-operation), there is no other reference to an institutional arrangement in which trade environmental matters may be treated." (...) "Thus far, that institution has not as yet addressed trade and environment issues in any concrete manner (Thomas, 1999).

nisance of events in the environmental sector. Pressure in SADC for synergy between these two sectors appears at present to be driven by the environmentalists" (Thomas, 1999).

3.6 Interregional agreements

3.6.1 EU - ACP agreement (Lomé Convention)

3.6.1.1 Important aspects of integration

The relationships between the European Union and the former colonies of its member states in Africa, the Caribbean, and the Pacific were regulated by the first Lomé Convention in 1975. The reasons for this from the point of view of the ACP states was the perceived need at that time for a new world economic order (Article 1 of the Convention), and from the EU point of view on the one hand the need to secure sources of raw materials, and on the other hand strategic-political considerations in the context of the cold war (ZEW 1996:43). In the face of the changed economic situation (collapse of the Eastern Block) and the continuing economic problems of the ACP states (among other things, the debt crisis of the 1980s) in 1989 the fourth and most comprehensive Lomé Convention between the EU and the 70³⁸ ACP states was signed, valid until 2000 (**Lomé IV**). It was replaced by a follow-on agreement valid for twenty years.

The overriding aim of the co-operation is the development of the ACP states. The concept of development is much broader in Lomé IV than it had been used hitherto, including for the first time the environment and human rights (ZEW 1996:44). Lomé IV regulates for the first time the methods and instruments of co-operation.

The Lomé Convention is an **interregional** trade preference agreement with **multilateral** character between extremely **different** partners: industrial countries on the one side, and developing countries on the other side, large and very small countries, rich and poor - a wide spectrum. The trade structures correspond to the heterogeneous structures of the co-operation partners. From the point of view of the EU, trade with the ACP countries is only of small significance, making up around 2 to 3 % of EU total trade, and has been decreasing for many years (it was still 6 % in 1980). In contrast, the market share of non-ACP developing countries in the EU has increased. From the point of view of the ACP countries, the EU is the most important trading partner. More than 40 % of all ACP exports go to the EU, with this proportion being even much more for some individual countries (70 % and more - source: EuroStat 1998).

In spite of the different significance of trade for the parties to the agreement, the trade balances are in a synchronised range. If crude oil products are taken out of the trade balances, however, there has been a clear imbalance of trade in favour of the EU since 1995. Imports into the EU from the ACP states are mainly agricultural produce and mineral products, which make up more than 62 % of all exports. Main exports from the EU states to the ACP states are machine and transport equipment, which alone make up more than 45 % of all export products. Further significant products are in the agriculture and chemical sectors (around 14 % each of all exports in 1996).

³⁸ Now 71.

The main instrument of the Lomé Convention for promoting the development of the ACP states is the *European Development Fund* (EDF) as a financial instrument, serving the further instruments listed below to achieve implementation. Essentially, the fund supports aid programmes in the context of development co-operation, which make up 55 % of the total financial means of the fund. From a trade policy point of view, in the context of the Lomé IV Convention, the following trade policy instruments for the promotion of the development of the ACP states are available (see ZEW 1996:44ff):

- **Preferential market access** for ACP states is the most important instrument of co-operation.³⁹ In principle, this enables free access to the market for goods from the ACP states, whereby regulations about origins have been made (Art. 16) in order to avoid trade diversion. The minimum processing quotas vary according to the product category. Special regulations have been made in separate protocols for bananas and sugar.
- For the ACP states, there is a **system of subsidies for balancing fluctuations in yields** for certain categories of products, in order to stabilise import revenues. The basis for granting these subsidies is the significance of the export incomes, or the proportion of export incomes of the total income of the ACP country. (For agricultural produce, the so-called STABEX system applied until 2000, and for mineral raw materials the SYSMIN.)
- A further instrument is financial support in the context of the **Structural Adaptation Programmes (SAP)**. The funds are made available in the form of Sectoral Import Programmes (SIP) and General Import Programmes (GIP) in order to reduce scarcity of foreign exchange.

The extremely heterogeneous structure of the ACP countries, with neither economic nor political approaches to homogeneity, has led to the consideration of whether the EU should not perhaps conclude free trade agreements with regional groups of countries (*Regional Economic Partnership Agreements*, **REPA**), rather than making agreements with the whole group.

After 25 years of co-operation, the conclusions to be drawn on the success of the co-operation are sobering. The proportion of ACP imports to EU imports has fallen drastically (from 6.7 % in 1976 to 3.8 % in 1996). This, however, corresponds to the falling share of the ACP countries in world trade, which, in the same period, fell by half from 3 % to 1.5 %. It seems that too many aims are connected to too many instruments. The 20 least developed countries listed in the UN Index of Human Development are all African ACP countries. A follow-up agreement will probably not be called Lomé. A new quality of co-operation will be presented with an optical difference. This will not only apply to the demanding "recipient mentality" which has grown up in many countries, but also to such aspects as "good governance", and the need to include environmental protection. Environmental policy conditions of co-operation should not be mis-interpreted as environmental imperialism, but as "contractuality": *mutual* obligation to keep to the terms of cooperation agreements.

³⁹ In each case, the WTO has to grant a waiver (usually for a period of ten years), since Article XXIV GATT in principle requires reciprocal preference regulations (free trade) for an integration zone. The USA and Canada make use of this instrument for their relationships with developing countries.

3.6.1.2 Environmental policy

In the context of the Lomé IV agreement of 1989, and the supplementary agreement of 1995, the area of **environment** or **environmental protection** was first explicitly and comprehensively included. Great importance is placed on environmental protection, and it is considered across the sectors.

Sustainable development and environmental protection are already established as an aim and principle in the *General Provisions of ACP-EC Cooperation*: „Support shall be provided in ACP-EC co-operation for the ACP States' efforts to achieve comprehensive self-reliant and self-sustained development based on their cultural and social values, their human capacities, their natural resources and their economic potential (...). Such development shall be based on a sustainable balance between its economic objectives, the rational management of the environment and the enhancement of natural and human resources“ (Art. 4).

An Extension Agreement of 1995 emphasizes the importance of environmental protection as follows: „The Contracting Parties recognize that priority must be given to environmental protection and the conservation of natural resources, which are essential conditions for sustainable and balanced development from both the economic and human viewpoints. They recognize the importance of promoting, in ACP States, an environment favourable to the development of the market economy and of the private sector“ (Art. 6, par. 2).

Protection of the environment is given equal importance to the promotion of trade (Art. 159): „Having regard to Article 158, the scope of regional co-operation shall include the following: (...) (d) preservation and improvement of the environment, especially through programmes to combat desertification, erosion, deforestation, coastal deterioration, the consequences of large scale marine pollution, including large accidental discharge of petroleum or other pollutants with a view to ensuring rational and ecologically balanced development“.

Environmental protection here is understood as a cross-sectoral **basic principle**, which is to be included in all important areas of cooperation „Cooperation shall entail mutual responsibility for preservation of the natural heritage. In particular, it shall attach special importance to environmental protection and the preservation and restoration of natural equilibria in the ACP States. Cooperation schemes in all areas shall therefore be designed to make the objectives of economic growth compatible with development that respects natural equilibria and brings about lasting results in the service of man“ (Art. 14).

Article 33 states the aims of co-operation in the field of the environment between ACP states and the EU: „In the framework of this Convention, the protection and the enhancement of the environment and natural resources, the halting of the deterioration of land and forests, the restoration of ecological balances, the preservation of natural resources and their rational exploitation are basic objectives that the ACP States concerned shall strive to achieve with Community support with a view to bringing an immediate improvement in the living conditions of their populations and to safeguarding those of future generations.“

Special importance is accorded to the following environmental areas:

- Conservation and protection of natural (renewable, and non-renewable) resources.
- Protection of eco-systems.
- Control of droughts, desertification, and deforestation.
- Protection and use of water resources.

- Conservation of tropical rain forests and biological diversity.
- Support of a better balance between rural and urban areas, and the urban environment.

Cooperation in the areas of environmental protection is defined more exactly in Article 35. From a methodological point of view, certain **principles** are formulated:

- „a preventive approach aimed at avoiding harmful effects on the environment as a result of any programme or operation“,
- “a systematic approach that will ensure ecological viability at all stages, from identification to implementation” and
- “a trans-sectoral approach that takes into account not only the direct but also the indirect consequences of the operations undertaken.”

Criteria, instruments, and their applications are defined more closely: “Cooperation instruments appropriate to environmental needs shall be designed and implemented. Where necessary, both qualitative and quantitative criteria may be used. Jointly approved check-lists shall be used to help estimate the environmental viability of proposed operations, whatever their scale. *Environmental impact assessment* will be carried out as appropriate in the case of large-scale projects and those posing a significant threat to the environment. (...) For the proper integration of environmental considerations, physical inventories, where possible translated into accounting terms, shall be drawn up. (...) The implementation of these instruments has to ensure that, should an adverse environmental impact be foreseen, the necessary corrective measures are formulated in the early stage of the preparation of the proposed project or programme so that it can go ahead in accordance with the planned timetable though improved in terms of environmental and natural resource protection” (Art. 37).

Special **regulations** with regard to trade in poisonous or radioactive wastes are set down in Article 39. Special importance is attached to control and international co-operation in this area, export bans from the EU for such substances, and corresponding import bans for the ACP states, monitoring of the implementation of the export and import bans on national and supra-national legal levels.

Article 41 deals with the exchange and agreement on the points of view of the co-operation partners using existing consultation mechanisms. Clear reference is made to the possibility of exchange of information and reaching of agreement ahead of international negotiations and fora: „If necessary, the consultations will also provide for an exchange of views prior to discussions conducted on these subjects in the appropriate international fora“ (Art.41).

As well as the mentioned direct references, environmental protection is also referred to **indirectly**, i.e. cross-sectorally. There are regulations in the fields of mines and energy, agriculture, food security, land development, fisheries, industrial development, production and production processes, tourism, and technology. In the areas of energy and mines, the following main aims are pursued with regard to environmental protection (see Art. 16):

- Reduction in dependency of a large number of ACP states on imports of crude oil products and development of new and sustainable sources of energy.
- Promotion of more efficient use of resources by involvement of energy-technology components in the various social and economic sectors, and thereby:
- Improvements in the standard of living and the environmental situation, together with preservation of biological resources, in particular wood as raw fuel materials.

From the point of view of environmental policy, the following main objectives are pursued in the development of ACP states' energy sectors:

- Use and development of domestic and regional energy sources in a suitable manner, from a technical, economic, and ecological point of view.
- Increased efficiency in energy production and use.
- Promotion of use of new and sustainable sources of energy.
- Protection of the natural environment and preservation of biological resources by improved technology (consumption) and the use of energy and energy resources in a rational and sustainable manner.

Cooperation in the areas of agriculture and land development is connected with the explicit objective of environmental protection and sustainable development: „Cooperation in the agricultural and rural sector, that is arable farming, livestock production, fisheries and forestry, shall be aimed, inter alia, at: continuously and systematically promoting viable and sustainable development based in particular on protection of the environment and the rational management of natural resources“ (Art. 42).

For a control of droughts and desertification the importance of the following issues is emphasized (Art. 54-56):

- „the extension of agroforestry systems combining farming and forestry, research and development activities to produce plant species that are more adapted to local conditions“,
- “the introduction of suitable techniques aimed at increasing and maintaining the productivity of agricultural land, arable land and natural pastureland with a view to controlling the various forms of erosion”,
- “the reclamation of land that has deteriorated, by means of reforestation or agricultural-land improvement ...”,
- “the encouragement of measures to economize on wood as an energy source by stepping up research into, application of and information on new and renewable sources of energy such as wind, solar and biomass energy, and by the use of improved stoves with a greater heat yield”,
- “the rational development and management of forestry resources by setting up at national or regional level, forestry management plans aimed at optimising the exploitation of forestry resources” and
- “the pursuit of ongoing campaigns to educate the people concerned to be aware of the phenomena of drought and desertification and to train them in the possible ways of controlling them”.

Also the promotion of the industrial sector in the ACP states in the context of the Lomé Convention makes clear reference to environmental aspects: „In order to facilitate the attainment of the industrial development objectives of the ACP States, it is important to ensure that an integrated and sustainable development strategy, which links activities in different sectors to each other, is evolved. Thus sectoral strategies for agricultural and rural development, manufacturing, mining, energy, infrastructure and services should be designed in such a way as to foster interlinkages within and between economic sectors with a view to maximizing local value added and creating, where possible, an effective capacity to export manufactured products, while ensuring the protection of the environment and natural resources. In pursuit of these objectives the Contracting Parties shall have recourse to the provisions on trade promotion for ACP products and private investments, in addition to the specific provisions on industrial cooperation“ (Art. 77).

A significant element of cooperation consists of financial support for the ACP states. Here too, among the main objectives, the promotion of sustained development is included: „The objectives of development finance cooperation shall be, through the provision of adequate financial resources and appropriate technical assistance, to...promote and mobilize resources in support of sustainable, effective and growth-oriented adjustment programmes“ (Art. 220 par. j).

Environmental protection is explicitly included as a field of action for projects and programmes in the ACP states (Art. 226 and 229), and beyond this in the context of project identification and preparation as a factor to be taken into consideration: „Project and programme appraisal shall take into account the specific characteristics and constraints of each ACP State as well as the following factors: ...cultural, social, gender and environmental aspects, both direct and indirect, and impact on the populations“ (Art. 287 par. 2 b).

Seen as a whole, the Lomé Convention reflects the environmental policy of the EU very clearly. Although the Lomé Convention, in terms of integration theory, is only a preference agreement, it contains, in comparison with other integration agreements, a clear, comprehensive and coherent environmental section. The implementation of environmental ideas of the EU in the ACP countries will depend especially upon whether the corresponding progress can be made on the level of cooperation. Many expectations in this area have, so far, remained unfulfilled.

3.6.2 Asia-Pacific Economic Co-operation (APEC)

3.6.2.1 Important aspects of Integration

APEC was founded in 1989, on the initiative of Australia, by 12 Pacific states.⁴⁰ Today, with 18 countries, it includes 40 % of world production and 54 % of the world's population.⁴¹ It is **multilateral** and very **heterogeneous** in its composition, including both industrial countries and NICs, as well as developing countries. The members today, alongside the ASEAN founder members (Indonesia, Malaysia, the Philippines, Singapore, Thailand), are Brunei, Australia, Chile (1994), China, Hong Kong, Taiwan (1991), Japan, Canada, Mexico, New Zealand, Papua New Guinea (1993), South Korea and the USA.

APEC sees itself not as an economic block, but more as an Asian-Pacific OECD. With regard to the range of its members, it is the geographically most widespread cooperation project. APEC is at present still a loose, informal forum at a low level of institutionalisation. In 1992, a secretariat was formed in Singapore.

Apart from the current "Asian crisis", the Asian-Pacific zone is the area in the world with the greatest rate of economic growth, with increasing shares in world trade, and increasing industrialisation. The western countries in this area, USA, Canada, Australia, and New Zealand, have not recently shown any comparable dynamism, but have benefited continuously from the development of the Asian NICs and developing countries. The share in world trade is currently around 34 %, in both imports and exports. Also the inter-regional flows of trade in the

⁴⁰ USA, Japan, Australia, New Zealand, South Korea, and the six ASEAN states of Brunei, Indonesia, Malaysia, Philippines, Singapore, and Thailand.

⁴¹ The six ASEAN countries, USA, Canada, Mexico, (NAFTA), Australia, New Zealand (CER), Japan, South Korea, Chile, China, Hong Kong, Papua New Guinea, Taipei.

APEC zone have grown more quickly than e.g. in the EU, whereby intra-exports make up about 58 % and intra-imports around 56 %.

Of particular significance here are the connections between the USA and Canada, and between Japan, Malaysia, and Thailand. Less significant are those between Australia, New Zealand, and the other ASEAN states. Increasing direct investment, above all from Japan and the USA, have caused a change in structures involving an especially strong increase in the manufacture of sophisticated industrial products. An intensified locational competition has also been noticed, since the APEC countries have considerable economic disparities, political contradictions, socio-cultural differences, and different levels of resources, all of which have so far stood in the way of any deeper integration. On the other hand, the level of economic interconnection already achieved is a driving motor for more intensive co-operation. A customs union and a political-economic union on the pattern of the EU is, however, not intended. The aim is much more "*open regionalism*", interested less in internal integration than in linking up to the world economy.

The official aim of APEC was originally to achieve a better exchange of information between the member countries and to provide a forum for general economic policy consultation. At its foundation, APEC was an "open economic association", characterised by openness, economic orientation, and freedom of choice in implementing any decisions, conditioned by the very different interests of the member states. APEC was seen by all members as a common representation of their interests to the EU in the GATT negotiations (Hilpert/Nehls, 1996). A basic principle of APEC is the compatibility of its decisions with GATT.

A basic aspect of APEC policy is the liberalisation and simplification of trade. In 1994, a catalogue of aims for the *Pacific American Free Trade Area (PAFTA)* was compiled. Above all, unilateral liberalisation of trade and investment in the APEC zone was intended. For the industrial countries, a barrier free trading zone is to be created by 2010, and for the developing countries by 2020. A free trade zone is to be implemented step by step. Open questions are, among others, whether most favoured nations status should also be granted to non-members, or whether only no higher external barriers should be erected. Implementation in the individual countries is co-ordinated and made comparable by permanent consultation. APEC is developing into a 'free trade zone of free trade zones' - ASEAN and NAFTA states are both members, with bilateral free trade agreements, and the *Australia - New Zealand Closer Economic Relations and Trade Agreement (ANZCERTA)*.

Many controversial questions have not been clarified by the APEC mechanism (agreement in the negotiations, but no national implementation), in spite of agreed basic principles for co-operation, and agreements on the implementation of trade liberalisation for certain areas. As with ASEAN, APEC is understood by the Asian states as a forum for discussion of controversial questions, and less as a supra-national institution, to which national authority is to be transferred. The institutionalisation of APEC has therefore only been pushed forward step by step. As a matter of principle, all agreements reached by the APEC supreme bodies are not binding. Implementation is carried out by national policy or national action plans, and can only be forced by *peer pressure*.

Regular meetings of ministers have taken place since 1994. At the first meeting of ministers, an *Environmental Vision Statement*, and the *Framework for Integrating Economy and Environment* were passed. In 1995, the *Senior Officials* instructed all work groups and committees to include the environment in their work and in their annual reports.

Work groups with reference to the environment were formed on the following subjects: energy, sustainable development (APEC Information and Training Network), tourism, *Human Resource Development*, protection of the seas, industry, and technology.

In 1990, a sub-forum, the *East Asian Economic Caucus (EAEC)*⁴² was founded, which included the original ASEAN countries, China, Japan, and the South East Asian NICs. The founding of this forum for discussions, in which the three economic powers ASEAN, China, and Japan were equal partners was a positive economic policy development. There are hardly any reports on the activities of EAEC.

3.6.2.2 Environmental policy

Since APEC was founded in 1989, environmental aspects have been a part of the agenda, primarily in support of national policies in the areas of energy, fisheries, production technology, and pollution of the seas. Since 1993, environmental protection has also been integrated into the dialogue on sustainable development. The APEC environmental ministers passed a declaration in 1994 on environmental questions and principles of economy and the environment. The most important element in this declaration is that environmental protection is to be included in the work of all other work groups and committees (APEC Environmental Ministers 1994:1).

APEC is committed to sustainable development. Environmental and development objectives are negotiated parallel to free trade. The advantages of the "*Parallel Track*" are that a consensus on environmental policy can be found without pressure from the trade and investment agenda. A negative effect is that no framework can be created to deal with the possible negative effects on the environment of trade and investment liberalisation - e.g. in the primary sector (Zarsky, 1998:149 ff). In the face of their great economic, political and environmental diversity, it is not surprising that the individual parties to the treaty assign differing degrees of priority to environmental matters. The decision making process within the group of states shows similar problems to the 1992 Rio Conference, and has not led to any substantial results so far (Hunter, 1997a:7). Most approaches and environmental standards are voluntary: the environmental concept is a "*soft*" aspect. The conflicting relationships between trade and environment, which are even dealt with by the WTO, have been taken out of the APEC negotiations. China's President sketched out the APEC approach very aptly on the occasion of the 4th summit meeting: „Acknowledging diversity; stressing flexibility, gradualness, and openness; following the principle of mutual respect, equality and mutual benefit; reaching a consensus through consultation, initiative and voluntary participation; and combining individual actions with collective actions“ (Yumin 1999).

The "*Parallel Track*" is also a non-binding agreement, consensus oriented, and not institutionally or legalistically oriented (Zarsky, 1998:134). The participation of civil society is not guaranteed by the environmental agenda; there is no formal procedure for the involvement of such stake-holders as NGOs or the private sector in APEC negotiations, or in the foreign policies of the countries involved.

The environmental and development agenda **Eco-Tech** of APEC has, in contrast to trade liberalisation, not yet been successful. It relates above all to economic and technical co-operation in the region. The aims of the Eco-Tech agenda are sustainable growth in the region and fair

⁴² Known until 1993 as the *East Asian Economic Group*, integrated into APEC in 1993.

development, reduction of economic disparity between the APEC economies, improvement of the economic and social situation of the people, building up a community in the Asian-Pacific area in a spirit of openness.

The Eco-Tech agenda has, however, so far produced very few tangible results. It has been marred by lack of leadership, short-term and unrealistic ideas, too broad and financially insecure plans, and little political support (Zarsky, 1997: 6 ff.; Hunter, 1997a:7 ff.). The activities of APEC with regard to the environment are often only weakly linked to the national policies and the political interests of the member states. Because of lack of interest on the part of the member states and the inclusion of the environment in the APEC agenda, the activities of APEC in this respect remain limited and dominated by the strongest member states (Zarsky 1998: 145 ff).

The very broad Eco-Tech agenda includes above all the creation of regional standards, especially for environmentally friendly production and waste management, the implementation of which is left to the member states, and varies accordingly. The APEC regime is therefore not multilaterally oriented (Hunter, 1997:5 ff.) and looks especially to the poorer countries of the region. Environmental activities are only a part of the total work of the above mentioned work groups. In the field of energy, for example, the development of common energy efficiency standards is oriented more towards economic than environmental aims. The committees, and the work groups on trade liberalisation with environmental relevance, such as agriculture, forestry, and fishery, have not yet achieved any substantial results with regard to the incorporation of environmental aspects into their work, and checking environmental effects of foreseen sectoral trade liberalisation.

Within the EcoTech agenda about 300 mostly short-term projects were developed (Hunter, 1997a: 3 ff.). The main point of environmental policy activities are the approx. 40 *capacity building* projects, consisting of seminars and workshops. The exchange of information forms a main part of these projects. On the initiative of Japan, the *3-E programme* was passed in 1995: *Environment, Ecology, Energy*. Japan finances a development fund for APEC projects and set up the *APEC Energy Resource Centre (APEREC)* in Tokyo. In 1995, cross-sectoral subjects were combined in the "*FEEP Initiative*" - *Food, Energy, Environment, Economic Growth, and Population*. This initiative has not brought any substantive results to date.

In 1996, a *Regional Action Programme* was decided upon at the meeting of the ministers. The main point was the strategic action plan for the transfer of *cleaner technology*, protection of the seas, and the promotion of *sustainable cities* with regard to economic, ecological, and social sustainability. The USA would prefer the transfer of environmental technology on commercial principles, with the help of *public-private partnerships*, and not by means of development co-operation, e.g. in technical or financial matters. The strategic action plan for the protection of the seas includes integrated coastal management, reduction of pollution of the seas, and sustainable use of maritime resources by exchange of information, technology transfers, training, and public-private partnerships. The action plans, however, provide more exchange of information than any substantial improvement of the environment (Dua/Esty, 1997: 142 ff.).

3.6.3 Mediterranean Free Trade Zone (MFTZ)

3.6.3.1 Important aspects of integration

The planned Mediterranean Free Trade Zone (MFTZ) has two levels:

- a free trade zone of Mediterranean states
- a free trade zone between the EU and Mediterranean states.

(a) Regional free trade

The 12 Mediterranean states outside the EU plan a mutual free trade zone: Algeria, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Palestine, Syria, Tunisia, Turkey, and Cyprus.

At present, this only has prospects for the future. The countries in the group are very different with regard to their size, GDP, economic structure, incomes, financial power, and development cycles. In most of these countries, there are still restrictions on the movement of capital (especially in Syria, Algeria, and Morocco). Only a few (including Israel, Jordan, Lebanon) have liberalised movements of capital.⁴³ The trade relationships *between* the Mediterranean countries in the sense of "intra-trade" are at present not very important, and are also asymmetrical. This is because of their heterogeneous nature. Trade liberalisation restricted to the Mediterranean countries would therefore not have a very significant effect on development, since all of these countries, except Israel, have not developed specialisations out of which comparative advantages could develop. The economic structures are primarily agricultural (e.g. 50 % in Turkey, 40 % in Morocco, as opposed to 10 % in France).

(b) Inter-regional free trade zone

The Euro-Mediterranean Partnership (EUMP) could become a moving force, based on the so-called Barcelona declaration of 1995, which proclaimed cooperation between the EU and the Mediterranean countries.

The EU has concluded multiple bi-lateral cooperation agreements with the Maghreb and Mashrek, and the other Mediterranean countries, which are designed to promote economic development and the connection to the EU market. This aim has only been achieved to a limited extent. The customs preferences currently granted extend almost exclusively to industrial goods. The agricultural sector is largely excluded. The regulations on rules of origin have also been a problem so far. Customs preference could only be granted for goods originating in a preferred country. The EU preference system contains several contradictions, which cannot be gone into in more detail here. This previous system is to be replaced by association agreements. The EU concluded a customs union with Turkey in 1995, in 1998 with Cyprus. The foreseen customs union with Malta could not so far be realised because of failure to meet requirements on the Maltese side.

An inter-regional Euro-Med free trade zone has a very heterogeneous structure for two reasons: Firstly, it includes two very different groups of states: the EU states on the one hand, and the Mediterranean countries on the other hand. Secondly, the internal structure of the Mediterranean countries is heterogeneous. Consisting of (so far) 27 countries, the group is also very large in this respect by international comparison. On the other hand, the Mediterra-

⁴³ See the overview by Nienhaus, Volker: Entwicklung und Entwicklungsprobleme in Ländern des südlichen Mittelmeerraums, in: Aus Politik und Zeitgeschichte, B 17/99, 20-28.

nean countries are very similar in terms of their problem structures, the scarcity of available means, and their high levels of debt. It therefore seems to make sense to look for common solutions to common problems in the framework of regional co-operation.

The Mediterranean partners have had only limited significance in terms of trade with the EU: a little over 5 % of imports and nearly 7 % of exports. In comparison to other trade partners, this is not much. Seen from the other side, the EU is an important trading partner for some Mediterranean countries. Turkey, Israel, Algeria (for oil products), Egypt, Morocco, and Tunisia have the strongest trade relations to the EU. The EU's share of the total imports of Mediterranean countries is some 40 % (slightly more in individual countries). Export quotas, depending on the category of goods, are between 10 and 78 % (EuroStat 1998). The EU takes 75 % of the crude oil and 87 % of natural gas exports from the Med. Group of countries. The EU has become considerably more important for Morocco, Tunisia, and Turkey. It has become much less important for Syria.

For most of these countries, the EU is also the most important sales market. Export quotas are 48 % to 78 %. Jordan, Lebanon, and Cyprus (12 %, 23 %, 27 %, respectively) are much lower. A free trade zone with the EU for the Med. Countries would, considering the current preferences, be an advantage, above all if it included agricultural products, which at present are excluded. Since, on the other hand, EU agricultural policy will probably have been reformed by 2010, this side condition is not unrealistic. However, considerable resistance can be expected from the presently heavily protected agricultural sectors of the southern EU countries, as destabilisation of the agricultural sector will be feared. Liberalisation of trade in agricultural produce would mean trade advantages for the Mediterranean countries, which, however, would be very questionable from an environmental point of view.

With the exceptions of Israel, Egypt, Morocco, and Tunisia, there is only a low level of foreign **direct investment** in the 12 Mediterranean countries. The location is not very attractive. A total of just 2 % of all EU direct investments go to the Mediterranean.

For some Mediterranean countries, a free trade area with the EU would mean considerable loss of revenues from import duties. In Lebanon approximately 30 % of state revenue comes from customs duties. This figure is 16 % for Tunisia, 12 % for Jordan, 10 % for Morocco, 8 % for Egypt, 7 % for Syria. These revenues would, of course, not be lost completely, since imports from other countries are also subject to import duties, but they would be reduced by the amount currently attributable to EU and intra-trade. These effects would have to be made up for by suitable reforms in taxation.

In addition, because of global liberalisation in the framework of WTO/GATT, the trade creation effects resulting from a Euro-Med free trade zone would be partly compensated for by competition from other, more competitive developing and newly industrialised countries, particularly in Asia and the Pacific.

The bi-lateral EU-Mediterranean preferences would have to be supplemented by mutual preferences between countries of the South and Eastern Mediterranean, as sketched out above in (1), in order to really create a free trade zone. At present there does not seem to be any dynamic development in this respect. Developments in North-South relations are clearly in the foreground. Most of the concrete agreements must be concluded bilaterally, since especially the Arabian area shows little sign of cohesion. A mutual approach is being made only by the two Maghreb states. Expectations should therefore not be placed too high.

3.6.3.2 Environmental policy

In section 4.2 a **case study** goes into more detail of the environmental policy dimension of MFTZ.

3.6.4 Free Trade Area of the Americas (FTAA)

In 1994, the USA proposed a *Free Trade Area of the Americas* (FTAA) (also *Western Hemisphere Free Trade Association*, WHFTA), planned to encompass the whole American continent by 2005. Various work groups were established, including on market entry, technical barriers, anti-dumping procedures, compensation duties, public procurement, investments, services, and competition. A summit meeting of the heads of state of the countries involved took place in Chile in 1998. While the USA was in favour of negotiations on a national level, the Mercosur states preferred negotiations between the existing integration zones. As the US had not approved the so-called "*Fast-Track Authority*", the negotiating process was delayed. *Fast-Track Authority* means empowerment of the US President to negotiate trade agreements and present them to Congress for approval, without Congress having the power to change the text. Only a general approval, or general rejection would be possible (Roett 1999:15,22).

Mercosur proposed a three stage negotiation process. In the first stage, trade liberalisation measures are to be implemented, in the second stage the necessary harmonisation, in the third stage conditions for market entry are to be negotiated. The USA, on the other hand, sees market entry as the first priority and favours sectoral agreements, e.g. for electrical goods. Mercosur, on the other hand, wants to see the negotiation as a "*single undertaking*", making it necessary to reach consensus on all detailed questions. An FTAA would bring with it asymmetrical political and economic power structures of a much higher order than are currently present in Mercosur. In the case of the Latin American countries, there is therefore a high degree of scepticism about what benefit they would gain from the integration agreement, which would bring above all considerable benefits to the USA.

Environmental protection, in the sense of the aim to "*guarantee sustainable development and conserve the environment for future generations*" (Tussie/Vásquez, 1998:244) was one of the main topics at the summit meeting in 1994. This commitment to environmental protection, however, did not get much further than the drafting of an action plan with three levels: co-operation for sustainable energy consumption; partnership for bio-diversity; partnership for preventive environmental protection. Consideration of international environmental agreements was established.

At the following summit meetings, eleven work groups were formed, of which not one was responsible for environmental protection. In 1996, the USA suggested environmental protection again as a standard subject for FTAA. Mercosur, and most of the other states feared, however, that this was just a convenient disguise for non-tariff trade barriers, and refused to approve the proposal that environmental protection should be negotiated in *parallel track* to trade. It was finally decided to treat environmental protection completely on its own, without any reference to trade.

3.6.5 MERCOSUR-EU

In 1995, a general agreement was concluded in Madrid, and technical preparations for co-operation were begun. The EU insisted on formal recognition of Mercosur in the sense of international law, without, however, the existence of internal supra-national law. The high point of co-operation negotiations so far was the summit meeting in Rio de Janeiro in June 1999. No progress beyond collecting important and conflicting aspects has yet been made. No date has been set for real liberalisation of trade between the two blocks. This is likely to be difficult because trade liberalisation from the point of view of Mercosur should also include trade in agricultural produce, which is not attractive for the EU. It is also probable that the negotiations with the EU will give Mercosur a stronger position in negotiations with its NAFTA partners.

At present, approximately half the EU's exports to Latin America go to Mercosur countries. At the same time, however, Western Europe has lost market shares in North America and in South East Asia. In June 1999, there was a summit meeting between the heads of state and government of the EU, Latin America, and the Caribbean in Rio de Janeiro, in the context of which free trade cooperation agreements between the EU and Mercosur were continued. European business is urgently interested in an extension of trade relations in order not to lose the race with the free trade negotiations being carried out parallel between Mercosur and USA/NAFTA.

3.6.6 Valdivia Group

The Valdivia Group is the name chosen by the *Group of Temperate Southern Hemisphere Countries on Environment* (Dodds, 1998). Its approach to cooperation on environmental policy contains elements similar to those of MFTZ, but which sometimes go considerably further. The heterogeneous group of countries (Argentina, Australia, Brazil, Chile, New Zealand, South Africa, Uruguay) was formed in 1995 on the initiative of Australia in Valdivia (Chile). It is primarily concerned with regional environmental problems which, at the same time, have global significance (climate change, bio-diversity, forests, ozone layer, desertification, dangerous precipitation), and therefore creates a link between multinational and bi-regional approaches to environment-related cooperation. Although trade policy questions play a secondary role, the agreement on environmental policy evaluation of all activities in the region also has a cross-sectional function. Australia in particular emphasises the common environmental policy, general economic, and trade policy interests.

3.6.7 Perspectives

Inter-regional alliances are becoming more popular. They arise not only out of economic, but even more so out of geo-political considerations. Their special problem is multiple memberships, which can result in conflicting constellations. If, for example, the EU makes agreements with Mercosur about environmental standards, and Mercosur makes similar agreements with NAFTA, then the EU standards would have to be compatible with the NAFTA standards. If at the same time the EU makes agreements with the Mediterranean states, and NAFTA with APEC, then the result is a very difficult over-all structure. For this reason, the increase in inter-regional agreements is on the one hand an opportunity to create a global basis for environmental protection, but could, on the other hand, easily result in blockades.

The environmental perspective will probably not have a very high level of significance. It would be possible, by bi-regional, or even pluri-regional free trade agreements, to connect the regional 'island solutions', and thus to globalise the regional environmental protection measures. However, bi-regional cooperation efforts so far have been clearly dominated by global interests.

Bi-regional agreements are said to be an invention of the EU (Grabendorff, 1999:95). In the global context, they are rather **strategic alliances**, and are understood as such by both sides. From the point of view of the EU, there is a clear interest in forming a counter-weight to the FTAA, the outlines of which are more recognizable than that of a possible EU-Mercosur free trade zone. From the point of view of Mercosur, the aim is to achieve a balanced position between America and Europe. The aim is to stake world trade policy claims, as the president of the German Association of Chambers of Commerce and Industry, Diehl, commented.

4. Case studies on the environmental effects of regional integration

4.1 North American Free Trade Association (NAFTA)

4.1.1 Overview ⁴⁴

The following case study examines the question of how successfully ecological aspects have been implemented in the context of NAFTA⁴⁵ and the North American Agreement on Environmental Cooperation (NAAEC). The object was to establish whether in the process of regional integration of three economically very different countries, environmental laws and standards have been equally observed by each country. This is to ensure that no country suffers disadvantages by consistently implementing environmental laws.

NAFTA is the first regional economic agreement in which institutions and instruments were created in order to counter the environmental conflicts caused by trade liberalisation and the over-use of resources, and to monitor the enforcement of environmental law. Environmental problems in NAFTA cross borders and need binational or trinational solutions. The subsidiary agreements made in NAFTA on environmental protection and its institutions, and its instruments are exemplary for binational or trinational co-operation.

At the beginning, the border situation between the USA and Mexico is analysed, with its environmental hot spots. This region was already a small scale free trade zone before NAFTA. The environmental policy will be examined before and after the coming into force of NAFTA and the instruments and institutions of the subsidiary agreements. Special attention is paid to the *Commission on Environmental Cooperation* (CEC). This watches over compliance with trade-related environmental laws in Canada, Mexico, and the USA, and is intended to bring about harmonisation of environmental standards in the free trade zone. Finally, there is an assessment of how far the solution mechanisms, instruments, and institutions sketched out here can be the basis for future agreements.

4.1.2 Reasons for supplementary agreements to NAFTA

The North American Free Trade Agreement between Canada, the USA, and Mexico, and the two trinational supplementary agreements on protection of the environment and protection of labour, came into force on 1st January 1994 after three years of negotiations. When the Mexican President Salinas de Gortari initiated the negotiations towards a free trade zone between Mexico and the USA in June 1990, he could not have known what kind of resistance the agreement would meet with, especially in the USA: The decisive hurdle for the negotiations had to be taken by President George Bush in the form of the vote on the *Fast-Track* Procedure by the US Congress. Congress was being asked to approve a procedure which prescribed an exact schedule for the negotiations. Congress would have only 90 days' time after the President had signed to register any wishes to change the agreement. After this, Congress would only be able to accept or reject the agreement as a whole.

⁴⁴ An economic sketch of NAFTA is given in section 3.2.

⁴⁵ The Free Trade **AREA** is referred to below, and not the Free Trade **Agreement**.

In the run-up to the negotiations, a coalition of environmental organisations, churches, unions, and consumer organisations had drawn attention to the difficult ecological and health policy situation along the 3,500 km border between the USA and Mexico. The environmental effects of the *Maquiladora* industries were brought into the campaign by the USA environmental campaigning organisations against NAFTA as an example of the damage NAFTA could do to the environment. The low level of social and environmental standards in the out-sourced industries raised fears that the free trade zone would mean that social and environmental standards in the USA would not be sustainable. The environmental regulations which were then adopted by NAFTA, or which were adopted by Mexico and the USA in association with NAFTA, largely relate back to the environmental problems arising out of the *Maquiladora* industries.

Thus it came about that, of all people, the Members of Congress for the US states bordering Mexico demanded a national environmental impact assessment report from President George Bush. The *Review of US-Mexico Environmental Issues*, published in February 1992, was a bilateral environmental plan for the US-Mexican border region, containing some critical points from environmental protectionists. After the change of office, President Clinton's administration emphasised that NAFTA would only be supported if steps were taken to protect working conditions and the environment. These, however, were then not included in the final text of the agreement, but parallel to it in two supplementary agreements. In concluding NAFTA, a *parallel track* procedure was chosen, not the *single track* procedure which the environmental organisations had demanded.

4.1.3 Free trade and industrial development in the border region between the USA and Mexico

Industrial development in the free trade zone in the north of Mexico, the *Maquiladora* model brought in considerable environmental strain. The *Export Processing Zone* was concentrated on the six northern states of Mexico (Baja California, Sonora, Chihuahua, Coahuila, Nuevo Leon, and Tamaulipas). *Maquiladora* is the name for the production industry in the north of Mexico, founded on the initiative of US manufacturers and Mexican land owners. It is legally founded in the *Programa Nacional Fronterizo* of 1965.⁴⁶ Accordingly, US companies could take their semi-finished products and raw materials into Mexico free from customs duties in order to have them processed there. On the final products - above all textiles, electrical devices, chemical products, plastic and rubber products, electronic products, such as televisions and radios - when re-imported into the USA, customs duties were due only on the parts to which value had been added by processing in Mexico. The components which had been

⁴⁶ In the 1960s, Mexican land owners tried to change the use of their land from growing cotton to industrial parks. In response to this, the USA and Mexico decided to create an official context for these individual initiatives. In 1963, the US government added the *US Tariff Code* Section 807. This decreed that all US products which would be used for further manufacturing processes outside the USA would be allowed to re-import the resulting products, whereby only the value added to the products would be taxed.

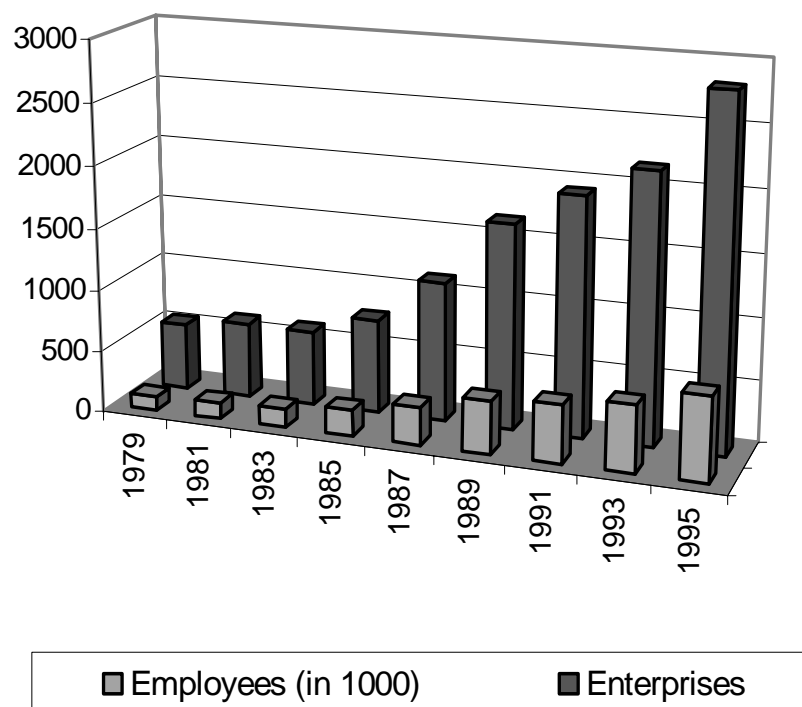
After the US Congress, under pressure from trades unions, dropped the *Bracero* program with Mexico in 1964, which, among other things, allowed Mexican seasonal workers to come to the US at harvest time, the aim was to avoid mass unemployment and large scale immigration in the border areas. The Johnson administration therefore initiated the *Maquiladora* programme and created an Export Processing Zone along the Mexican border. The programme was not a success from the beginning. It was made use of at first almost exclusively by the textile industry. The electronics industry followed in the 1970s. Ironically, it was not so much those who had become unemployed with the end of the *Bracero* programme (i.e. male workers) who profited, but much more new entrants to the job market; up to 90 % of the workers in the *Maquilas* were women.

taken from the USA to Mexico and were now being re-imported were duty free.⁴⁷ This arrangement also applied to beyond the formerly narrowly defined free-trade corridor, which extended up to 200 km south into the interior of Mexico. The Maquiladora industry exports almost exclusively to the US market. Preferences for the Maquiladora industry will end with NAFTA in 2001.

The conclusion of the NAFTA agreement secured the results of the "factual integration" brought about by the processing industry over more than 30 years. This Export Processing Zone played an important part in the Mexican economy from 1965 until the conclusion of NAFTA. Mexico came out of the credit crisis of the 1980s as the second biggest debtor in Latin America. In 1980, Mexico had a foreign debt of 57,000 million US dollars (IADB1987) and was battling against rising inflation and growing unemployment. Loans from the World Bank had rescued the country from falling more deeply into crisis. These loans came with conditions on structural adaptation measures for opening borders, reduction of customs duties and a strict *austerity policy* with regard to social spending. Thus, while in the 1980s Mexican industry as a whole was in recession, the Maquiladora industries enjoyed 12 % p.a. growth rates and provided the biggest source of job creation in Mexico. Approximately 75 % of all new jobs were in the Maquiladora, which is now seen as the most prosperous sector of Mexican industry, and the second biggest earner of foreign exchange after the oil industry. In 1995, the Maquiladora had 680,000 employees in 2,800 enterprises, making up about 20 % of all jobs in Mexico (Steinbach, 1996) (figure 4/1). The average size of the enterprises was 250 employees (Burkhard, 1992).

⁴⁷ Active further processing from the point of view of Mexico, passive further processing from the point of view of the USA. Re-import in connection with passive further processing is common and duty free in many countries

Fig. 4/1: Number of enterprises and employees in Mexican Maquiladora Industry



Source: INEGI, Estadísticas de La Industria Maquiladora de Exportación 1975-1984. CIEMEX-WEFA, Maquiladora Industry Analysis, Vol. 2 No. 2, Philadelphia, 1994, cited in Echeverri-Carroll (1995), INEGI cited in La Jornada, 3.11.1995

The majority of Mexican enterprises are suppliers for US enterprises, meaning that about 90 % are controlled by US enterprises (Echeverri-Carroll, 1995:161). Many well-known multinational enterprises, such as General Motors, Ford, Panasonic, Maxwelll, Johnson and Johnson, own shares in *Maquiladora* enterprises, which are 100 % incorporated under the laws of Mexico. Approx. 98 % of output is bound for the USA (BID, 1993; 160). The majority of investments (68 %) are made by enterprises in the USA, 25 % by Mexican enterprises, 4 % by Japanese, 2 % by European, and 1 % enterprises from other countries (BID 1993:160). The *Maquiladora* Industry includes nearly all sectors, the three most important being the automotive, textile, electrical, and electronic industries.

NAFTA is viewed by the US government as a kind of insurance policy against withdrawing market and private business reforms and the opening up policy by Mexico. In return, the Mexican government expects from NAFTA a considerable increase in foreign direct investments. These have been noted particularly in the *Maquiladora* industries. In the 1980s, the USA was not only the largest customer for Mexican goods, it had also become the most important investor in Mexico. Whereas at the beginning of the 1980s the largest part of loans going to Mexico came from US banks, this changed with Mexico's entry into GATT in 1986, and the new investment regulations. In 1989, 2.8 thousand million dollars worth of foreign direct investments came in to Mexico, 1.8 thousand million of which came from the USA (GAO-GGD-92-131, 68/70).

The advantages for the USA in creating a free trade zone can be summarised as follows:

- The greatest attraction is the low labour costs for US industry (intensified by the devaluations of the peso in 1982 and 1995).
- Qualified work force (employees in the Maquiladora have three to four years' more schooling than the Mexican average (Burkhard, 1992).
- Production very near to the US market, and a strategic "springboard" for Latin America.
- Cost-effective production procedures (the location on the border allows just-in-time production, low transport and communications costs, and good cross border control).
- Low investment costs.
- Low operating costs because of low costs for services and energy.
- Less strict application of Mexican environmental laws - e.g. for various investment projects in Mexico, no EIA was carried out, even though Art. 1114 prescribes this for investments (Duncan, 1997:147). This is often especially neglected for the Maquiladora, even though the low environmental costs are a much less important criteria for deciding on locating in Mexico than the low labour costs.
- Secure political environment (since the structural adaptation programs of the 1980s and the political change of course of the government of Salinas de Gortari, 1988-1994).
- Tax incentives for enterprises within 200 km south of the border
- Unrestricted repatriation of profits and invested capital.

4.1.4 Ecological situation along the US- Mexican border before NAFTA

Two aspects aroused the interest of a broad coalition of environmental protectionists, trades unionists, and church organisations:

- The decision of a GATT arbitration panel on the tuna-dolphin fish trap case because of complaint by Mexico.
- A series of environmental conflicts along the 3,500 kilometre long US-Mexican border.

The environmental protectionists were particularly worried about the GATT arbitration ruling in August 1991, which declared the US import ban on Mexican tuna fish to be in contravention of GATT (Möller, 1995). Environmental protectionists, who regarded trade sanctions as an effective measure for the protection of *common goods* and the environment outside the jurisdiction of a country, called for an explicit allowance of import bans from the NAFTA negotiators. This, they hoped, would protect the industries of a country with higher environmental standards against those who produced under less strict conditions. They also pursued the objective of using this method to provide an incentive for changes in environmentally damaging production methods in other countries.

Whereas the arbitration ruling of the GATT panel did influence certain points in the NAFTA programme, the direct effects of free trade and industrialisation of the environment along the US-Mexican border have had a lasting effect. The American Medical Association (*Public Citizen* 1996:2) described the border region as a "breeding ground for infectious diseases", because the effluent from industry and private households with considerable concentrations of damaging substances was deposited untreated into border rivers. The notorious breaches of Mexican environmental laws, failure to observe standards for health and safety at work and the negative health policy effects had made the headlines in the USA. Several cases of anencephalie (a malformation of the brain leading to early death) in new-born babies in Brownsville (Texas) was connected with lax standards and use of toxic substances in the *Ma-*

quiladoras (San Antonio Light 6.7.1992). The "not-in-my-backyard"-syndrome (Esty/Geradin, 1998) in the USA, where certain products and production processes are in demand and controlled strictly, but nobody wants to bear the price, led to an increase in illegal activities in Mexico, where environmental laws tend to be less strictly enforced. The illegal exports of toxic waste to Mexico, or environmentally polluting activities, such as the recycling in Mexico of car batteries from the USA are symptoms of this.

Because of the shift of the industrial centre of the USA to the south, there has also been a sharp increase in population on the US side of the border, although less than on the Mexican side. About half of the population are distributed between the big twin metropolises of San Diego/Tijuana and El Paso/Juarez. It is a phenomenon of the border area that each Mexican town has a twin town on the other side of the border. The numbers for the real density of population vary greatly and depend very much on whether migrants are counted or not. Gilbreath/Tonra (1992:22) track the rapid demographic growth: the population along the Mexican border in the 1970s was 4.36 million, in 1980 already 6.49 million. According to EPA (1997:9), the population had grown by 25 % in the last five years and is expected to double in the next 20 years. The reason for this development is that many people from the poor rural areas of Mexico, and from the whole of Latin America are seeking work in the border region. Many of these are migrants without a firm destination, who at first want to work at the interface between North and South as seasonal workers, but then mostly stay.

Since the 1950s, the Mexican government has invested in the regional infrastructure, especially in building highways, the energy sector, and communications systems. It has, however, invested hardly anything in environmental infrastructure. The number of mostly large and unplanned slums on the edge of Mexican towns (*colonias*) has increased sharply. Most of the new illegal settlements can be supplied with electricity and drinking water from street supplies. Drainage facilities, however, are either never built, or started much later. There is usually no organised waste disposal. Lack of planning means that industrial and residential areas are mixed, which means that the population are exposed to industrial pollution. 21 administrative areas have therefore been designated as economic crisis areas, and ten of the poorest administrative areas are in the border region (EPA 1997:9).

The **main problems** in the border regions are:

- Supply of drinking water and the treatment of effluent is particularly critical. The border rivers are heavily polluted by untreated effluent. All US twin metropolises fulfil the basic requirements for treatment of water and effluent. This, however, does not apply for the slums, where 400,000 people live. Most of the households in Mexico (69 %) are connected to the drainage/sewage system, but only 34 % of effluent is treated in any way at all (Clinton Administration 1997, p. 124 f.). For this reason, more and more people resort to ground water and wells for agricultural water supply. Planning of new capacity lags behind real need. In the industrial metropolises a critical shortage of water is predicted for the next five years.
- Cross-border air pollution is caused by industry, road vehicles, households and human settlement. Some border towns in the USA are so-called "Non-Attainment Areas", which must reach the EPA standards by 2005. About half of the population in the border area is affected (Clinton Administration 1997, p. 124 f.). Road traffic is responsible for the greatest part of air pollution. Supplies to the Maquiladora industries are made by road, for lack of other means. Road traffic has increased greatly since the conclusion of NAFTA and the boom of the Maquiladoras. Most of the vehicles used in Mexico are relatively old, and without catalytic converters. Lead-free petrol has only been available since 1993. This means that the air is heavily polluted with soot particles, sulphur oxides, and carbon mon-

oxide. Air pollution by dust particles, produced by erosion in the desert-like areas, is high. Because of the un-surfaced roadways and the complete lack of green areas, dust storms occur. This is exacerbated by the pollution of the air with particles from the burning of waste and open waste dumps in human settlements. A large part of the households in the illegal settlements use corrugated cardboard or wood as fuel, so that the air is polluted by these additional emissions. In all larger border towns, regulations for the preservation of the air (against ozone and carbon dioxide) are breached.

- Serious breaches occur in the disposal of hazardous waste. Lack of adequate safety precautions result in illegal cross-border deliveries of poisonous waste, wrong storage of chemical substances and poisonous waste, incorrect or illegal disposal of poisonous waste by burning, disposal into the drainage system or surface water, illegal dumps in the desert, release of chemical substances in production processes and accidents, caused by inadequate safety measures.
- In the border region there are about 85 endangered species. The eco-systems on the border are home to about 450 rare or threatened species (EPA 1997:9).
- The following illnesses occur frequently: respiratory problems, increased lead contents in children's blood, hepatitis, tuberculosis, illnesses of the digestive organs, bone marrow cancer, skin diseases, pesticide poisoning. These illnesses are caused by heavy metals, especially lead, untreated effluent, pesticides, etc. (EPA 1997:9).

4.1.5 Institutions and instruments of binational co-operation before the founding of NAFTA

Before NAFTA came into effect, there were already three binational agreements or institutions dedicated to finding solutions for environmental problems between Mexico and the USA:

- *International Boundary and Water Commission (IBWC)* founded by the water agreement of 1944.
- *La Paz Agreement 1983* (The Agreement Between the United States and Mexico for the Protection and Improvement of the Environment in Border Areas).
- *Integrated Environmental Plan* for the Mexican-US Border Area Environmental Plan, First Stage (IBEP) 1992-1994.

1. *The International Boundary and Water Commission (IBWC)* of 1944 was the first binational authority responsible for the protection of water resources, distribution, and treatment and purifying of waste water in the border region. Its main task is in planning, designing, and setting up water treatment plants on both sides of the border.

The criticism is raised that in the last 53 years, only 16 new water plants have been set up under the *IBWC*, although this comes nowhere near to meeting the needs in terms of clean drinking water and proper treatment of effluent of a rapidly growing population on both sides of the border (Spalding 1998:9). In future, the role of the *IBWC* and its technical knowledge could be used in the negotiations towards an agreement on ground water. NAFTA has already brought about a fundamental change in the organisation, towards more openness. It is now completely bilingual and staffed by people from both countries.

2. The *La Paz Agreement* of 1983 has had six work groups since 1991 which have been examining the causes of air, water, hazardous waste, and soil contamination, and co-operation in implementing environmental regulations in preventive environmental protection, emergencies and contingency planning. Its suggested solutions are intended to assist in designing concrete

policy. Critics described the action as being rather symbolic, as it laid a foundation stone for binational cooperation, but had little effect in terms of concrete implementation. Spalding (1998:12) sees its weaknesses above all in the following aspects:

- No build-up of technical capacity at the local level is foreseen.
- Few regional political players are involved.
- Structures and decision-making processes are clumsy and lack transparency.

In spite of this, there is the positive aspect that in Annex III to the La Paz Agreement, the first regulations were made for what should happen to the hazardous waste generated by the Maquiladoras. NAFTA has brought about an increase in cooperation between the La Paz Agreement work group for water and *IBWC* and *BECC*, especially with regard to the binational financing of drinking water plants and effluent treatment (EPA 1998,3).

3. *The Integrated Border Environmental Plan* (IBEP) of 1992-1994 came about during the NAFTA negotiations and is seen as the government's response to the investigations carried out by the Bush administration in the *Review of US-Mexico Environmental Issues*. The *IBEP* itself is based neither on obligations of enforcement, nor on allocations for the creation of environmental technical infrastructure. It is seen, however, as a milestone for the projects created by NAFTA for a series of border cities (Spalding 1998:12). The *IBEP* is a strategy paper which names four problem areas which were then taken up and dealt with by NAFTA institutions:

- Inadequate implementation of environmental protection,
- Increased co-operation on binational planning of infrastructure, towns, and landscape,
- Construction of effluent treatment plants,
- Development of a computer-supported data system on cross-border flows of hazardous waste.

If one looks at the institutions and the agreements which were established before the founding of NAFTA, the large number of coexisting agreements and institutions is remarkable, and there would seem to be a need to coordinate them. This fact, and the fact that the agreements lacked practicality, meant that binational cooperation made only slow progress. Priority was given to plans which provided a description of the existing problems. Finding solutions to the problems was often hindered by technical and organisational difficulties, such as the low level of technical capacities on the Mexican side, or the inadequate existence of bilingual authorities (Spalding, 1998:12). The most serious problem, however, was the lack of resources to finance infrastructural projects, or for capacity building.

4.1.6 Environmental protection in NAFTA and in the supplementary agreement on the environment (NAAEC)

4.1.6.1 The terms of the NAFTA agreement

In the preamble to the NAFTA agreement, the parties to the agreement commit themselves to the principle of sustainable future development: "The Government of Canada, the Government of the United Mexican States, and the Government of the United States of America resolve to: ...undertake each [of a list of commercial objectives] in a manner consistent with environmental protection and conservation, promote sustainable development, strengthen the development and enforcement of environmental laws and regulations."

This principle, however, is not included in the objectives of the agreement (Art. 102). Nevertheless, NAFTA carries within it the idea of sustainable future development in it in the form of important points on securing environmental protection:

- NAFTA is the first economic agreement which deals with environmental problems created by trade.
- Important multilateral environmental agreements have, in the case of conflict, priority over terms of trade liberalisation - e.g. the Basel Convention on the control of cross-border toxic waste, the Washington Agreement on the protection of species, the Montreal Protocol on the protection of the ozone layer (Art. 104). The list can be extended by agreement between all three parties to the agreement.
- Within NAFTA, lowering national environmental standards as an incentive to investment is forbidden, and existing standards are to be applied (Art. 104, 9906(2), and 1114): "Each party shall effectively enforce its environmental laws and obligations through appropriate governmental action" (Art. 5 Section 1, NAAEC). This article is directed especially towards Mexico, which has appropriate environmental laws, but does not adequately enforce them.
- NAFTA is based on certain multilateral agreements about sanitary and phyto-sanitary measures and other standard-related measures. In order to fix appropriate levels of protection, each country has the right to determine sanitary and phyto-sanitary standards which are stricter than the international standards (Art. 712, 902, and 904). The application of international standards is encouraged (Art.905:1).
- The agreement promotes the creation of environmental laws and standards on a higher common level and integrates the environment into procedures for the settlement of trade disputes (Art. 723 and 914). The onus of proof is reversed, being borne by the plaintiff. Every accused country has the right to have the case heard within NAFTA, instead of by previously existing institutions (WTO). Thus further-going regulations on environmental protection in NAFTA are protected by a WTO panel decision, which could topple these regulations (Houseman, 1994:32).

The **results** of five years of NAFTA show that the creation of environmental standards and laws can be opposed to free trade regulations. Thus the Canadian government passed a law in 1997 on preventive environmental and health protection, prohibiting the import and the transport of the petrol (gasoline) additive MMT on Canadian roads. The *American Ethyl Corporation* responded with a lawsuit against the Canadian government, claiming US\$ 250 million compensation because the Canadian law contravened the regulation on the protection of investors in NAFTA Chapter 11B. The US corporation argued that the ban had caused loss of calculated earnings, and that this was equivalent to expropriation (Public Citizen, 1998:1). The Canadian government responded by finally granting the corporation 13 million US\$ compensation.

It remains to be seen whether this trade dispute will remain an exceptional case. It raises the fear that, in future, environment ministers will have less incentive to raise their standards, because these could be seen as measures designed to distort competition, and be punished with high claims for compensation. However, since the case was solved out of court, it is not clear whether the environmental standard was a protectionist measure, or whether Canada gave in too quickly. The onus of proof in this case was with the plaintiff.

To date, four suits have been brought by foreign investors under NAFTA Chapter 11 against discriminatory environmental laws of a North American country. While none of the investors has made use of the arbitration mechanisms, the lawsuit in the case of Ethyl Corporation lead

to a voluntary withdrawal of a national environmental standard by Canada (Stavis/Mumme, 1999:13).

There seem to be better chances of implementing existing environmental laws and the control of their implementation than for preventive environmental protection. If one party accuses another of reducing its environmental standards in order to create a climate more attractive to investors than in neighbouring countries, the parties to the conflict must find a diplomatic route to a solution. If they do not succeed, then an arbitration panel will be called in. NAFTA has created important new institutions to make it easier to respond diplomatically to complaints from citizens in the region.

4.1.6.2 The supplementary agreement on environmental protection (NAAEC)

The *North American Agreement on Environmental Cooperation* (NAAEC) was signed by Canada, Mexico, and the United States on 13th September 1993 and came into force together with the NAFTA agreement on 1st January 1994. Its objective is the promotion of sustainable development, as described in the preamble. The supplementary agreement is in seven parts: Part I declares the objectives of the agreement; Part II stipulates the obligations of the three parties; Part III establishes the monitoring body CEC and its organs and procedures; Part IV stipulates the mode of cooperation between the three parties and the obligation to exchange information; Part V describes the procedure to be taken by CEC in the event of failure to implement environmental laws and the setting up of an arbitration panel; Part VI contains preventative measures and definitions with regard to the text of the agreement; Part VII defines the level of fines for repeated failure to implement environmental laws and for non-application of an action plan, and the setting aside of certain *benefits* described in the NAFTA agreement.

Article 2 contains certain general obligations binding the parties to the agreement with regard to environmental protection, including regular environmental reports, environmental education, environmental research, estimates of environmental impacts, implementation of the council's recommendations with regard to maximum values, and export bans for pesticides and toxic substances which are forbidden in the home country.

Some basic successes of the NAAEC should be noted:

- The arbitration procedure itself is a radical innovation. If two of the three NAFTA partners bring a complaint against a country for failing to implement a law, the Commission of the CEC will take action. The commission will make its own factual report on the case if this is required by the council. If a country is found guilty of not having implemented the laws, then agreement has to be reached by diplomatic channels on how this country is to make up the deficit. If no agreement can be reached, the CEC can call in an arbitration panel, consisting of environmental experts, to consider the arguments of each party and carry out hearings similar to those foreseen in the arbitration mechanism of the main agreement (NAAEC 1994, Art. 22-36; Thomas/Terepowsky 1995, Peña 1997). Historically, there have hardly been any environmental regimes founded to arbitrate disputes (Spalding 1998:18).
- The most important component of the NAAEC is the ability to impose sanctions against NAFTA members for lax implementation of environmental protection. The level of fines should not be more than 0.07 % of the total trade in goods between the parties on the basis of the latest data (NAAEC 1994, Art. 51, Annex 34). The sanctions, however, are only im-

plemented when all diplomatic channels between the parties to the conflict have been tried and an independent arbitration panel (Art. 24 f.) has been set up, and the latter also identifies a deficit in the implementation of laws and negotiates a plan of action with the party involved to make up the deficit. Only when this action plan is not kept to can sanctions be applied (Art. 34, 5b and Art. 36).

- Contrary to what is sometimes thought, member countries (in accord with WTO/GATT) are not allowed to counter suspected ecological dumping by third countries by raising customs barriers.
- Also new, compared to international standards, is the time within which a dispute about the implementation of environmental laws should be solved. The commission of the CEC sets firm deadlines for each step in the presentation of evidence and for the governments and the decisions of the commission.
- Each state which is party to the agreement has the right to implement its own environmental standards and to implement this level of environmental protection as it sees fit (Article 904:2). In contrast to the fear that NAFTA would mean a harmonisation of environmental standards at the lowest level, Mexico recently has changed its environmental laws to approach US standards. In this process, Mexico has introduced market-oriented instruments such as ISO 14000, adapted its vehicle emission limits to US standards, and made moves towards decentralised regulation (Stavis/Mumme, 1999:35).

4.1.6.3 Environmental protection measures relevant to trade in NAFTA

A basic innovation in NAFTA, compared to other free trade agreements, is that negotiations on the economic agreement were carried out taking environmental factors into account. The Clinton administration received an explicit commission to reach a supplementary environmental agreement during the negotiations for the *fast-track* procedure. The importance of environmental protection in the creation of trade agreements for North and South America (FTAA) became clear during the negotiations. The Government was not given approval for the *fast-track* procedure by Congress, because it wanted to keep environmental considerations out of the trade negotiations (Hauer/Runge, 1999:25).

NAFTA is the first free trade agreement to include trade and arbitration measures for environmental protection in its text. The following is a summary of environmental aspects contained in the text of the agreement (Spalding: 14; Derrick, 1994; Rugman, 1999:130):

- NAFTA places certain MEAs above trade regulations (Art. 104).
- NAFTA prohibits any lowering of environmental standards in order to create investment incentives (Art. 104; 906.2 and 1114).
- The introduction of environmental standards beyond those recommended by international agreements is allowed (Art. 904/5 and 713).
- Art. 904.1 allows import restrictions for products or services which do not meet the standards of a member state.
- NAFTA allows the application of *Border Tax Adjustment* (BTA) if environmental taxes are levied in a third export country.
- NAFTA creates general, multilateral regulations on sanitary and phytosanitary measures and other measures related to standards (Art. 712, 902 and 904).
- NAFTA pursues harmonisation of environmental standards and policies at a high level (Art. 713, 714, 905 and 906).
- NAFTA creates within a supplementary agreement a tri-lateral monitoring body (CEC) to control the implementation of national environmental law.

- According to Art. 10.6 of the supplementary agreement, CEC arbitration mechanisms can be introduced in the event of trade disputes related to the environment.
- In arbitration procedures of NAFTA, environmentally relevant aspects and experts on the environment will be given more attention (Art. 723 and 914).
- The onus of proof in the event of arbitration of disputes lies with the plaintiff and not, as specified in the GATT/WTO regime, with the defendant (Art. 723.6 and 914.4).

Many of these points, compared with the international level, are progress in terms of linking trade and the environment. This is true, for example, for the status of multilateral environmental agreements, but also for the NAFTA dispute settlement procedures. An alternative to the immediate resort to import restrictions in the event of conflicts arising out of varying environmental or health standards is, in the first place, to negotiate an environmental agreement with the trading partner before sanctions mechanisms are applied in the second place. Whereas the world trade system has not finally clarified the status of MEAs as opposed to trade regulations, NAFTA gives priority over trade agreements to three multilateral environmental agreements. Member states are also encouraged to include further environmental agreements in this catalogue.

NAFTA is praised by environmental protectionists not only for these regulations, but also because it creates clarity on other points of conflict which are regulated either unclearly or to the disadvantage of the environment at the WTO level. In the case of different production and process standards for goods and services, the application of trade restriction measures in the context of the GATT regime is controversial. In NAFTA, the situation is also unclear. The parties, however, appear not to be disinclined to apply process-related environmental standards and to impose import boycotts if these are seen as serving environmental protection:

„Each Party may ... adopt, maintain or apply any standards-related measure, including any such measures relating to safety, the protection of human, animal or plant life or health, the environment or consumers, and any measure to ensure its enforcement or implementation. Such measures include those to prohibit the importation of a good of another Party or the provision of a service by a service provider of another Party that fails to comply with the applicable requirements of those measures or to complete the Party's approval procedure. (NAFTA Art. 904.1)

It would not be surprising if NAFTA did not at some time loosen the hitherto restricted procedures for import boycotts. The USA after all is the country which imposes import boycotts on the basis of PPMs most often, and its environmental protectionists are the most active in the North American free trade region. The GATT/WTO regime does not encourage its trading partners to work towards a higher level of environmental standards. Because environmental protectionists within the GATT regime are walking along a knife's edge between scientific data and proof, and because there repeatedly appear to be data which do not allow an environmental standard to be justified, the European Union agreed on the principle of prevention after the Rio Conference. In NAFTA, the right to have different levels of environmental standards, and the incentive to increase these and to proceed together are incorporated in the supplementary agreement. Here too, the parties are supposed to work together towards harmonisation of environmental standards.

There is also a fundamental difference between the **mechanisms for dispute settlement** of NAFTA and those of the GATT/WTO. The onus of proof in NAFTA is with the plaintiff - i.e. the environmental standards under attack remain in force until such time as they may be declared to be in contravention of NAFTA by an arbitration panel. The plaintiff must prove that

the environmental standards of a country are in fact non-permissible barriers to trade, or that they are "*more restrictive than necessary*". Thus NAFTA is more progressive than GATT in favour of the accused party. Furthermore, environmental experts can be called in to arbitration procedures - e.g. in the framework of the trilateral commission for co-operation on environmental protection. This body has the primary task of avoiding environment-related trade conflicts by co-operation with the free trade commission, and can resort to mechanisms for settlement of disputes. In general, the hurdles for consultation in the context of mechanisms for the settlement of disputes are high. If, for example, a party should be suspected of having created an incentive for investment by lowering its health, safety, or environmental standards (NAFTA Art. 1114.2), then the parties negatively affected by this action must first try to allay the conflict by means of co-operation. Anti-dumping duties and levies are not acceptable as a response to different levels of environmental standards (Derrick, 1994:408).

The heart of the supplementary agreement on co-operation for environmental protection is the monitoring body, *CEC*, which is described in the following section.

4.1.7 The Mexican-American environmental regime

In the context of the NAFTA agreement, there are three new institutions for the protection of the environment:

- The *Commission for Environmental Cooperation* (CEC) which is a trilateral body.
- The *Border Environmental Cooperation Commission* (BECC), which is a bilateral US-Mexican commission.
- The *North American Development Bank* (NAD Bank).

Whereas NAFTA establishes an important relationship between trade and environment on some important points, the trading partners have removed the real control over enforcement of environmental laws from the text of the agreement. This is done by the newly-formed *North American Commission on Environmental Cooperation* (CEC), which is defined by a supplementary agreement for cooperation on environmental protection.

4.1.7.1 Commission on Environmental Cooperation (CEC)

(1) Structure of the CEC

The *CEC* is defined in *NAAEC* and consists of three trinational bodies: the Council of Ministers, the Secretariat, and the Joint Advisory Committee (Art. 8,2). The Council of Ministers consists of the three environmental ministers. They meet at least once a year (Art. 9, 3a). The Secretariat supports the Council of Ministers and carries out investigations in case of contraventions of environmental law. The Joint Advisory Committee has access to official documents of the Council of Ministers and the Secretariat. The annual budget of the *CEC* for the years 1995 and 1996 respectively was nine million US dollars, which are not prescribed by the environmental agreement itself. The *CEC* as a whole has the following tasks:

- To produce an annual report on the activities and expenditure of the Commission and on the environmental situation in the three countries (Art. 12, 2a and 3).
- To make recommendations for the creation of new environmental standards at a high level and for ecological labelling, in order to promote environmental legislation (Art. 10, 2r, and Art. 10, 3b).

- To deal with complaints and carry out investigations if individuals or groups have suffered identifiable damage (Art. 10, 6a). (This right to bring private legal action is a very important innovation.)
- To co-operate with the NAFTA Trade Commission to avoid trade disputes and to observe the environmental impact of NAFTA (Art. 10, 6b).
- If a complaint meets the criteria for compulsory documentation in *NAAEC* with regard to a contravention, then the Secretariat of *CEC* will take action and can, if so instructed by the Council, make its own *Factual Report* (Art. 13,1 and 15, 1/2).
- The highest priority of the Commission is to avoid arbitration procedures for the settlement of disputes and to reach solutions acceptable to all parties by means of co-operation and consultation (Art. 22, 4).⁴⁸

(2) Results of *CEC*

Until March 1999 the *CEC* had received 20 complaints, only one of which was investigated more closely in a Factual Report. The others were rejected by the Commission on the grounds that they were not based on trade-related activities. To date, there has not been a single arbitration procedure between the parties (Mumme/Steviss, 1999:35).

Measured against the potential for conflict within the region, the number of complaints investigated more closely by *CEC* seems to be low. This raises the question of causes. These become clear upon a brief examination of the strengths and weaknesses of *CEC*.

• Weaknesses

The trinational authority cannot take action on its own initiative, but only in response to written complaints by citizens, non-governmental organisations, business enterprises, or government agencies (*NAAEC* 1994, Art. 13-15). These must be formulated to meet the criteria of *CEC*. This means that citizens and environmental groups, for example, must fulfil strict documentary requirements and demonstrate that they have brought the matter of the damage concerned repeatedly to the attention of their own governments, whose responsible offices have not stopped the damage. The *CEC* will only pursue cases which relate to the economic and investment activities of NAFTA which cause sustained damage to the environment of North America. The Secretariat decides whether a government has a case to answer (Art. 14,2). Within 30 days, the government can bring the investigations of the Secretariat to a standstill by referring to current court proceedings - even if no conclusion to these is in sight (Art. 14,3a). These regulations themselves indicate considerable weaknesses in the structure and procedures of the *CEC*.

However, not only the number of cases investigated is negatively influenced by the procedures of *CEC*. The structure also has an unfavourable effect on the transparency of and public participation in the decision-making processes. If the Secretary, on the instructions of the Council, makes a Factual Report, two of the three parties to NAFTA must have voted for the report to be made. Whether or not the report is published will also depend on a two thirds majority of the members of the Council in favour of this. This means a restriction in the transparency of decision making. In the end, the report has no binding significance for the accused party. The only consequence of the report can be to put a country under moral pressure to

⁴⁸ To this end, a special work group was formed by the Council, the North American Working Group on Environmental Enforcement and Compliance, which is intended to help to avoid arbitration proceedings (Steviss/Mumme, 1999:36).

solve a deficit in implementation. The *CEC* has no independent controlling units to investigate compliance with environmental laws, but must rely on information from the parties concerned and from the media.

In the final resort, arbitration can only take place on the level of the Council if two of the three countries accuse the other of “a persistent pattern of failure” (Art. 22,1), and no agreement could be reached between the parties, or through an arbitration panel (Art. 24,1), about how to remove the deficit. The procedure for the actual imposition of trade sanctions is long and not very effective; it can take months before an arbitration panel decides that a party has failed to implement the negotiated plan of action. Reaction to breaches is therefore not flexible and rapid. Improvements are advisable here. The Commission itself has no real power, but can only make recommendations with regard to the setting up of environmental standards, which would have to be carried out in the form of legislating by the governments of the countries.

Also with regard to public participation and transparency in decision-making processes, there is a need for improvement. Special public meetings must, for example, be approved by a two-thirds majority of the Council (Art. 11,3). The *CEC* is currently working to improve the possibilities for participation. The question arises of whether the *CEC*, with its headquarters in Montreal, Canada, is not simply too far away from the ecological crisis area along the US-Mexican border, making it very difficult for the citizens of the border region to make contact.

- **Strengths**

In spite of limitations on transparency and public participation, and in spite of the long-drawn-out and complicated procedure for making complaints, the *CEC*'s way of working does offer the following advantages:

The arbitration mechanisms (panels) of NAFTA can, on the application of a party involved, invite scientists, above all environmental scientists, or persons who have experience in assessing environmental effects (Articles 2014, 2015, 2011).

In the context of investigations into the condition of the environment, financial means have been released and results achieved which could not have been expected on a unilateral basis. Compared with other trinational authorities, the *CEC* has a large mandate because it is able to collect and distribute data and technical information centrally. This leads to an improved flow of information on the environmental situation of the three member states, and to a greater degree of acceptance of the *CEC* by the citizens of the region.

In the course of complaints procedures, the governments are obliged to make a statement to the Secretary, whereas in former times they simply ignored complaints. Although the authorities of a government cannot implement laws in the territory of a party (Art. 37), and the agreement itself does not provide any means of enforcing the resolution of a deficit of a country before a court in another country, the Council, under Art. 10,9 of the agreement, should nevertheless make recommendations about how the parties should provide ways and means so that those responsible in a country for cross-border pollution can be brought to account. To this end, the parties should create administrative and legal means.

The co-operation of NAAEC stipulated in Art. 3 of *CEC* in the harmonisation of environmental standards at a high level is considered to be outstanding. Without this, the three governments would have little incentive to work towards raising standards unilaterally. Business

interests also approve of improving environmental standards for all three countries since this will provide industry with certainty about what to expect (Spalding 1998:19). The fact that *CEC* has been able to provide technical and scientific support to compensate for lack of technical equipment and know-how in Mexico is significant for the development of higher environmental standards. This connection also exists at an international level, where in the context of cooperation for development, technical and scientific support can help to deal with the pressure towards harmonisation on developing countries and lead to cooperation (Wiemann, 1996:183).

• Results of external evaluations

The three environmental ministers have themselves examined the 1997 supplementary agreement and had it examined by an independent commission with regard to its effectiveness. The investigation (CEC 1998, quoted in Spalding 1998:20) shows both room for improvement and some initial success:

- The trilateral institutions made only slow progress since in the first three years after the coming into effect of NAFTA the emphasis was on financial and human resources for the institutions and procedures and priorities had to be determined.
- The link between the almost 50 institutions on the level of the Council of Ministers, Commissions on a lower level, sub-committees and work groups also prevented rapid progress.
- On the trilateral level, it has been possible to integrate Mexico more strongly in consultations.
- Cooperation with the NAFTA work groups has led to very varied results. Whereas the *Land Transportation Standards Committee Working Group on the Transportation of Dangerous Goods (LTSSV)* has developed a handbook for the transport of dangerous substances (*Emergency Response Guide*) and cooperates closely with the Mexican authorities in developing safety standards, the *Automotive Standards Council* has not produced any concrete results (CEC 1997:17).
- On the regional level, action plans for the protection of public health were developed with the objective of helping to remove widespread sources of pollution, including DDT, PCBs, chlorates, mercury.
- Important environmental information about the region, including data on regional emissions from the *CEC* annual report and an on-line summary of environmental legislation of the three NAFTA countries was made available.
- Information on bio-diversity of the three parties was exchanged.
- A sophisticated public evaluation system by JPAC and national consultative committees was set up and public meetings held together with the sessions of the Council and the work groups.
- The three governments have cooperated to set up cross-border environmental impact assessments for government projects which may have a detrimental effect on a neighbouring country.
- The *CEC* has promoted the cooperation of the environmental authorities responsible for implementation by specially targeted exchange of information about current strategies, building up of capacities, and workshops.

4.1.7.2 Bi-national institutions

(1) Border Environmental Co-operation Commission (*BECC*)

The *BECC*, with headquarters in Juarez, Mexico, is a bi-national authority responsible for the solution of environmental problems in cooperation with government authorities, local authorities, and other project initiators.⁴⁹ On the basis of this agreement, the projects range from the creation of drinking water plants, plants for processing water and waste water, municipal waste dumps, etc. The *BECC* decides if a project fulfils the technical, financial, and environmental criteria to qualify for loan from the *NAD Bank*. The criteria are available to the public online. *BECC* does not carry out any projects itself, but only certifies project applications. It can, however, offer environmental or financial evaluations at all stages. *BECC* has received project funds from *EPA* amounting to 10 million US\$ for its project development program. The program offers support to local authorities in making applications.

The **Border XXI Programme** of 1996 (*BECC* 1996), which replaced the integrated environmental plan of 1992, is the core of the cooperation in the sphere of the environment. Border XXI is a comprehensive programme with the objective of securing sustainable development, environmental and health protection, and the protection of natural resources. The goal is to achieve a high level of public involvement in developing and implementing the programme. The programme defines five-year goals for the quality of the environment along the US-Mexican border and mechanisms for achieving these objectives. The programme is part of a strategic plan for the region by both governments. The programme is therefore evaluated and indicators for the progress of the programme are generated (*BECC* 1996).

(2) The North American Development Bank (*NAD Bank*)

The *NAD Bank*, with headquarters in San Antonio, USA, is financed in equal parts by the USA and Mexico to the amount of approx. three thousand million US dollars, in addition to existing sources of finance. (The partners also administer private funds.) The USA and Mexico each pay in 450 million US dollars as fixed capital, half of 2.55 billion US dollars is available on call. Allocation of the funds could mean that some ten to twenty billion US dollars could be used for social adaptation or environmental projects (Spalding, 1998:21).

(3) Evaluation

Both bi-national institutions have the special feature that the USA and Mexico have for the first time agreed to share the costs for bi-national institutions for environmental protection, and have equal voting rights. Traditionally, the USA claimed more decision-making power on the allocation of resources on the basis of its greater financial contribution. In creating the institutions, attention was also paid to making *BECC* and *NAD Bank* independent, so that not only finance projects would be in the foreground, but also the creation of capacity and environmental education.

BECC and *NAD Bank* can already report the following achievements:

- Stronger bi-national cooperation.
- Growing public participation in the selection procedure for the projects, which has led to an acceleration of democratic processes, especially in Mexico.

⁴⁹ *BECC* was founded by the Agreement between the government of the United States of America and the government of the United Mexican States concerning the establishment of a Border Environment Cooperation Commission and a North American Development Bank.

- Development and publication of criteria for future development in the border region.
- Initiatives for an infrastructure needs analysis for the whole border region.

The strengthening of bi-national cooperation shows up most clearly in the creation of material infrastructure for the border region. Great progress has been made in the fields of maintaining purity of water and purifying water. The relative transparency of institutions and public meetings caused by *BECC* led to a greater public involvement.

In the final analysis, however, the success of *BECC* and *NAD Bank* depends on financial power for environmental infrastructure problems. In order to achieve sustainable development, the institutions must receive more funds, which can only be achieved by increasing their budgets. Environmental organisations, *EPA*, and scientists agree on this.

Consumer organisations, environmental groups, and scientists, who had expected more rapid intervention by this organisation to achieve visible improvement of the environmental situation, were, on the other hand, disappointed by the results and pointed to the disadvantages of the three institutions. Lori Wallach, director of the consumer group Public Citizen's Global Trade Watch (1998:175 f.) concluded that the environmental institutions of NAFTA had failed. The only parties to benefit from NAFTA had thus been the multi-national companies. To date, not a single case of breach of environmental regulations had been investigated, and *CEC* has not been implemented. Stevis/Mumme (1999:2) predict that the creation of the three institutions will lead to a "weak environmental modernisation". The agreement and its bodies and work groups compound the primacy of economic liberalisation over environmental issues, rather than contribute to a strengthening of the environmental regime in the sense of preventative environmental protection.

The institutions of the NAFTA subsidiary agreements seem to recognise their own deficits and seem willing to reform. The deficits are described in a press release of the *BECC* as being primarily in the coordination of the activities of the three bodies created by NAFTA met for the first time in January 1999. The head of the *NAD Bank* thereby observed that in future increased cooperation and long-term studies on the economic, environmental policy and migration induced developments were necessary to be able to plan more sustainable infrastructure projects. Otherwise, the institutions would be in danger of lagging behind real developments (*BECC* 1999). Consideration was also given to a steering committee for cooperation, which would make sense against the background of their geographical distance and the size of their staff.

4.1.8 Effects of the new institutions on the environmental media

The effects of the institutions should be seen in connection with observation of two environmental fields of conflict:

- the creation of environmental infrastructure for the provision of drinking water and processing of waste water and
- control of cross-border flows of special and hazardous waste and the legal disposal of hazardous waste in the border region.

4.1.8.1 The creation of environmental infrastructure for the provision of drinking water and treatment of waste water

Clear priority has been given to the solution of water problems in the region since 1994. *BECC* has received more than 100 project applications. 30 % of these could not be considered because they did not refer to the border region or the tasks to be dealt with by the institutions (Spalding 1998:23). Other project proposals could not yet be approved because they would only have met the criteria of *BECC* with additional technical support. The balance is as follows:

Up to January 1999, 24 projects were approved by *BECC*, the total costs of which amounted to 600 million US dollars. The *NAD Bank* had granted loans, guarantees, and/or subsidies amounting to a total of 105 million US dollars, thereby making possible the financing of investments amounting to more than 400 million US dollars for the total financing of 14 projects (Spalding 1998:23). 14 of the 24 projects are at present under construction. Only one project over one million US dollars for the treatment of waste water in Tamaulipas (Mexico) had been finished. 20 of the 24 approved infrastructure projects are for the provision of drinking water, treatment of waste water, extension of existing plants, and collection of waste water. On the completion of the projects, seven million people in the border regions will profit from them - about 60 % of the population of the border region (Spalding 1998:24). On the US side, 13 projects, with a value of 365.9 million US dollars have been approved. On the Mexican side, *BECC* has approved 11 projects with a value of 234.1 million US dollars. There is thus an imbalance in the distribution of infrastructure funds to Mexico's disadvantage.

The consumer group *Public Citizen* criticises that the funds provided by the *NAD Bank*, amounting to two thousand million US dollars are not nearly enough to create any improvements in the border situation at all. Furthermore, since the creation of the bank, not one direct loan had been granted, since the most polluted border areas would not be able to repay the bank (Wallach 1998:175). Spalding (1998:26) comes to the conclusion that the success of *BECC* and *NAD Bank* depends in the final analysis on their funding. *NAD Bank* could only distribute 1- 3 thousand million US dollars, whereas 8 - 10 thousand million dollars were needed.

It may be disappointing that five years after NAFTA coming into effect, only one project has been concluded. If, however, one looks at the long preparation times involving the public, the lack of capacity and technical know-how of the local authorities, and the difficulties in planning, then the length of the projects becomes understandable, and some progress recognisable.

4.1.8.2 Control of cross-border flows of hazardous waste

(1) Development

The most important and most discussed environmental problem, caused by the *Maquiladoras*, is without doubt the illegal disposal of special and hazardous waste, or the emission of toxic substances. Case studies have shown that in the Maquiladora industry, significant quantities of toxic waste and emissions are produced under conditions which cause a high level of risk for the environment (Simon 1997, Burkhard 1992:384, Ortiz 1995, The Public Citizen 1996, Sanchez 1990b). Because until recently companies were not obliged to make information available to the public, there are few systematic investigations on this topic. The information of composition, potential danger arising from the emission of toxic substances, and the disposal

of waste from the *Maquiladoras*, are therefore not precise. On conclusion of the NAFTA agreement, the EPA monitoring system for special and hazardous waste, *Hazardous Waste Tracking System* (HAZTRAK) was created, which monitors the storage and disposal of special and hazardous waste on both sides of the border.

An investigation carried out by the *Mexican Ministry of the Environment* as early as 1990 identified 1035 of the 1963 *Maquiladoras* in the border region as producers of special and hazardous waste (Sanchez 1991:9). Only 347 of 1035 producers of hazardous waste (33.5 %) returned the toxic substances imported from the USA to their country of origin, thus complying with the regulations of the Mexican General Law on the Environment (Art. 55). According to this law, hazardous waste generated in the *Maquiladoras* during the production process from raw materials imported free of duty must be returned to its country of origin for disposal. On the basis of the Treaty of La Paz (1983) Annex III, the USA allows the import of hazardous waste from Mexico if the transport meets US requirements. The Mexican environmental planning institution *Instituto Nacional de Ecología* (INE) had only received reports on the returning of such waste from 19 % of the companies involved (Sanchez 1991:9). According to INE estimates, approx. 14,500 tons of hazardous waste were being produced every day in Mexico. That makes more than 5 million tons of hazardous waste over a year (Rotella 1993:A21).

Although it is difficult to calculate the exact quantities of chemical, corrosive, and toxic substances generated, Rosas and Whitehead (1993:45) assume that in Mexico, before NAFTA came into force, only 5 % of such waste was disposed of legally, including that generated by the *Maquiladoras*. If one looks at the statistics of the US environmental authority EPA for 1991, or the rate of increase of returned hazardous waste, then this assumption would seem to be justified:

- In 1991, the *EPA* received only 874 accompanying documents for legally returned hazardous waste to the USA.
- In 1993, the number of returns of such waste reported to the *EPA* was 2,208.
- Since then, the number of reported returns has remained steady at about 2600 (EPA 28.8.1998).

In a similar manner, the volume of hazardous waste returned from the *Maquiladoras* has increased sharply since NAFTA came into force:

- The volume of cross-border flows of hazardous waste in 1991 was approx. 5,524 tons.
- In 1996, the US environmental authority reported an increase in the volume of returned toxic waste to 10,133 tons.
- In 1997, the volume of hazardous waste from the Mexican *Maquiladoras* disposed of in the USA was 11,057 tons.

Thus the return of hazardous waste from the *Maquiladoras* in the border area to the USA had obviously improved, even if it must also be taken into account that the number of production plants in the Mexican-US border region and in the Mexican hinterland had increased in this period. The numbers indicate that there was an effective implementation of the law and consistent effort against environmental offenders on the Mexican side.

(2) Improvements in the situation

There are three reasons for the improvements in the situation:

- Build-up of a computer supported monitoring system between the Mexican and US environmental authorities, known as HAZTRAK (Hazardous Waste Tracking System).

- Capacity building in the Mexican environmental authority.
- Improvement in the information basis for the *Maquiladoras* and the citizens of the border region.

In the final analysis, also here the provision of funds for the creation of capacity for determining and classifying waste and special training programmes and workshops by the US environmental authority with representatives of the *Maquiladoras* and Mexican environmental groups have led to an improvement in the information basis on the Mexican side. Just the online presence of *EPA* (Region 09) gives the citizens an extensive catalogue of information on the specific hazardous waste substances of each branch of industry, the volumes of such waste, the names of the enterprises involved, and the locations at which the waste is to be disposed of on the US side. Furthermore, there is a list of toxic substances to provide citizens with information (*EPA* 1999). This is supported by central national inquiry points at which (mainly foreign) enquirers can obtain information about the applicable norms and standards and other regulations in the country. Transparency and monitoring of this kind did not exist before NAFTA.

(3) Problems

The activities of the US environmental agency *EPA* in cooperation with the bi-national institutions *BECC* and *SEDUE* perhaps at first appeased environmental organisations in the border region. Cause for renewed concern, however, is the fact that Mexico itself has hardly any capacity for waste disposal, nor has it created any such capacity for the border region since the establishment of NAFTA (figure 4/2).

Fig. 4/2: Geographic distribution of infrastructure for hazardous substances in the Mexican border states

State	Recycling	Treatment	Combustion	Final Deposit	Total
Baja	5	3	1	0	9
Coahuila	1	1	5	0	7
Chihuahua	0	3	0	0	3
Nuevo León	12	2	3	1	18
Sonora	0	0	0	1	1
Tamaulipas	0	3	1	0	4
Total	18	12	10	2	42

(Source: RMALC 1999:83)

The shortage of capacity for waste disposal in the border states will, especially with the removal of customs borders by the year 2001, cause problems for Mexico. Then, the *Maquiladoras* will also have the possibility of changing their status as foreign enterprises in order to be able to sell their products in Mexico. This will give them the same environmental status as other Mexican enterprises. They would then have to report all hazardous waste generated in the production process to the Mexican environmental authority. The special regulations of the La Paz Treaty for the return of substances to the USA would become invalid. It is cause for concern that the reports received by the *Instituto Nacional de Ecología* (INE) originate from a very small segment of Mexican industry only (RMALC 1999:28). In 1997, INE received only 10,741 reports from manufacturers of hazardous waste, approx. 10 % of the estimated volume for industry as a whole.

Furthermore, there is a trend in Mexico for hazardous waste to be "recycled" in cement kilns. The recycling of hazardous waste in Mexico is in keeping with the Mexican environmental law. Mexico's planning environmental authority (INE) allows the burning of hazardous waste in cement kilns not only in the short-term, as a so-called test procedure. The Mexican environmental law *Ley General de Equilibrio Ecológico y la Protección al Ambiente* (LGEEPA, Art. 153) also provides for the importation of toxic waste from other countries to be recycled in Mexico. The identification and monitoring of dioxin and furan emissions in Mexico is made very difficult by lack of expertise and the necessary technical equipment to measure emissions exactly (TCPS 1998:7).

The incentive of Mexico's favourable legal situation has led to a series of joint ventures between Mexican and US firms acting as suppliers and collectors of hazardous waste, the thermal value of which is then to be put to use in cement works.

In 1997, approx. 70,000 tons of hazardous waste and alternative fuels were burnt in cement works in Mexico (TCPS 1998:3). Already before the free trade agreement came into effect, such practices were made use of in Mexico, but the volume has since increased steadily. This is especially worrying because the list of hazardous wastes is long and many of the cement works are not equipped with the necessary filters to reduce the emission of damaging substances. Included are solid waste materials, such as car tyres, battery housings, contaminated earth and slag. Liquid toxic materials include solvents, oils, greases, and distilled slag. The wastes come from the automobile, chemical, electronic, paint, and oil refining industries (TCS 1998:3). Of 29 cement works in Mexico, 21 at present burn such hazardous waste as a so-called energy resource.

4.1.9 Other environmental effects

The regions on the Mexican side of the US border will continue to have a considerable attraction, also for migrants from outside Mexico. The resultant expansion of urban settlements presents the Mexican authorities with a number of problems, as the urban infrastructure is already now unable to keep up with demographic developments, and the main activities are concentrated on poor, hitherto not industrialised towns (Tamayo, 1995).

If preventive measures are not taken in time, further extension of cattle breeding and vegetable cultivation will have a damaging effect on the soil and vegetation (expansion of the use of land for agriculture, change of the use of land, deforestation, erosion, use of chemical products in agriculture, salination), on the ground water (blockages, contamination by pesticides), and on human health (poisoning, concentration of damaging substances). Other production activities, such as the manufacturing of cement, paints and dyes, petro-chemical products, glass, and above all the Maquiladoras put strain on the soil, air, and water, and contribute to the consumption on non-replaceable raw materials (Meza 1995:114). Bio-diversity is also under threat (Urrutia, 1995:218).

Until 1989, the Maquiladoras, according to the Ministry for the Environment, were hardly controlled (Sánchez, 1990a:309). Only in 1992, in preparation for NAFTA, did the Mexican Environment Ministry begin stricter control of the enterprises and took measures such as closures of plants. From June 1992 to November 1993, the Mexican Environment Ministry investigated 1,161 (of a total of 16,000 in Mexico) enterprises in the framework of an inspection programme. The result was impressive: 202 enterprises were closed down temporarily and 58 closed down permanently.

The number of enterprises which fulfilled all environmental requirements rose by 1997 to one third (Peña, 1997). In a survey carried out by the US Chamber of Commerce in Mexico, most of the enterprises indicated that they had introduced new safety regulations and made investments in environmental protection between 1993 and 1996 (Clinton Administration 1997, p. 113). This is a remarkable effect of integration in the context of NAFTA.

Funds for communal infrastructure were increased in the border towns. Local and state institutions for environmental protection on the Mexican side are, however, only effective to a limited extent; they lack qualified staff, funds, and technical equipment. The Environment Ministry has increased its staff in the border region since 1990, and has been provided with more funds and technical resources, in order to demonstrate the ability to act of Mexican environmental policy in the context of NAFTA. The Mexican Environment Ministry is, however, no longer responsible in all states of the federation along the border, since in the meantime regional (state) environmental laws have been passed.

4.1.10 Need for political action

From the elaborations above, a number of weaknesses can be summarised, which point to the need for political action:

- NAFTA promotes an industry model in Mexico which leads to concentration and damage to the environment.
- The implementation and raising of **environmental standards** in the Maquiladora industry is a major aspect of the need for environmental policy action, which cannot be solved by Mexico alone. The Mexican environmental authorities lack human resources, equipment, and funds to be able to monitor the enterprises effectively. Resistance to environmental standards is high because these cause considerable costs for the enterprises. Willingness to implement environmental standards is not very great in the Mexican administration because of fear of losing industry in the area.
- There are no sanctions for lowering environmental standards - as they are for breaches of trade policy.
- The right to raise PPMs is not secured.
- Upward harmonisation of standards is not provided for. Articles 904 and 906 (in not very precise formulation) allow the "status quo" to be maintained.
- State controls of trade in natural resources is not provided for.
- Neither in NAFTA nor in supplementary agreements are funds foreseen for *upgrading* environmental policy in Mexico.

To improve the at present inadequate controls in the area of **hazardous waste**, CEC (CEC II 1999:28) suggests the following:

- Improved exchange of information for the these countries, especially on the import and export declarations made to the customs authorities. Mexico should make the information from the HAZTRACK system available to other Mexican authorities - e.g. the customs and statistics office.
- Information held by the customs authorities should include a clear identification or co-ordination of hazardous wastes. This is not yet the case in the international customs system.

- Standard transport documents for cross-border transport of hazardous waste should be introduced for all three countries. These should be in three languages and include a standard system of quantification.
- The definitions of hazardous waste should be harmonised for all three countries. This could be achieved on the basis of the OECD waste classification system.
- Creation of infrastructure for professional and environmentally suitable disposal of hazardous waste in Mexico, in connection with long-term replacement of toxic or dangerous substances in production processes.

Further need for political action arises from the following aspects:

- Increased cooperation between the monitoring body *CEC* and the *BECC* and *Nad Bank* and with the economic institutions of NAFTA in the planning of infrastructure projects.
- Improved cooperation between the three countries to raise environmental standards involving tri-national institutions.
- Greater transparency of structures for work groups and commissions at the national, bi-national, and tri-national level, and transparency of decision-making structures and responsibilities.
- Greater public involvement.
- Restructuring of environmental institutions to achieve possibilities for intervention - e.g. by independent investigations of breaches of environmental law, or by the right to suggest the creation of environmental infrastructure or suggestions for the redevelopment of abandoned sites.
- Restructuring the *CEC* complaints procedure and shortening the deadlines for its investigations. The current arbitration procedure is too bureaucratic and not open enough to the public (publication of many documents, including complaints, requires a two-thirds majority of the *CEC* members).
- Long-term securing of resources to achieve sustainable development - e.g. by ground water management and a bi-national ground water agreement.
- Connection of all households to the drinking water and drainage network in the border region, and especially improvement of the water situation in the *colonias*.
- Provision of funds by instruments such as charges for use and taxes for the financing of environmental infrastructure projects.
- Build-up of capacity in Mexico - e.g. for local research or fixing of upper limits for emissions.
- Improved environmental education and training for industry and households in the border region - e.g. water-saving programmes, environmental education for correct disposal of hazardous wastes.

4.1.11 Conclusions

Experience with NAFTA so far is very limited. Nevertheless, first indications are available of whether and to what extent ecological aspects have been included in the NAFTA agreement and implemented in the area, and to what extent the solution mechanisms, instruments, and institutions described here meet the problems and could serve as the basis for further agreements.

In contrast to the EU, the architects of NAFTA did not want to establish any independent political bodies to make policy for the free trade zone independently of national governments. The sovereignty of all three parties involved is guaranteed. This is one of the main reasons for

decoupling environmental protection and its institutions from economic liberalisation in the *parallel track* procedure. Herein lies also the fundamental fault in the structure of the agreement and the structure of the procedures of the tri-lateral institution CEC: it cannot prevent over use of natural resources as a measure of *pollution prevention*.

In the final analysis, an agreement on environmental protection, parallel to the main free trade agreement, designed to ensure sustainable development, does not lead to the intended objective because it supports the "end-of-pipe" mode of thinking which was typical of the national environmental protection of the 1970s and 1980s. Especially through NAFTA, there seems to be more investment in reactive environmental protection than in proactive preventative protection. It would be very important to combine environmental protection and economic development in order to achieve sustainable development. For future agreements, a *single track* procedure is therefore recommended, in order to establish and support a real connection between trade liberalisation and the environment of the free trade zone (see also Section 6.1.3). The objectives of trade liberalisation should be linked to sustainable environmental policy with regard to free exchange of goods and services, unrestricted access for investors, and planning of infrastructure.

This link has been achieved in part in NAFTA. In the main NAFTA agreement there is provision for certain measures which follow the guidelines for environmental protection. These include priority for important international agreements over trade regulations, and a commitment to the principle of *sustainable development* in the preamble and text of the agreement. The obligations of the parties to the agreement arising out of multi-lateral environmental agreements are not affected by NAFTA, although it is necessary to reduce the contradictions between such environmental agreements and NAFTA to a minimum. The objective of harmonisation of standards at a higher level is also an indication of this. The application of trade measures contained in international environmental agreements is allowed under Article 104 (an exception clause for multi-lateral environmental agreements which are to be precisely described). Article XX of GATT is taken into account in Article 2101.⁵⁰

In this connection, however, it must be emphasised that NAFTA is not an environmental agreement, but an economic agreement, and that its stipulations are guided by the objective of free trade liberalisation. This may also be the reason why some of its environmental regulations are vague and in need of interpretation. The Japanese describe agreements of this kind as *tama mushi*, after a beetle whose transparent wings show in different colours, depending on the light and the angle at which they are viewed. If one approaches NAFTA with strong expectations for modernisation in the area of the environment, then there will be disappointment. The *parallel track* procedure has, however, created new possibilities for the resolution of environmental conflicts in ways which were not possible for governments in the past. The reasons for this were above all lack of human resources, know-how, funds, control, and political will.

The instruments and institutions created by NAFTA have within five years not been able to make up for this and remove all the old problems which had accumulated over nearly 30 years. At first, the condition of the environment continued to deteriorate because important infrastructure construction projects were only realised very slowly, funds were not adequate,

⁵⁰ „GATT Article XX and its interpretative notes, or any equivalent provision of a successor agreement to which all Parties are party, are incorporated into and made part of this Agreement. The Parties understand that the measures referred to in GATT Article XX(b) include environmental measures necessary to protect human, animal or plant life or health, and that GATT Article XX(g) applies to measures relating to the conservation of living and non-living exhaustible natural resources.“

and problems were created by a very rapid growth in the populations of the border regions. Nevertheless, achievements have been made in the area of water provision and purification which will be to the advantage of most of the US-Mexican border population. This is a clear improvement in reactive environmental protection. Public funds have been made available, which, although not nearly adequate, but are a step in the right direction. Since, however, the success of reactive environmental protection depends very much on the funds available, future financial instruments, such as taxation and charges for use, should be included in future project financing.

Also in the area of bi-national or tri-national cooperation, the institutions of the supplementary environmental agreement of NAFTA have had some success. This is shown in the carrying out of workshops, training seminars, and the transfer of know-how, the exchange of information, and transfer of technology and data. Further evidence of an improvement of environmental standards is in the network structure, which includes regional, national, and supra-national players, as well as scientists, governmental and non-governmental organisations. Not only the number (50) of the tri-national workshops set up in NAFTA is decisive for the progress of environmental protection, but also the structure of the integrative communication process.

It is also to be noted here that not all political players have the same access to the decision-making processes at the highest level. If NAFTA, however, is understood as a dynamic process, then it may be assumed that in practice there will be increased institutional transparency and a reduction of hierarchies in the decision-making processes. Public workshops, hearings, and intensive lobbying activities by environmental organisations already seem to have had an indirect effect on higher decision-making levels.

In competition for more say in shaping the future, the population involved (and not only in the border regions) in the NAFTA negotiations has gained more say in decision-making processes. Participation in public hearings on the planning of infrastructure projects by *BECC*, procedures for raising doubts, publication of available funds and their allocation through *BECC* and *NAD Bank* are examples for the opening of institutions for participation in decision-making by the public. In spite of sustained and in detail partially justified criticism, this has had a positive effect on the democratisation process in Mexico and indirectly on its hitherto centralised structure.

CEC has also made a big contribution to cooperation between the three countries. Although there is not the kind of co-operation between the individual work groups and the bi-national and tri-national institutions that would have been desirable for rapid progress on projects, the *CEC* provides important impulses for common procedure on the environment. *CEC* has taken an active part in the formation of environmental policy in North America. *CEC* on the one hand takes instructions from the environmental minister of the Council, but on the other hand it has access to data and scientific research possibilities which make it possible for it to assume a de facto regulatory function without infringing on the sovereignty of the individual member countries.

Even if so far no complaint about failure to implement environmental policy has led to economic sanctions in the context of NAFTA, the three regions are nonetheless obliged to report to *CEC* and the public. In the final resort, NAFTA arbitration procedures can be activated if cross-border environmental conflicts cannot be solved otherwise.

Perhaps the most important achievement of the supplementary agreement and its institutions is the fact that official communications fora have been established with it, which maintain the process of consultation and political integration for all countries, something which previously happened only sporadically at the bi-national level.

NAFTA on the whole, however, makes it very clear that the environmental problems, especially those in the border region between the USA and Mexico, are not primarily caused by liberalisation of trade, but by *failure to properly implement existing environmental protection regulations*. Lack of environmental awareness leads people to seek to externalise environmental costs. If this is made possible by policy failure, then economic liberalisation is not primarily to blame, but inadequate environmental policy securing.

4.2 Mediterranean Free Trade Zone (MFTZ)

4.2.1 Prospects for a Mediterranean Free Trade Zone

Since its foundation, the EU has been concerned to develop relations with its southern neighbours based on the relevant terms of the Treaty of Rome. There are bi-lateral preference agreements with all Mediterranean states. The partner countries, however, complain repeatedly that the limitation to trade preference is unsatisfactory because of an inadequate financial component. The economic contours of the development of the group of countries so far is described in section 3.6.3.

Since the beginning of the 1990s, the EU has been pursuing a new strategy with regard to the southern Mediterranean states. With the acceptance of the "new Mediterranean policy " in 1990, cooperation with these countries has been intensified.⁵¹ With the so-called *Barcelona process*, called into life on 27th/28th November 1995 by the foreign ministers of the EU and representatives of the 12 Southern Mediterranean states, the EU is attempting to intensify the political and economic dialogue with the south. At the Barcelona conference, a new form of political, economic, and social cooperation was agreed - a multi-dimensional political approach, and a work programme for concrete measures. At the same time, long-term prospects were discussed. It is certainly no coincidence that this has been taking place at the same time as developments in Eastern European Countries.

12 Mediterranean countries have agreed a partnership with the EU: Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Palestine, Syria, Tunisia, Turkey. As early as February 1976, the *Barcelona Agreement* was signed (valid since February 1978).⁵² This was modified in the course of the "Barcelona process" in 1995. The idea of a partnership was addressed even earlier, at a meeting of the Council of Europe in Lisbon in 1992. At the meeting of the Council of Europe in Corfu (June 1994) and in Essen (December 1994), the question of co-operation with the Mediterranean countries was central. At a meeting in Cannes in June 1995, in Malta in April 1997, in Palermo in June 1998, and in Stuttgart in April 1999, suggestions for the founding of a Euro-Mediterranean economic zone were discussed further. In addition, there are about 50 conferences and meetings a year on special subjects (environmental protection, industrial cooperation, tourism, etc.) at all levels. On the whole, the Euro-Med focus has shifted from "free trade" to "promotion of sustainable development". It has been

⁵¹ European Commission, The EU and its Mediterranean Partners, Brussels, 1997.

⁵² MED Forum, March, 1999, p. 4.

possible to include an ecological perspective in the economic agenda, intensively involving NGOs.

4.2.2 The three basket approach

The cooperation agreed for the Mediterranean area consists of three "baskets".

- **Basket I: Political and security aspects.**

Basket I refers to the establishment of stable political structures to guarantee peace and security. This is to be done by promotion of mechanisms to increase stability in the region, including the possibility of a stability pact, and with the help of an intensified political dialogue on the basis of certain basic principles agreed by all parties (respect of basic freedoms and the rule of law).

- **Basket II: Economic and financial aspects**

Basket II refers to the building up of a free trade zone and the funding of urgently needed economic transformation processes. The European-Mediterranean free trade zone should conform to WTO standards in developing step by step. At the same time, financial cooperation should be increased, especially to support economic modernisation and investment in the private sector.

- **Basket III: Social, cultural, and human aspects**

Basket III refers to intensification of the dialogue on democracy and human rights, but also to marginalisation and racism, to intensification of the human dimension of relations, especially by decentral, local cooperation in the fields of education and youth, culture, media, migration of populations, and health. Cooperation in the areas of law and internal policy is also planned. The basis for this ambitious partnership policy is the strengthening of democracy and the preservation of human rights as essential shared values between the EU and the Mediterranean.

Whereas the agreements before the "*Barcelona process*" tended to be restricted to a financial and economic basis, the "*Barcelona process*" has led to the integration of social, cultural, and human components of cooperation. The first steps towards setting up a common Euro-Mediterranean cultural zone are to be made via the *Association of the Southern Countries* with the EU. First agreements have already been made with Morocco, Tunisia, Israel, Jordan, and with the Palestinians. Negotiations are taking place with Algeria, Egypt, Lebanon, and Syria. A customs union has already been agreed with Turkey.

4.2.3 Objectives of the cooperation

1. By the year 2010 an "area of peace, stability, and affluence" is to be created in the Mediterranean.
2. A central element of this process is the setting up of a free trade zone for industrial products (see "basket II"), which is hoped to achieve positive economic and social results. By 2010 it is hoped to remove customs between the member countries. This should help to re-

- duce differences in wealth between North and South (also with the objective of reducing immigration into the EU via Morocco, Tunisia, and Turkey).
3. By 2010 it is hoped to open up the national Arabian markets with European help. In the context of this objective, it is planned to steer the economy and society on to a sustainable course of transformation. In a further step, even the six oil-rich states of the Arabian Gulf could be integrated.
 4. The dialogue and the economic, social, cultural, and financial cooperation between the partners are to be strengthened. In *economic cooperation*, regular economic dialogues between the partners are intended to support cooperation efforts. For various sectors (environment, energy, tourism, etc.) there are objectives within the agreement, and priority measures have been agreed. The intention is above all to improve competition and the infrastructure. In the foreground of the *social and cultural cooperation* is a dialogue on the role of women and better understanding between cultures. In the context of *financial cooperation* the so-called *Meda Programme* of the EU support social and economic reforms of the partner countries. They help the local private sector in particular to develop. They promote trans-Mediterranean common projects for small and medium enterprises, as, e.g. by setting up "Business Centres" for the transfer of European technical knowledge. The *Meda Programme* provided the southern Mediterranean countries with 4.6 billion ECU in the years 1995 to 1999, as well as loans from the European Investment Bank (EIB).

"Basket II" in particular, which deals with economic cooperation, could provide the largest impulses in the "*Barcelona process*". The largest potential for growth and development are to be developed which are offered by the wealth of raw materials, labour, and agriculture in the Middle East and North Africa. A double strategy is intended to strengthen the socio-economic transformation process and the performance of the southern economies. A distinction is made between the *national approach* and the *regional approach*.

4.2.3.1 National approach

The national approach pursues the continuous transformation of economy and society. The transformation of the state economies is aimed at the development of local enterprises and the development of a varied and efficient private sector which is strengthened in terms of internal policy and internationally competitive. In this way, for example, jobs are to be created which are so badly needed in the Arab societies with their very high levels of youth unemployment.

The conditions for domestic and foreign investors have to be improved in order to give new impulses to the slow economies. To achieve this, simplifications in the often extensive and confusing laws and regulations have to be carried out, the rule of law has to be guaranteed, and corruption and nepotism stamped out. Only a **structural adjustment** which will re-organise the state finance and taxation systems and keep expenditure down will encourage Western investors, to move capital and technical know-how directly to the relatively capital-weak markets.

In the process of structural adjustment, high economic and social costs are to be expected, which will create large gaps in state budgets and may cause social tension, e.g. by removing subsidies for food. The partner governments must therefore be put into a position to find additional sources of income - e.g. by having better access to the European markets for agricultural produce. In order to limit the social costs and to ease the restructuring of the economies (modernisation of the banking system, environmental protection, development of tourism), the EU is already supporting the region with funds from the Meda-Programmes.

The donors and the receivers of these development funds could both do more for the realisation of the project. The EU, for example, could simplify the long and difficult roads in the Brussels bureaucracy. The receivers could make the implementation of the projects more effective, so that the help is really received where it is needed. One improvement can be made by carrying on the projects into the *Meda-2-Programme*, which replaces the outgoing Meda-Financing instrument.

4.2.3.2 Regional and bi-lateral approaches

The regional approach strengthens the intra-regional and trans-Mediterranean labour-divided production and trade relations. Experience shows that capital and trade seek large, stable markets. The formation of large economic areas is therefore important. North Africa and the Middle East, however, are only at the beginning in this respect. Expectations must therefore not be placed too high.

The heavily populated regional powers, Egypt, Turkey, Iraq, Iran, and Saudi-Arabia are each interesting as individual markets. A common economic area, however, including the whole of the Middle East and North Africa, would be more attractive. Different economic structures and political and territorial conflicts, however, are obstacles to co-operation and integration in the region. Most real agreements have to be bi-lateral. Increasing proximity is to be observed above all between the Maghreb states. Nevertheless, regional economic links have been made. The association agreement with the EU has made it possible for the 12 partner states to develop flexible sectoral and geographic cooperation between themselves:

- Egypt, Tunisia, and Jordan have agreed to harmonise their external customs tariffs step by step over the next ten years.
- Morocco and Egypt have agreed on an electricity grid.
- Israel and Jordan have agreed on an industrial free trade zone.⁵³
- Syria and Jordan are planning a free trade zone by 2005.
- 18 of the 22 member countries of the Arab League have agreed that by 2008, all trade barriers are to be removed and an **Arabian Free Trade Zone (AFTA)** established. The prospects for the success of this, however, have to be seen with scepticism.
- Turkey and Israel are using the common agreement structure with the EU for intensive economic co-operation.

A trade agreement initialled between the EU and Egypt in July 1999 - as in the case of previous bi-lateral agreements with other Mediterranean states - does *not*, however, contain any environmental component (MFTZ Environment Monitor 1.1999:5). This contradicts the declaration of intent by the EU, which was made in Rio in 1992, that environmental policy should be a part of trade agreements. In the Egyptian inter-ministerial evaluation commission, which is to prepare the ratification process, the Environment Minister is not represented.

⁵³ The "Qualified Industrial Zone" (QIZ) in the context of the *Jordan Gateway Project* is on the east and west banks of the Jordan, which is the natural border between the two countries. The free trade zone will also benefit from a free trade agreement with the United States.

4.2.4 Euro-Mediterranean partnership and environmental policy

4.2.4.1 Concept

The new **Euro-Mediterranean Partnership (EUMP)** will have a strong influence on economic and political relations in the Mediterranean area in the coming years. By setting up a free trade zone, there will be above all advantages for the economy, for the building up of infrastructure, and for the integration of the Mediterranean states in the regional economic process. These structural changes and the easing of trade will, however, also have an influence on the redistribution of resources, changes in relative prices, and a transformation of the roles of state and the private sector (Insausti, 1999:2). The private sector will be expected to take on functions which were previously the exclusive domain of the state. NGOs will play a decisive role in this transformation process. They are concentrated in large numbers in the Mediterranean area.

The Barcelona Agreement sees for the first time the environment as an aspect which requires more attention. In previous negotiations, this was not the case. The Barcelona declaration calls expressly for commitment to environmental issues in both economic and other areas. Until now, however, no real steps have been taken. In 1995 in Cannes it was also said that environmental protection should be reflected in all economic areas (industry, research, energy, transport, agriculture, fisheries, tourism, regional planning).

The anticipated effects of regional integration on the environment have not been properly investigated so far, although an environmentally related evaluation is prescribed in the Amsterdam Treaty. In April 1999, the EU Commission decided to carry out regional and sectoral *Environmental Impact Assessments* (the method of which is described in section 2.3). This intention has, however, not yet been put into practice. Among other things, it would be urgently important to evaluate the effect of the MFTZ on water consumption and water resources.

4.2.4.2 Areas of action

At the Barcelona Conference of 1995, the partner countries emphasised their independence with regard to the various areas of environmental protection. They agreed, however, on the following tasks, which they wanted to carry out in the coming years:

- Water management in land and coastal areas.
- Waste management.
- Avoidance of pollution of air and water, especially in the many "hot spots".
- Conservation and management of natural and historical inheritance.
- Protection and reconstruction of forests against erosion, desertification, degradation, and fires.
- Integration of environmental protection in other areas of policy.

In view of the wide range of problems and the identification of areas of action, clearer priorities have to be set (EC 1997:31). Otherwise, the regional environmental concept becomes a mere "shopping list", without any operative significance, as has been observed in other integration areas. At the Helsinki Conference in 1997, the *Short and Medium Term Action Programme on the Environment* (SMAP) provided a framework for cooperation in the field of the environment and sustainable development (EC 1997). The *Mediterranean Information Office for Environment, Culture, and Sustainable Development* (MIO-ESCDE), an information centre, was also established. It has 57 member states and organisations, is supported by the EU Commission, and works together with international and regional government organisations.

Its contributions to the protection of the environment and sustainable development in the Mediterranean region include:

- A database with 400 non-governmental environmental and development organisations.
- Help in founding, strengthening, cooperation and coordination of Mediterranean NGOs, and enabling flows of information to the important places.
- Promotion of education and research on Mediterranean affairs in cooperation with NGOs and scientific and academic organisations.
- Increasing public interest in environmental protection in the Mediterranean area by campaigns, publications, exhibitions, public presentations, etc.
- Networking (news letter, Internet, monthly bulletin) between all members about future Mediterranean activities.

An important aspect, in which economic integration and ecology overlap very clearly, is the energy requirement generated in a developing integration zone. For this reason, large quantities of EU funds are invested in the development of sustainable energy sources. In Israel and Jordan, thermal solar energy is already widespread. The EUMP also promotes a large number of environment projects in the area of industry.

It is, however, clear that most environmental problems require action on the **national** (and local) **levels**. The national environmental policies are the central components of regional environmental policy. These should include some priority areas:

The Mediterranean area, according to scientists and environmental protectionists, is an especially important ecological area, also in terms of global environmental protection. Its natural riches, however, are being lost more and more by the reduction of natural resources and environmental pollution.

Some **trends**:

- The over-utilization of water resources remains alarming. Already, ten countries in the MENA region⁵⁴ are using more than 100 % of their sustainable water resources (i.e. they are using more than is naturally replenished). Nine of these countries are known to be struggling with significant water shortage problems.
- Urbanisation continues to increase.
- Available agricultural land is being reduced more and more, especially because of increasing urbanisation and soil erosion. The desertification of farming land is horrific.
- Air pollution in areas with high population density is increasing.
- The eco-systems along the coasts and on the seas are under increasing pressure because of the expansion of urban areas, increasing tourism, increasing shipping, and non-sustainable fishing practices (Insausti 1999:2).

The effects for the population are alarming. More than 50 million people are without secured access to **drinking water**, more than 85 million live in unhygienic conditions, and nearly 60 million breathe polluted **air** (Insausti 1999:2). For many countries, the shortage of water presents severe limitations for development.

⁵⁴ The MENA region includes Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi-Arabia, Syria, Tunisia, the United Arab Emirates, the Republic of Yemen, the West Bank and Gaza.

On the other hand, **population pressure** is an important cause of these problems: in 1950, the population of the Mediterranean area was 200 million, in 1980, it was 300 million, today it is 450 million. Estimates project a population of 520 to 570 million for the year 2025, and 600 million for the year 2050. To this must be added the numbers of in-coming **tourists**, who cause an enormous amount of environmental damage. The Mediterranean region has one of the highest numbers of in-coming tourists in the world. Most of the tourists come in the summer months. In 1990, 261 million tourists visited the Mediterranean area. 443 million are expected by 2025 (Sustainable Mediterranean 9/1998:8). Migration into the urban areas will continue in the coming years. Urban concentration will lead to further environmental damage.

Population and economic activity are concentrated along the coast. Nearly 110 "*hot spots*" have been identified for the whole region, especially in Egypt, Italy, and Turkey. **Management of the coastal regions** is becoming more and more important, since the population is expected to increase from 82 million in 1990 to 150 to 170 million in 2025. 60 % of these people will live in the southern Mediterranean area; only 32 % did so in 1990. This increase will take place mainly in the form of urbanisation. From 50 % today, the proportion of the urban population will rise to 80 %. More agricultural land will be built upon, meaning that subsistence farming for the population will become less and less possible. The national governments and regional and communal authorities will be faced with huge problems. They are already finding it difficult to deal with today's problems:

(1) Water

- The **over-use** of water resources is still alarming. Ten countries in the MENA region are already using more than 100 % of their sustainable water resources - i.e. they are using more water than will be replaced by natural means. Nine of these countries are known to be struggling with water problems.
- **Water management** is of the highest priority. Water resources are distributed very unevenly in the Mediterranean area. 86 % of water reserves are in the countries to the north of the Mediterranean. The quality of the water also varies. Increasing shortage of water is also caused by agricultural irrigation (76 % of water consumption). Drinking water makes up only about 12 %, but the requirements in the urban areas may easily quadruple by the year 2005 (EC 1997:19). Water is therefore an essential development factor, especially with regard to the expansion of agricultural production. Increasing shortage of water may lead to more local and regional conflicts about the use of water. In several countries, rationing of water is already common. Experience with low-consumption irrigation methods can be used to increase the availability of water. Use of water per surface unit of land varies greatly in the region. Desalination plants and hydro systems such as dams and flow systems are also required. External financial support (e.g. for the EU) will be essential here.
- **Pollution of the oceans** is especially problematic because the circulation of water in the Mediterranean is limited (EC 1997:17). An important cause of pollution is shipping. 15 % of all oil tankers in the world pass through the Mediterranean, but above all urban, agricultural and industrial waste water and other waste. 70 % to 80 % of all water pollution come from the land, and almost 60 % of the pollution comes from France, Italy, and Spain (MED Forum 1998:2). A lot of waste water is allowed to flow into the Mediterranean untreated, leading to serious deterioration in water quality. The results are changes in colour, loss of transparency, increase in algae, loss of oxygen and generation of gases. Large quantities of heavy metals also enter the Med with the waste water flows. This leads to death of fish and water plants and has a large detrimental effect on water quality, fisheries, tourism, etc. and on the health of the population. Fish stocks have in some areas fallen so extremely that countries which used export fish now have to import.

- The **quantity** of contaminated water that flows untreated into the sea is rising steadily. The sewage plants are not able to cope with the rising problem. On average, only 50 % of water is treated before passing into the sea. The situation is made worse by plant species which are normally only to be found in the Pacific and which have a serious detrimental effect on the quality of the water. The best known species is the killer algae which takes oxygen out of the water (EC 1997:8). Intensive use of fertilisers and pesticides also contributes to the contamination of drinking water and soil.

(2) Air

Air pollution is particularly bad in the coastal urban areas. It contributes to water pollution in that atmospheric influences lead to metallic immissions. Athens is an extreme example. Local and global air pollution is worsened above all by the increasing use of automobiles, above all in Israel, Lebanon, Morocco, Turkey, Egypt, and Turkey, and by industrial emissions where there is a lack of integrated, or at least end-of-pipe protection devices.

(3) Soil

The area of usable land is declining. **Soil erosion** is widespread and increasing. Arable land is being taken over by urban development. At the same time, the **quality of the soil** is deteriorating because of heavy use of fertilisers and pesticides. Irrigation systems lead to salination. Med forest areas are among the worst and lowest in the world, with only 5 % of the original woodland areas still surviving. Reforestation programmes and plans for the use of land are essential.

(4) Diversity of species

The diversity of plant and animal species is also in danger. More than 1,000 species of plants are faced with extinction. 26 species are already extinct, many are endangered, including dolphins, seals, and turtles. Migratory birds are losing their habitats as a result of the drying out of marsh-lands. 75 % of sand dune areas and 50 million hectares of mud flats have disappeared in the last 50 years. In spite of this, only 1 % of the Med coast is protected.⁵⁵

(5) Energy

The southern Med region is a net exporter of **energy**. Its oil resources make up approx. 7 % of global production, but are very unevenly distributed in the region. For other the countries, the import of energy is therefore a very expensive factor. The transport infrastructure for oil, gas, and electricity continues to be expanded. Electrical power plants often use lignin, a petroleum derivative which causes considerable SO₂ emissions. At the same time, wood is widely used as a source of energy in rural areas, leading to deforestation and erosion. As well as the non-sustainable sources of energy, which will certainly still be required in the long term (whereby oil can be replaced to a large extent by gas) there is large **potential** for solar and wind energy, and for bio-energy. This can be supported by **energy savings**, in connection with passive architecture. In the field of sustainable energy resources, the experience of other countries, such as France, Italy and Israel, but also Spain, Portugal, Turkey and Tunisia can be put to use.

(6) Waste

The greater part of normal **waste** and of **toxic waste** is not disposed of properly. This leads to pollution of rivers, seas and beaches, to dirty towns, blockage of drainage systems, and contamination of the soil near unsuitable rubbish dumps. **Waste management** is, alongside other tasks, a special local priority.

⁵⁵ Report of the preparatory NGO Round Table in Palestine for the Environmental Civil Forum, Stuttgart, 1999.

To sum up, environmental policy development must take five central factors of influence into account: the demographic, urban, agricultural, industrial, and energy technology factors. Environmental protection needs to be developed at all levels. A cross-sectional problem in all Med countries is the clear discrepancy between modern production and consumption structures on the one hand and the low standard of environmental policy on the other. As well as the creation of a legal framework, establishment and build-up of the required **administrative capacities** will be a central task in order to *implement* state environmental policy, and - which is of vital importance - to *enforce* this in the face of resistance. It should be mentioned again, that the political *will* to achieve this is essential.

Environmental protection at company level is of central importance. Ecological management can be strengthened by regulations, by economic incentives, and by environmental awareness. The economic *advantages* to be derived from practising environmental protection within the company are hidden for many companies behind the *costs* of environmental investment. There is a great need for enlightenment and education in this field.

4.2.5 Critical comments and perspectives

Between the Barcelona agreement and its realisation there are certain discrepancies. This applies not only for the introduction of environmental protection standards, but also for the strengthening of democracy. At a conference in Palestine in March 1999, a debate took place about whether these aspects were not the exclusive province of the countries, and whether the demands placed on developing countries for careful treatment of the environment were not too high, and would obstruct investment and economic growth. It was especially critically noted that some standards were exaggerated. Harmonisation of standards at a high (e.g. EU) level would be unrealistic in the face of the huge differences involved. *Phasing upwards*, is, however, a realistic goal.

The introduction of a free trade zone is criticised from various points of view, whereby the arguments tend to be the same as those used in the assessment of other approaches to free trade. The first objective is to ensure that all regions have adequate basic food supplies before thinking about liberalisation of trade, which normally ends with liberalisation of trade in luxury goods. One should also not always force certain standards on the developing countries, such as an obligatory EIA for enterprises and investments. Economically weaker countries should have the opportunity to set such standards for themselves, which will go hand in hand with their economic development.⁵⁶ The NGOs demand to be fully accepted and to be seen as important partners. In this connection, they demand comprehensive access to information. The distribution of funds should also not depend on the agreement of governments. There is agreement that the public should be better informed, and encouraged to produce less waste. Industry is called on to consider waste disposal already at the planning stage for new products. When new chemicals are to be introduced, there should be results of research into their possible effects and on their final disposal. An important problem is that the Euro-Med partnership is intended to apply for *all* countries in the Med region. This also includes Albania, Libya, and the former Yugoslavian states, which are only very weakly integrated. There are also considerable political tensions between the Med states. Syria and Lebanon, for example, have seen agreements between Israel and Turkey as hostile acts.

⁵⁶ Report on the preparatory NGO Round Table, op. cit.

A very important ecological problem area is to be expected from the liberalisation of the EU agricultural market. The range of goods of the Med countries is largely agricultural, and would benefit from the opening up on the EU market, whereby they would also almost certainly take away market share from the hitherto protected southern members of the EU. Expansion of agricultural production, is, however, only possible with extensive artificial irrigation. It is really absurd that countries in which water is extremely scarce should specialise in the production of agricultural products which is only possible by large scale artificial irrigation. If real market prices had to be paid for water, then the comparative advantage against the EU southern countries would quickly vanish. Since, however, such prices for water are not to be expected, the Med countries will make efforts to expand agriculture. The already acute shortage of water will therefore become even worse.

Environmental cooperation, especially in an integration zone in which the EU has taken on a leading environmental role, should really be much more consistent. In contrast to the otherwise usual donor-receiver structures, the EU funds available are passed on through local and international NGOs. This strongly participative character is a positive factor to be emphasised.

Very many activities are concerned with emphasising problems and *priority issues*, and with developing concepts, intentions, and proposals ("*should*", "*has to*", "*ought to*") in which the operative aspect is not very clear. Studies, reports, and discussions are an essential precondition for effective environmental policy, but they should not be the limits of environmental policy.

The intended systematic *ex-ante* evaluation of environmental effects of a Med free trade zone means, on the other hand, a real chance to carry out an *Environmental Impact Assessment* of the kind that has been neglected in other integration zones, not least in the case of NAFTA. The large number of real environmental protection measures have so far not appeared as a part of a workable concept, but have remained isolated individual projects. The environmental strategy dimension of the Euro-Med cooperation leaves much room for improvement.

It is also clear that it is very difficult to plan and realise a regional environmental policy for 12 very different partners. As in other heterogeneous integration zones between economically relatively weakly developed partners, the problems of largely substitutional goods structures, and the considerable financial problems of common policies cannot be overlooked. The surplus of goods to the north of the Med and the standard of living to the south are in stark contrast. The Med seems at present to separate two worlds.

The demand for more financial and technical support from the EU has thus far had a decisive influence on the Euro-Med partnership. We cannot enter further into the question here of whether in the Med countries themselves - in the interest of real partnership - more independent responsibility, more commitment, and more funds for environmental protection can be mobilised. The EU, however, will have to take on not only an accompanying, supportive role, but a decisive role, if an improvement in the environmental situation in the Med is really to be achieved.

4.3 Environmental protection in Mercosur⁵⁷

In Latin America, as in many other regions, environmental awareness has improved considerably. The public is strongly aware of the inadequacies of environmental policy, and economic and political developments are observed critically and from ecological points of view not only by committed environmental protectionists, but also by the general public. The environmental situation in the large cities is deteriorating at an increasing rate, and traffic is increasing. It is therefore not surprising that environmental policy is accorded new importance in Mercosur.

4.3.1 Contractual and institutional aspects

Environmental protection is not included as a goal in the integration agreement - the Treaty of Asunción - but is addressed in the preamble. Environmental aspects played only a secondary role in the negotiations leading to the agreement (Leira 1999, Happe 1999). Environmental protection is addressed in the preamble only in the context of economic development, which is supposed to take place in harmony with the environment. This statement is not backed up by any indications of how it is to be realised, or by any instructions for action in the agreement.

There is an annual conference of environment ministers. The decisions made by the meeting of the ministers are to be implemented by the individual member states. The main instruments used are common environmental minimum requirements and harmonisation of standards, ISO 14000 and eco-labels. Further instruments of environmental cooperation are obligations to introduce EIAs, a common environmental information system, and a system for dealing with environmental catastrophes. These instrument, however, are only used partially.

In addition to the meetings of the ministers, there are annual **environmental conferences** (ECOSUL - MERCOSUL) attended by representatives of the governments, environmental authorities, NGOs, scientists, and members of parliament. Topics of discussion are usually environmental problems such as acid rain, pollution and contamination of regional rivers because of lack of drainage and use of pesticides in agriculture and silting caused by deforestation. In the concrete decisions at government level, cross-border environmental problems are largely ignored. Although the ECOSUL environmental forum is only a loose-knit association of varied interests, it has a certain influence on public opinion.

For the organisation of cooperation between the Mercosur states, 11 work groups were formed, none of them, however, originally for environmental policy.⁵⁸ Only under pressure from the Rio conference in 1992 was environmental protection included in the co-operation agenda, and in 1993 a special **environmental commission** was founded (*Reunião de Meio Ambiente*, REMA). Its tasks include the analysis of current environmental laws of the member states, and the development of proposals for harmonisation, especially with regard to environmental questions with cross-border dimensions. Furthermore, REMA is working on a *definition of priorities of the international acts related to the environment* (Mattos de Lemos 1992:2). The work of the work groups (*Resolución* No. 38 1995 of the Council of the Com-

⁵⁷ An economic description of Mercosur is given in section 3.3.5

⁵⁸ The groups foreseen by the Asunción Treaty were for: trade, customs, technical standards, budget and monetary policy, land transport, water transport, industry and technology policy, agricultural policy, energy policy, co-ordination of macro policy. The agreement originally had only 10 groups. However, on the initiative of trades union organisations, an 11th group was formed in March 1992 to deal with labour relations, employment, and social security (Klein 1996:210).

mon Market) are intended to have a cross-sectional effect for the following areas (Leira, 1999):

- Checking of non-tariff instruments with regard to possible environmental effects, working out of proposals for possible harmonisation or removal.
- Investigations on competitiveness and environmental protection, working out contributions to competitive conditions in Mercosur, promotion of studies to determine environmental costs in enterprises.
- International standards ISO 14000: monitoring of processes in the development and implementation of standards, analysis of possible effects on international competitiveness of products from Mercosur.
- Checking of sectoral policies.
- Processing of environmental laws for Mercosur.
- Establishment of an environmental information system.
- Development of an eco-labelling system (e.g. under the influence of the "green point", Leira 1999).
- Coordination mechanisms and guidelines for cooperation in the event of environmental catastrophes (resolution of the Council of the Common Market No. 7.1998).

Civil participation is organised in the form of three representatives from each member state (one representative of private business, one of trades unions, one of environmental organisations) at the preparatory meetings of the work group. Furthermore, there is the option for representatives of other interests and of the general public to take part in preparatory seminars and meetings of Mercosur work groups in the member countries.

In the following time, the sectoral groups for industry and technology policy, agricultural policy, and energy policy each formed a commission concerned with sector-specific environmental problems. It is not known why this did not also take place in the other groups. In the three environmental sub-commissions, unified analytical systems were developed for comparison of the national systems. In addition, standards for licensing in industry, emission controls, and for treating and storing waste water were developed. In the field of agriculture, a Mercosur-wide valid list of permissible agricultural chemicals was compiled. Regardless of the fact that these results only have the status of recommendations, it was not possible to achieve an alignment of environmental standards in any of the environmental groups. The recommendations of the REMA were, however, ratified even more rarely (Happe 1999:22). The most important demands of REMA covered the following points:

- Maintenance of equal competitive opportunities in Mercosur.
- Protection of natural resources.
- Minimisation of contaminating emissions, application of appropriate technologies, recycling, treatment of waste.
- Concentration on harmonisation of legal regulations.
- Coordination of environmental criteria for the negotiation and implementation of international agreements in the further integration process.

With the formal coming into effect of the integration agreement in 1995, the environment ministers signed the declaration of *Taranco* (Uruguay). This defined for the first time the legal harmonisation of environmental regulations in Mercosur. This goes beyond the WTO approach, since PPM standards are also to be harmonised in order to reduce asymmetries (Tussi/Vásquez 1998:241).

In 1999 the Treaty of Asunción was supplemented by an *additional protocol* on environmental protection. The main emphasis is the harmonisation of environmental laws in the member states (Mattos de Lemos 1999:5). The resolution of the Council of the Common Market No. 10/1994, Guidelines for Environmental Policy, contains this harmonisation objective and the obligation of the member states to introduce environmental licensing procedures, including environmental compatibility tests. Furthermore, there are direct regulations for individual standards, such as vehicle emissions and food hygiene. Indirect regulations with environmental relevance in the main agreement refer to agriculture, energy, infrastructure, transport, industry and trade policy, and harmonisation of standards and norms. Standards are partly prescribed and have to be implemented by the member states. Some minimum environmental standards are contained in a supplementary agreement to the Treaty of Asunción. The remaining regulations refer to the creation of a common commission for the processing of rules and norms. These are intended to coordinate all trade-relevant areas of environmental policy.

4.3.2 Hidrovia Paraná-Paraguay (HPP)

The example of the planned common extension of the Hidrovia Paraná-Paraguay (HPP) clearly shows that the concept of ecological sustainability has only been inadequately implemented in political *practice*, in spite of proclaimed intentions. The project was talked up as the central aspect of the integration process in Mercosur, and has indeed a very important political dimension in regional cooperation. We are concerned here with a very difficult political task, since on the one hand shipping lanes are to be efficiently modernised, and on the other hand the environmental strain expected from the huge construction and drainage measures is to be minimised. For this reason, various parts of the agreement and some supplementary protocols contain clauses on the protection of the environment, which, however, are regarded by environmental protectionists as inadequate. It is interesting that the BID (Banco Interamericano de Desarrollo) has classified the project as having only moderate significance for the environment. Hence only a "semi-detailed" EIA was carried out, the report of which, however, amounted to no less than 20,000 pages (!) (Happe:40).

This regional cooperation project has only a very limited impact on the formulation of unified environmental norms and laws in Mercosur. To counter the danger of the Brazilian environmental standards being reduced to the level of the other Mercosur states, in the *Acordo Fluvial*, on which the HPP project is based, the inviolability of national environmental law is established. Harmonisation is only to take place on details.

The project includes making a 3,400 km stretch of river navigable, from the southern Brazilian Amazon area to the ports of Buenos Aires in Argentina and Nueva Palmira in Uruguay. This would drastically reduce the transport costs for many goods and greatly improve the transport possibilities from the inland areas to the ports.

The economic advantages of the project for all countries involved are without doubt. This also applies for Bolivia, which is an associated country, and hopes to attain a permanent link to the ocean. The comprehensive measures devoted to river regulation and navigability would, however, have grave implications for the environment. The waterway, for example, passes through the Pantanal, a nature reserve of approx. 140,000 km². Unfavourable effects are feared, e.g. because of the huge dredging operation required and the effect of this on water reserves in neighbouring areas, the danger of flooding on the lower reaches of the Hidrovia, deterioration of water quality in the river system, lowering of the ground water level, sedi-

mentation of the rivers, and pollution of the sediment, mainly by agricultural chemicals. The risks induced by the project by increasing agricultural production and iron ore mining and by the expected flow of migrants (because of displacement of indigenous peoples) are categorised as low level by the authorities. This is remarkable because, e.g. an increase in soya production in the region would involve the destruction of forests, which would be missed as water reservoirs, meaning that erosion would be increased, increasing in turn sedimentation in the rivers. Increasing ore production brings with it the risk of damage to the natural environment, increased erosion, production of waste and soil and water contamination.

As a matter of principle, from an ecological point of view, it is better to use existing channels of transport than to create new ones (e.g. by building new roads). The ecological risks, however, have not been fully investigated, but are regarded as significant, so that as a consequence, Brazil is increasingly more reserved than Argentina, which positions economic aspects more in the foreground, since the ecological risks are geographically more concentrated on Brazil. In Brazil, no start has yet been made with real constructive measures, as opposed to other countries involved. Paraguay, Uruguay and Bolivia also estimate the environmental risks on their territory to be low.

Critics criticise above all that, as well as the negative environmental effects which they judge to be clearly higher, the civilian population is not involved in the planning and discussion process leading to the product design. They complain that, as in countless other large-scale projects world-wide, they have inadequate access to information, and lack of possibilities to articulate interests and ideas (Pro Regenwald 1996:7). Many observers also doubt whether the technical alternatives (extension and modernisation of the existing rail and road network) have been adequately taken into account and evaluated. Official evaluations seem to overvalue the HPP project usefulness, and to underrate the costs and risks, especially as the ecological and social costs are not clearly indicated along with the economic costs. This is also not internationally unique.

The increasingly cautious approach of the Brazilian government is to be seen as a strengthening of the environmental component in the integration process, in the development of which the priority of environmental arguments has been reduced. This, however, is obviously not to be referred back to the fact that the Mercosur Treaty gives appropriate priority to environmental protection, but to the clearly developed environmental awareness of the Brazilian public and the environmental policy orientation of the Brazilian government. Environmental protection has been given increasing prominence in the political discussion, which has had its effect in the establishment of progressive environmental norms in the legal system.

4.3.3 Conclusions for Mercosur

Nevertheless, this example also makes the argumentation clear that the promotion of economic development via the strengthening of intra-regional trade also, at least in the medium term, serves to support ecological sustainability. Hence the creation of instrumental contextual conditions (e.g. tax favours or subsidies) can be neglected, and the creation of an efficient infrastructure can be seen as adequate. This may be sufficient to convince economically oriented investors, but the lack of ecological regulations for the region is connected with a lack of operational criteria for the environmental acceptability of industrial settlements in the integration zone. Regardless of the obvious ecological orientation of the Brazilian government, Mercosur has not yet been able to develop a sustainable ecological development plan that goes beyond isolated details. Intra-regional co-operation and networking are still much in

need of development. Regional development policy is also still very much dominated by economic thinking from the agricultural and industrial lobbies. The institutional structure of Mercosur sketched out above does not yet give reason to believe that environmental protection is given central importance, even though this is to be assumed because of the creation of REMA.

The environmental policy status and environmental legislation framework of Mercosur are only weakly developed. In its quality as "*soft law*" it is not different from similar regulations in other integration zones. The large number of resolutions, declarations and protocols cannot hide the fact that there is a big gap between these and their realisation (Leira 1999). Their realisation depends in practice on the good will of the governments. It is certainly a correct consequence of this that the additional protocol to the Mercosur treaty does not include any arbitration mechanisms or complaints procedure. Progress on environmental policy is slow and restricted to sporadic activity (BID 1996:43 f.).

Brazil has the most developed environmental law system of the four partner countries. The Brazilian environmental legislation is ahead of that of its Latin American neighbours in that environmental protection is included in the constitution and has environmental legislation based on the constitution. Harmonisation on a regional level is therefore difficult from the Brazilian point of view and is actually not pursued, since there is a fear that harmonisation may be downward. Even critical environmental initiatives evaluated the existing laws on environmental policy as in many ways positive - especially in the Latin American context. Criticism is made that the effectiveness of the laws is subject to a large number of limitations, either by clauses in the law itself, or because of lack of capacity to monitor the regulations or by lack of rigorous prosecution and punishment in the event of breaches of the law.

For the whole Mercosur region, there is not yet any common monitoring system. Because of lack of priorities and inadequate political commitment, the verbal agreements with regard to harmonisation and coordination of environmental policy have led to hardly any progress in terms of real efforts. There is especially no inclination to delegate responsibility and authority to supra-national institutions. However, an important aspect to emphasise is that environmental protection has been given increasing importance in unofficial political discussion in Mercosur. As long, however, as there is no move beyond non-committal statements of intent and the demand for efficient environmental management (e.g. the 1992 Canela Declaration ahead of the Rio Conference), common environmental policy is only identifiable in the event of acute environmental crises. Without a future-oriented integration of environmental policy in the development processes, environmental policy will remain reactive and restricted to the limitation of consequent social and economic costs. This is also demonstrated by the *Hidrovia Paraná-Paraguay* project.

5. Evaluation of environmental policy instruments in a regional context

5.1 Methodological principles

5.1.1 Regional and international treaty law

The following chapter examines the question of which instruments can provide effective environmental protection within a free trade zone. Many environmental instruments have already been introduced and tested on a national level. Since their range partly goes beyond the national level, some have been criticised on the international level as being discriminatory with regard to trade or constituting interference in the sovereignty of a country.⁵⁹ Others are not adequate solutions to cross-border or global environmental conflicts, especially those related to the protection of international resources (e.g. the atmosphere, the climate, or the oceans). This gives rise to the question of which measures are in conflict with the objectives of economic deregulation, or which are in harmony with these goals and how they have been included in regional economic agreements, or how they could be included.

Some measures are still in the process of clarification on the international level. The GATT-WTO regime has been slow to take up and allow trade measures in favour of the environment (Altmann 1997:60f). The word "environment" itself occurred for the first time in the Tokyo round of GATT in 1979 (Lalonde 1994:80). The work group formed by GATT 1972 on trade and environmental protection was only reactivated by the member countries of the EU in 1991. Its goal was to investigate conflicts in connection with environmental labels, environmental standards, packaging labels, and the relationship between multilateral environmental agreements and GATT principles. This task was then clarified at the Uruguay round in the *Decision on Trade and Environment* (GATT:1994).

There is an inter-play between the regional and the global levels. On the one hand, on the regional level, the instruments must conform to existing international trade and environmental legislation norms. On the other hand, there may be important impulses from the regional level for the formation of environmental protection on the international level. On the global level, there is a world trade system which lays down obligatory trade rules for the member states, but there is no institution which could define corresponding generally valid rules for environmental protection.⁶⁰ An environmental regime is coming into being in a piecemeal fashion by the creation of multi-lateral environmental agreements (MEAs)⁶¹ or in the context of co-ordinated environmental policy between the member states of a regional integration agreement. A regulatory body at the international level could contribute to the coordination and unification of the individual fragments of environmental protection. Integration of environ-

⁵⁹ In the final declaration of the UN Environment Conference in Stockholm, it is stated:

"The states have the sovereign right, in compliance with the Charter of the United Nations and the basic principles of international law, to exploit their natural resources in line with their environmental policy, and the obligation to ensure that activities within their jurisdiction or control do not damage the environment of other states or of other areas outside their national territory." This basic principle, not binding in international law, was also taken over in Principle 2 of the 1992 Rio declaration on the environment.

⁶⁰ The proposal to create a world environmental organisation with the same powers as the WTO was made by Renato Ruggiero (IUST:1999,4). See also Simonis 1996, or Kym Anderson and Jane Drake-Brockmann, "The World Trade Organisation and Environment" in Ben Boer, Robert Fowler, and Neil Cunningham (Eds.) *Environmental Outlook No. 2. Law and Policy* 139-157.).

⁶¹ MEA: Multilateral Environmental Agreement

mental protection in the regulations of the GATT-WTO regime, which is conceivable and would be desirable, has not yet taken place.

Both the WTO-/GATT agreement and international or regional environmental agreements are equal elements of general international law. Sections 6.1.4 and 6.1.5 look at the fact that in regional environmental law the members of a free trade zone can also make agreements among themselves which contradict WTO. The formation of environmental measures between the members of an integration zone is not a problem in terms of WTO regulations. The outside relationship towards states which are not members of the integration zone may be problematic.

5.1.2 SWOT analysis

In the following sections the most important environmental policy instruments are examined in relation to their ability to be implemented in regional integration zones. Special attention is given to instruments which are applied by the states. Instruments on the level of the industrial enterprise are only examined briefly. The state, however, can set the framework for these, since state environmental policy forces enterprises, or gives them incentives, to take action which they perhaps would not have taken on their own initiative. The instruments are examined in the form of a shortened SWOT analysis. First the *strengths* of the instruments are examined, then their *weaknesses*. We are concerned with the "internal" advantages and disadvantages of the instruments in connection with the particular problems of regional integration. This is supplemented by a synoptic examination of the *opportunities* and *threats* arising from "external" factors, especially in the contextual conditions of the regional integration. Strengths and opportunities make up the advantages, weaknesses and threats make up the disadvantages of the instrument. It will be assumed that the method of working of the instruments is known.

A summary evaluation is given for each environmental policy instrument, classing its suitability as very good (++), good (+), suitable with qualifications (0), or unsuitable (-) for inclusion in a regional free trade agreement. A bracket around the evaluation symbol means that the evaluation was made with reservation. For example, eco-taxes are theoretically very suitable, but there are so many problems associated with them in industrial countries that their suitability is strongly restricted.

To keep within the brief of this study, the suitability of the environmental policy instrument examined with regard to its suitability for inclusion in a regional free trade agreement can only be presented as a result in a brief form. There is not the scope for a detailed analytical justification.

In the evaluation four integration types are distinguished on the basis of existing free trade agreements (see figure 3/5 in chapter 3):

- Free trade agreements between industrial countries (IC/IC).
- Free trade agreements between developing countries (DC/DC).
- Free trade agreements between newly industrialised countries and developing countries (NIC/DC).
- Free trade agreements between industrial, newly industrialised, and developing countries (IC/NIC/DC).

This assumes the premise that free trade agreements between industrial countries (IC/IC), between newly industrialised countries and developing countries (NIC/DC) and between industrial, newly industrialised, and developing countries (IC/NIC/DC) have a greater depth of integration than those between developing countries (DC/DC). It was mentioned in several parts of Chapter 1 that a "deeper" integration provides more favourable conditions for the inclusion of environmental protection in the regional free trade agreement than more "shallow" integration agreements.

5.1.3 Classification of environmental policy instruments

The spectrum of available environmental policy instruments is impressive. The OECD lists 116 different instruments. The instruments are defined very differently in the various countries, so that it is difficult to categorise them (OECD 1994b:55f., 184). The main categories are:

- Legal and planning measures.
- Economic (market) instruments.
- Political (indicative) instruments of the state (education, distribution of information, training, *moral suasion*) [*suasive instruments*].
- Informal (voluntary) instruments of the private sector.

The instruments include direct and indirect instruments. The **direct instruments** include the planning and legal instruments. The **indirect** instruments include the economic and informal instruments. The legal instruments include prohibitions, orders, duties to register, give information and report, and authorisations of office. They are aimed at the target groups of enterprises, citizens, authorities, and project carriers. Orders include the duty to give information which the enterprises have under the law on environmental statistics (Fritzler 1997:88). Planning, legal, and the economic instruments are established in laws, directives, and articles. The informal level is formed less by the legislative side than by industry, citizens, and consumer groups and authorities. Figure 5/1 gives a summary overview, whereby it should be remembered that other systems are possible.

Fig. 5/1: Classification of environmental policy instruments

Legal Instruments	Economic Instruments	Political Instruments	Informal Instruments
Planning Standards	• Taxes, levies	• Political dialogue	• Voluntary obligations
• Execution standards (orders and prohibitions)	• Subsidies	• Environmental action plans	• Eco audits
• Investment protection	• Certificates	• Adaptation support, cooperation	• Eco-labels
• Liability	• Joint implementation	• Arbitration	
	• Trade preferences	• Complaints procedures	
	• Trade restrictions	• Reporting duties, monitoring	
	• Eco duties		

In spite of the development of economic environmental instruments in many states, the legal instruments have not lost their significance. The large range of "soft" (informal and voluntary) and "hard" (legally and economically regulating) instruments allows suitable control in cooperation with industry and works against over-control by the state. The trend to economic and informal instruments depends on the one hand on the difficulties in the implementation and control of orders and prohibitions, on the other hand with the problems of an effective cross-border environmental policy based on the principle of proactive prevention. It is becoming ever clearer that cross border and global environmental problems must be dealt with on the international (global) or supra-national level. At the same time, economic and informal instruments are used more and more at the regional level to deal with environmental conflicts. In which form the countries who are parties to the agreement use these in *common* will depend on the depth of the regional agreement.

5.1.4 Criteria for the evaluation and selection of instruments

There are widely differing opinions about when and how and in what combination environmental instruments should be applied (OECD 1994b:184). The selection of the instruments is usually made according to the following criteria:

- Environmental policy effectiveness.
- Economic efficiency.
- Social and political acceptance.

Efficiency and acceptance problems in particular, also with regard to administrative user-friendliness and implementability in practice, can become more important than the environmental effectiveness of an instrument and restrict its suitability.

The application of these criteria is carried out with regard to the possible consideration of **environmental principles**. Various principles are internationally accepted. Environmental policy principles are general rules for the formation and application of instruments and measures. In the context of regional free trade agreements, the most important aspects are the principles of **causality** and **prevention**, and, above all, the **principle of integration**. Environmental policy principles have above all two functions:

1. Unclear regulations, e.g. in the event of disputes about the fulfilment of obligations, can be interpreted in relation to principles of environmental policy.
2. They form a partly legal basis for determining and forming measures and instruments in the agreement.

Their inclusion in the regional integration or environmental agreement has, however, formally only the character of a declaration of intent and has no legal consequences.

The principle of **causality** (*the Polluter Pays Principle*, PPP) is included in a diluted form as Principle 16 in the Rio declaration (Sands 1995:66). It assumes an obligation to economic compensation for environmental pollution. In contrast to national law, the principle of causality in international law is not very widespread, as it is also in the law of developing countries, as compared with OECD countries (Repetto 1994:24). Because of the lack of international agreements and institutions it has so far not been possible to implement this principle within an integration zone on an inter-state level.

The principle of **prevention** contains two sub-principles. The *Principle of Preventive Action*, which refers to avoidance and minimisation of environmental damage. It requires that environmental policy measures should be taken before damage occurs. It is included indirectly in Principle 11 of the Rio declaration, which requires that "*states shall enact effective environmental legislation*" (Sands 1995:65). The *Precautionary Principle* implies that environmental standards can also be set when there is some doubt about the causes and consequences of an environmental problem. It is contained in Principle 15 of the Rio Declaration. Both principles are significant for regional trade agreements, especially as the basis for *Environmental Reviews of Trade Policy* and for product and PPM standards.

As not all environmental effects of integration agreements can be determined, the prevention principle should guide the application of measures and instruments. Many problems have to be solved in spite of uncertainty. Avoidance of negative environmental consequences of regional integration is in the foreground. Scientific findings, especially in the area of the environment, form the basis for measures and instruments, which are used in regional free trade agreements, especially in the case of sanitary and phytosanitary standards and safety standards (see IISD 1994).

The principle of causality and the principle of prevention are not components of international law, but can make a significant contribution to the justification of measures and instruments, especially in the area of environmental liability and to arbitration. They are contained in the EU, the APEC principles on economy and the environment, and in NAFTA.

The **principle of integration** is based on the integration of trade and environment policy, as called for in Article 2 of the Rio Declaration. A cross-section clause calls for the environmentally-friendly formation of all other policy areas. Trade liberalisation measures and other measures from which significant environmental effects can be expected, as well as interstate agreements, e.g. on the harmonisation of sectoral policies, are to be tested for their compatibility with the objectives of environmental protection. The cross-section clause thereby forms the legal basis for carrying out environmental reviews of trade policy. The cross section

clause has so far not been a component of international law, but is recognised by the EU and APEC as the largest integration agreements (the NAFTA countries are members of APEC). Article 6 EC Treaty as amended by the Amsterdam Treaty of the EU contains the cross section clause. In the context of APEC, there is an instruction to all work groups to take account in their work of the principles of integration of economy and environmental protection agreed at the 1994 meeting of ministers (APEC Environmental Ministers 1994:1). The work groups have so far not achieved anything substantial on this (Hunter 1997a:2).

These three principles have so far not been much incorporated into regional environmental law. The principle of causality and the principle of prevention can serve especially in the area of environmental liability as the justification for measures and instruments and arbitration. Both principles are addressed directly in the APEC principles on the environment and the economy (APEC 1994). The prevention principle is not explicitly mentioned in the NAFTA agreement, but is referred to indirectly in Article 715.4 SPS and Article 907.3 of NAFTA in that standards are allowed if there is insufficient information about the risk of a product or a service. The obligation to preventative environmental policy is also set down in Article 1 (i) NAEEC. The causative principle is generally present in the national law of the OECD states. It is only explicitly included in a regional agreement in Article 174 EC Treaty (Amsterdam).

5.1.5 Application of environmental instruments in integration areas

Figure 5/2 gives an exemplary overview of measures and instruments for environmental protection as used in NAFTA and the EU. Figure 5/3 summarises instruments of environmental cooperation. Most of these instruments are evaluated in terms of their suitability for regional integration agreements in the following sections. In spite of theoretical advantages, in the practice of regional integration, only a few economic instruments are used. In the EU, direct regulatory instruments make up more than 60 %. Direct market instruments, such as environmental taxes, or deposit systems make up only 1.7 % (Oosterhois:75, Felke:134). From the point of view of environmental theory, this means preferential treatment of ineffective and inefficient measures, as opposed to incentive-oriented instruments. The mere number and structure of the instruments, however, does not say anything about their applications and effects.

In the following sections, the most important environmentally relevant instruments are examined. They are grouped as:

- Legal measures (5.2).
- Economic (market) measures (5.3).
- Measures of interstate cooperation, especially political, indicative instruments of the state (5.4).
- Voluntary (informal) measures of the private sector (5.5).

Allocation to the sub-groups is not always unequivocal. The systematic approach to the instruments is, however, of secondary significance here. Figure 5/4 in section 5.6 contains a summary overview of the suitability of the investigated environmental instruments for integration in regional free trade agreements.

Fig. 5/2: Environmental instruments in NAFTA (examples)

Instruments and measures	Established in NAFTA
• <i>Legal instruments</i>	
Regional environmental development plan.	(planned)
Regional environmental impact analysis	NAFTA / CEC
Introduction of environmental and health standards above the normal international standards.	NAFTA (Art. 904/5 and 713)
Harmonisation of environmental standards at a high level.	NAFTA (Art. 713, 714, 905, 906)
Duties to report and give information, e.g. environmental levelling duty, eco-labelling on the national and regional level.	No
Fines for repeated failure to implement environmental law.	NAFTA supplementary agreement Annex 34, decision by an arbitration panel up to 0.07 % of the whole trade in goods.
Removal of customs preferences for failure to make payments up to the level of the environmental fine (see above).	NAFTA supplementary agreement (Art. 36, Annex 36B).
Granting of import licences on the basis of environmental standards.	No
• <i>Political and trade policy instruments</i>	
Preference of multilateral environmental agreements (MEAs) over free trade agreements.	NAFTA (Art. 104)
Arbitration procedures.	NAFTA: onus of proof is with the complainant (Art. 723.6 and 914.4). Environmental experts may be called.
• <i>Economic instruments</i>	
Import bans on the national or regional level on the basis of different environmental standards.	NAFTA on product standards (Art. 2101), lack of clarity in the case of PPMs
Indirect or direct levies for products or inputs in the production process.	No
Cross-border environmental liability funds on the model of the funds for disposal of old waste in the USA.	
Border Tax Adjustments (BTA).	Permissible, but not applied
• <i>Voluntary instruments</i>	
Harmonisation of environmental labels on the regional or voluntary level	No
Information, advice, knowledge and technology transfer in matters of environmental protection.	
Voluntary obligation (e.g. company environmental management systems similar to the eco audit method).	National

Fig. 5/3: Instruments of environmental policy cooperation
(Examples in selected regional integration agreements)

Instruments	Agreements
• Information, consultation	All
• Participation of civil society	EU, NAFTA, MFTA
• Environment reports (transparency)	EU, EFTA, NAFTA
• Environmental Impact Assessment of the free trade agreement	EU, NAFTA, Mercosur, [MFTZ]
• Trade Policy Review	EU, NAFTA
• EIA of projects and programmes	EU, NAFTA, SADC, EU-Lomé
• Environmental action programmes	EU, NAFTA, ASEAN, MCCA, APEC, CARICOM
• Institution building	ASEAN, APEC, SADC, EU, NAFTA
• Environmental education	EU, NAFTA
• Environmental information systems (monitoring)	EU, NAFTA, ASEAN, Mercosur, SADC
• Environmental action plans	EU, APEC, ASEAN, MCCA, MFTZ
• Eco-labels	EU (regional), NAFTA (national) Mercosur (intended)
• Eco audits	EU (regional), NAFTA (national) Mercosur (intended) APEC (intended)
• Technology transfer, adaptation help	NAFTA, EU, EU-Lomé, APEC
• Technical and financial cooperation	EU-Lomé, USA-Mexico (NAFTA)
• Cooperation on special environmental problems	EU, NAFTA, ASEAN, MCCA, SADC, EU-Lomé, ECOWAS
• Dispute settlement	EU (European Court), NAFTA (CEC)

5.2 Legal measures

Most of the instruments and measures used, or which could be used, in the region are of a legal nature. For regional integration zones there is the problem that the developed national environmental law systems diverge strongly. In order to avoid distortions, the national environmental laws would have to be harmonised. Harmonisation usually proves to be very difficult and time consuming. There is no supra-national environmental law in any integration zone other than in the EU.

Legal measures are primarily concerned with direct regulation in the form of obligations and orders (often in the form of real maximum or minimum values), prohibitions, reservations in granting allowances, planning regulations (*zoning*, including town and regional planning), application restrictions, packing regulations, etc. Their application requires appropriate administrative capacity on the national and regional level. Regardless of their legal character, direct regulations often have an economic (financial) component (e.g. fines).

The potential for implementation and enforcement of regulations is usually high, although most *stakeholders* (politicians, voters, emitters, environmental protection industry, environ-

mental organisations, administration) evaluate the application of legal instruments highly (see overview in Michaelowa 1998:26). Their popularity with bureaucrats is not surprising since they imply a high level of administrative effort.

In terms of *GATT regulations*, there are no limits with regard to regional or national environmental regulations in law, as long as these are not applied so as to cause discrimination.

Below, the suitability of general environmental law for a regional environmental policy is examined in the context of an integration agreement. In the following sections, further legally influenced instruments are examined: 5.2.1 environmental standards, 5.2.2 protection of investments, 5.2.3 liability regulations.

Strengths of general environmental law in the context of regional integration

- Concrete legal orders and other regulations are suitable for action against immediate danger (e.g. acute danger to health) because they are applied directly to the action causing damage to the environment. There is no room for manoeuvre as with taxes or other market economy instruments. This leads to high reaction security. This, however, depends on the efficiency of control and sanction mechanisms.
- Regionally unified environmental standards can reduce competitive disadvantages between the individual countries because of differences in the stringency of environmental regulations.
- The effect is usually readily understandable even without special economic knowledge. This increases the chances for political implementation of the instrument in the integration zone. Order solutions match the legal way of thinking dominant in politics and administration.
- In homogeneous industries, quantitative measures are more efficient than price instruments because companies can respond to price instruments with different degrees of flexibility (Zamir:4).
- Binding planning aspects (town and regional planning) can strongly restrict private externalisation of environmental costs.

Weaknesses

- Because of unknown cause and effect connections, clear marginal values cannot always be calculated. Here there is the danger that the establishment of regionally valid marginal values can be diluted by the influence of national or group interests.
- Regulations have a restrictive effect on innovation since there is no incentive to reduce environmental strain beyond the given values.
- Through orders, the given environmental policy targets are not reached with economic efficiency. An order does not take into account the various avoidance costs of the individual producers in the different countries.
- Orders do not correspond to the system because they do not relate to the price mechanism.
- In heterogeneous industries (as is often the case in regional free trade zones), or when several industries have to be covered, price instruments are better.
- Law can usually not establish a connection to *common goods*, or can only establish a loose such connection.

Opportunities

- Regional environmental law can be agreed between a limited number of contract partners more easily than global international environmental law.
- Relatively homogeneous contractual parties are favourable for agreement on a high level of environmental protection.
- The political and moral pressure with regard to contractual obligation (peer pressure) is stronger in the regional context than at the global / international level.
- Unified environmental law within the integration zone can, because of the implied need for consensus and negotiation, promote the integration process as a whole.
- A unified regional legal framework can work against the danger of eco dumping.

Threats

- The development of regionally binding legal bases requires a common democratically legitimated legislator (e.g. the EU Parliament, EU Commission). Without a functioning political framework, in the sense of a supranational legislature, the implementation and carrying out of a functioning legal framework is not possible. A generally binding environmental law cannot be established by a multilateral agreement alone. For this reason, a greater depth of integration, especially on the political level, is a prerequisite for regional harmonisation of law.
- The development of a regional harmonised law requires the approval of all member states. Because of the high requirement for consensus, there is the danger of reaching agreement at the level of the lowest common denominator. This disadvantage can only be alleviated if it is admissible to have stricter national laws (EU, NAFTA). This, however, could mean a competitive disadvantage for the national industry with the stricter environmental protection requirements.
- Questions of implementation, monitoring, and control have thus far not normally been part of environmental conventions.
- Regional environmental policy is often inadequately broken down to the level of national law.
- The development of regional environmental law requires a suitable administrative apparatus. The building up of a political and administrative structure and the allocation of institutional, financial and human resources components is often not accorded adequate significance on the regional level. The administrative bodies, on the national, and above all on the local level, are often not able to ensure that environmental requirements are met because of lack of human and material resources. Confusion about who is responsible for what and splitting of responsibilities was often observed. This can cause major problems in implementation. This is especially, but not only true for integration efforts between developing countries.
- There is often a lack of regulations for implementation and enforcement below the legislative level - i.e. on the level of directives and internal administrative regulations.
- Responsibility and authority to impose sanctions available to the implementing authorities are often inadequate. Means of enforcing the law are lacking. The implementation of environmental law can e.g. fail because notifications of the imposition of fines or other measures cannot be delivered by post because of lack of infrastructure.
- A central difficulty in many cases is that the environmental legislation is good and the law enforcement apparatus is adequately equipped, but the political will to apply and enforce the law is lacking.

- Apart from the EU, there is no other integration zone with supra-national environmental law. The administrative law must be established in the national law. This means a potential heterogeneity of national standards because there is usually no effective monitoring of standards.
- In inter-regional integration zones, member states often belong to different legal groups ('law circles'). However, even within the same legal group, national legal systems are often very different. This makes it difficult to reach agreement on regionally valid environmental standards and means differences in the implementation.

Conclusions and recommendations

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Law	++	o	+	+

++ very good, + good, o good with qualifications, - not suitable

Legal instruments are essential in all integration zones. They depend on effective administrative and legal capacities and are suitable for "deeper" free trade agreements. Problems in terms of GATT regulations with regard to the application of a law to the import of goods do not exist as long as the measures are not applied in a discriminatory manner (Art. III:4 GATT). The problem lies in the interpretation of "equality" of products from the home country and from abroad ("*like products*"). According to usual WTO practice, this is not restricted to physical qualities of the goods. In the case of a breach of Article III, exceptions can be made under Article XX.

5.2.1 Environmental standards

The concept of a "standard" is a standardised interpretation of a certain variable. This can refer to technical or other qualities of goods or production processes (**product** or **process standards**) or to the condition of an environmental medium such as water or air (**environmental quality standards** or environmental goals). Quantitative maximum or minimum values (limits) can be defined, or non-quantified, qualitative aspects. Without a specific additional qualification (e.g. minimum standard), the "**environmental standard**" refers in general to the existence of a standardising environmentally-related regulation, regardless of which kind.

Environmental standards are the most important element in connection with the development of a regional environmental policy. Environmental standards are aids in achieving or maintaining a certain environmental quality. They define and limit quantitative or qualitative aspects of various types of human influences on the environment (SRU 1996:251). It is first necessary to define the desired level of environmental protection and environmental quality goals (environmental goals) for the regional integration zone. These are then defined more clearly by product or product-related regionally valid environmental standards.

Environmental standards should be based on scientific-technical knowledge and exactly defined quantities (Fritzler 1997:86). They are determined for different *objects to be protected* (people, animals, plants, water), different *dimensions* (temporal, spatial), according to various *evaluation approaches* (e.g. natural scientific, technical-economic, political-social) and with

differing *degrees of legal validity*.⁶² The SPS agreement in the final act of the Uruguay round does not call for a scientific foundation for sanitary and phytosanitary standards, but a risk assessment and the application of scientific basic principles (Houseman 1994:26). In regional agreements, special regulations on sanitary and phytosanitary standards are not required because there are enough multilateral concrete cases. Environmental standards can be set in terms of jurisdiction (e.g. waste water standards), by state institutions, or by private institutions (e.g. ISO 14000 series). By raising or lowering of environmental standards the degree of internalisation of environmental costs can be varied. Seen strategically, standards can be used to secure the environmental *status quo* or to increase the level of protection.

In the section of the NAFTA agreement on *Standards Related Measures* it is said that measures are taken to achieve such goals as security, protection of persons, animals and plants, and sustainable development (NAFTA 904.3, 915). **Direct** environmental standards serve to implement environmental quality targets immediately (e.g. upper limits for emissions). **Indirect** environmental standards are set by sectoral policies, e.g. by agricultural and forestry policy, and determine, for example, processing standards. Sectoral policies can influence the environment considerably (see case study on sugar in Repetto 1994:12ff.), even if they are not primarily directed towards environmental goals. A general distinction is made between *product standards* and *process standards*.

5.2.1.1 Product and process standards

Product standards define technical or other quantitative criteria for specific products, e.g. with regard to product characteristics, component parts or ability to be recycled (Vossehaar/Jha 1994). They describe the physical properties of a product (e.g. the content of lead in petrol), the maximum environmental pollution caused by using or consuming a product (e.g. emissions of a passenger car) and regulations for assembling, packaging and marketing a product (e.g. regulations on packaging material and product designations) (Thomas/Te-reposky in Esty/Geradin 1998). If a certain product standard is only possible in connection with a certain production method, or can only be achieved using this method, then this will influence the selection of the production method and is, in the broadest sense a related PPM standard (see below).

Product standards and norms have long played an important role on the international level. In the past, developing and newly industrialised countries were not much affected by such standards. Environmental standards referred mainly to established technical products in the more traditional sectors of industry in the developed countries (Wieman 1996:181). Especially, however, the new health and environmental standards impact on the more traditional sectors in the developing countries,⁶³ such as in India, Zimbabwe, Brazil and Chile the textile sector, the tea and the flower industry, and the wood-processing industry. 63 % of textile exporting companies in India are small and medium enterprises (SMEs), which are not easily reached by information on changes in product requirements. In addition to the lack of information, there is also a lack of cooperation with the national dye-making industries in order to co-

⁶² If environmental standards come into effect in the form of laws, directives, or administrative regulations, then they are legally binding. Guidelines, on the other hand, are more for orientation for the legislature and are much less binding (SRU 1996:254).

⁶³ German law has, for example, stipulated an obligatory labelling for garments containing more than 1500 mg/kg of formaldehyde. Furthermore, the use of PCB is forbidden, the upper limit for detection being 5 mg/kg. This has had a very big impact on the production of leather in India, in which Pentachlorophenol was used (Trez: U.V.,3). Of further relevance to the textile industry is the ban on the production and distribution of goods which could contain carcinogenic amine.

ordinate procedures in order e.g. to adapt to German labelling regulations for formaldehyde emissions. In the flower and textile industry of Zimbabwe, lack of information about product requirements in the importing countries is large. To this must be added a lack of capacity to check imports of raw materials (Trenz 1999:9f).

The increased requirements in the area of environmental and health standards can only be fulfilled by the developing countries and their SMEs if the costs for laboratory tests, the spreading of information on standards to the manufacturers, and training through workshops and seminars, are also borne in part by the countries with higher environmental and health standards (e.g. in the form of technical or financial development aid).

Process and Production Methods (PPM standards) do not regulate the characteristics of a product, but its production process. They cover emissions, waste water, use of resources, waste, risk and other standards related to the production process (technological standards, filters, catalysts, etc.). In a broader definition, PPMs include all measures which influence the production process, including energy taxes, or liability law (Esty/Geradin 1998). Environmental norms for processes are based especially on operational *risk assessment*.

PPMs can be product-related or non-product-related. **Product-related** PPM standards make it possible to come to conclusions about production methods by examining the products (e.g. on standards of hygiene for food products, pesticide content of cut flowers). The environmental damage caused by the production methods will go well beyond the product itself. The production method influences the characteristic qualities of the product, so that environmental damage can be caused by using or consuming the product. The environmental damage occurs in the importing country, meaning that the externalities occur during consumption. If a product used in the importing country emits substances which are banned by environmental laws there, if maximum permitted values are exceeded, or if a product has been treated with substances which could cause harm to the user in the importing country (Wiemann 1996), then the importing country can reject these products. Product-related production standards of this kind are in compliance with GATT, as long as they are not discriminatory, or protectionist (Stevens 1994:8). Instead of product-related PPMs, product standards can be used.

Non-product-related PPM standards take into account of situations in which environmental damage is not caused by the product itself. The production method causes environmental damage in the country in which the product is manufactured - i.e. the externalities occur during production. Examples are the ban on dragnet fishing by the *Wellington Convention* of 1989, or limiting quotas for catching marine life in the Antarctic in the context of the *Convention for the Conservation of Antarctic Marine Living Resources* of 1980.

Since the dividing line between product-related and process-related environmental standards is in many cases fluid, in future process-related standards will appear more frequently. It is safe to assume that a balance between free trade and stricter environmental standards will be achieved, as the WTO reflects the interests of the most important trading partners and must always respond flexibly to their demands (Wiemann 1996:181f.).

Minimum standards define a level of environmental protection which may not be exceeded. In most cases, they are concerned with quantitative setting of limits to effects on people or the environment. Minimum standards, for example, clarify certain qualitative characteristics (e.g. "70 % recycled paper content") or set **upper limits** for emissions. **Emission standards** are process-oriented. They define maximum values - and are thus **maximum standards** - for emissions in the environmental media (water, air, soil) and usually specify substances. For

this reason, they are usually not defined in reference to specific goods. They are mostly standardised as bans or requirements, often on the basis of *best practice* or *best available technology* (**BAT**).

On the national level, product and process standards are tried and tested instruments to influence the environmental quality of a country. Within a free trade zone or an economic union, as well as in a global trade environment, the implementation of process-oriented standards is controversial. In terms of *GATT regulations*, there are no restrictions with regard to regional or national product standards, as long as these are not used in a discriminatory fashion (Art.III). The application of process standards to international trade is, according to GATT regulations, because of its extra-territorial nature, regarded as "interference in the internal affairs of a country" and as a matter of principle not allowed:

In connection with the protection of "*global commons*" by process-oriented trade restrictions, there are two prominent conflicts in GATT. Both are based on US legislation which proscribes certain methods for catching tuna and shrimps. In both disputes, the boycotted parties filed complaints with GATT. The latest case, the arbitration ruling on the shrimp and turtle case of 1998, goes back to a complaint by India, Pakistan, Malaysia and Thailand. The US government banned the import of shrimps from these countries because in catching the shrimps, an unusually large number of turtles were killed. The rulings of the WTO panel and the WTO *Appellate Body* on this matter are remarkable. The panel had argued that a unilateral measure such as that taken by the USA called the trading system as a whole into question, and was therefore not in compliance with GATT. A measure of this kind could lead to different countries introducing different PPMs, making it impossible for importers to take all standards into account (Ranné 1999:76).

This ruling was opposed especially by environmentalists from the USA, who feared that such a restrictive ruling by the panel could be used in future by the WTO to reject production-related measures. They applied pressure to the US government, which appealed against the ruling. The Appellate Body of the WTO came to the same conclusion, that the US action was not in conformity with GATT. Their explanation, however, was very different from the Panel's. Restrictive measures are explicitly allowed under Article XX. The PPMs, however, must apply in the same manner for all importing countries. The USA had previously (1991 - 1994) come to an agreement with a number of Caribbean states granting longer transition periods (three years) for the change to new catching methods. The fishers in the boycotted countries had been granted a transitional period of just four months to change to the use of nets with a so-called "*turtle excluder*" (BWTND 1998:3). The Appellate Body also criticised that the trade measures forced other WTO members to adopt the same standards as the USA, without regard to their different export conditions. The USA had on the whole not made sufficient effort to achieve protection of the turtles by other alternatives (e.g. an initiative for a multilateral agreement). The first step for the GATT-WTO regime is thus as a matter of principle to clarify whether the "objectives have been addressed in a manner less restrictive to trade" (Art. 2.3 TBT).

The result shows that unilateral, process-oriented measures could be really effective, and could be seen as conforming to GATT, but are to be regarded as exceptional means. They are intended as an incentive to resort to the harsh instrument of import restrictions only as a last resort, and to try first the "softer" instruments of cooperation and political solution.

Strengths of standards (in general) as instruments in integration agreements

- Minimum environmental standards are relatively easy to define.
- They communicate a minimum standard of security and calculability.
- Minimum standards make it possible to internalise suitable costs for the use of resources.
- Product-related standards can stimulate product innovation.
- PPM standards are applied to the *causes* of environmental strain and give incentives to technological innovation.
- Standardised environmental standards can reduce competitive disadvantages between individual countries caused by different levels of environmental regulations.
- In comparison to product standards, PPMs can have a less discriminatory effect on foreign suppliers. Manufacturers in developing countries, on the other hand, will tend to be more at a disadvantage. This may be desired from the point of view of competitiveness, or not.

Weaknesses

- Regionally standardised environmental regulation do not take into account special aspects of the region or of regional policy. For example, local regions high concentrations of damaging substances require strict regulations on maximum limits. The application of the same regulations to economically weaker regions could be an obstacle to development.
- With minimum standards, there is no incentive to achieve more than that which is prescribed by law.
- Because of unknown cause-effect relations, clear limits can often not be defined. This involves the risk that the limits are fixed under pressure from lobby interests, leading to a weakened effect.
- With maximum values, the maximum permissible total emissions must be defined, in order to be able to break them down to the individual sources. This can prove to be very difficult.
- Maximum values must be defined as objectively as possible, but usually also include arbitrary elements.
- Standards assume that there is a "causer" and are therefore not applicable in the case of *non-point source pollution*.
- Standards have to be controlled, and sanctions imposed if they are broken.
- The fulfilment of minimum standards can involve problems for foreign enterprises, particularly for those in developing countries, in obtaining information or in realising more demanding standards. (This effect can either be deliberately brought about - e.g. by unclear or non-transparent standards - or deliberately avoided.)
- In determining standards there is usually an asymmetry in information between the authorities and the enterprises. Authorities are dependent on industry to be regulated for the supply of data and therefore susceptible to lobbying. Enterprises will exaggerate costs and play down negative effects.

Opportunities

- Product-related environmental standards conform to GATT if they serve the protection of the environment and human health in the importing country and are applied equally to national or regional products and to imported products from third countries.
- According to the preventative principle in its interpretation as the *Precautionary Principle*, Principle No. 15 in the Rio Declaration, environmental standards should also be set if there is uncertainty about the causes and consequences of an environmental problem. Even according to the supplementary interpretation as the "*principle of preventive action*", which is included (indirectly) in Principle No. 11 of the Rio Declaration, standards should be used to avoid and minimise damage to the environment (Sands 1995:65)

Threats

- Standards can be more effective barriers to trade than import duties. Developing countries in particular see them in part as an unpleasant imposition, rather than as environmental protection measures.
- Non-product-related PPMs are not permitted according to GATT regulations (Chahoud 1998, but compare section 5.2.1.1). They infringe on the sovereignty of a country and are therefore an obstacle to its right to national autonomy in determining its level of environmental protection.⁶⁴ In the Uruguay round, in the agreement on technical barriers to trade (TBT), only production and process methods which relate to the quality of the products were included (Wiemann 1996:181).
- For protection of the climate, an absolute "cap" would be necessary. A reduction of emissions per unit is not enough because of the increasing number of sources of emissions, meaning that total emissions are increasing.
- Increasing competition between locations and increasing competition in trade because of increasing regional liberalisation mean are putting pressure on national environmental policy, which potentially could lead to a lowering of national environmental standards (downward harmonisation, or a "*race to the bottom*").

5.2.1.2 Regional (harmonised) standards

The definition of regional harmonised standards first requires a definition of regional and global protection goals. Minimum goals of regional environmental policy should not be restricted to securing existing national standards. This should not mean restricting the right to higher national environmental standards, but it must at the same time be ensured that existing standards are not lowered (as in NAFTA). With a low starting point for harmonisation, it is useful to agree on a step by step *phasing up* of standards. Regional harmonisation of standards does not primarily mean full harmonisation. This would lead to greater transparency and clarity about rules for those involved in the market, but on the other hand would take too little account of natural national comparative advantages and the needs and preferences of the individual countries and the level of development of the integration partners.

In the weakest form, regional standards on a voluntary basis can be agreed (*indicative standards*). This is useful when environmental policy integration is still at a low level. The efforts within the EU with regard to eco-labels and eco audits are an example of this. At a later stage, the lack of formal commitment of such agreements can be fully or partly replaced by stricter variants (*obligatory standards*). Of the existing integration zones, only the EU has been able to establish unified environmental standards which are binding for all members. The EU can harmonise environmental standards at a high level according to Art. 100a of the Single European Act. Under certain conditions, the member states can also establish stricter standards. There are EU standards on air pollution, protection of water, protection of waterways, hazardous chemicals, packaging (e.g. the recycling content of paper), and the efficiency of energy and resources of consumer goods. The maintenance of health standards for meat or medicines can only be controlled in the production process. The EU thus checks the hygienic conditions for production processes in developing countries before it grants import licences. The EU also

⁶⁴ A boycott of Colombian cut flowers by an importing country because of their method of production would thus not be permitted if the trade restriction measure, e.g. was based on the damage caused by pesticides in the production process to the health of the workers in the *exporting* country (Altmann, 1997:62). Colombia must be allowed to make its own decisions about the level of its environmental standards. It would be different if the importing country could prove that the remaining pesticides in the cut flowers were a health hazard for its own population and restricted the trade for this reason.

makes use of many measures in its single market which have already been tried and tested on the national level.

The NAFTA agreement refers explicitly in Chapter 7b to environmental and health standards and related objectives. NAFTA permits varying environmental standards (Art. 904.5), but it is not allowed to lower standards. On the contrary, the partners to the agreement are called upon to strive for harmony at a high level (Art. 713, 714, 905, 906; Art. 24 NAAEC; Feretti 1994:121; Derrick 1994:403). The national environmental standards may also be at a higher level than the internationally normal environmental standards,⁶⁵ as the GATT text stipulates on Technical Barriers to Trade (TBT) if these prove to be obviously "ineffective or unsuitable" (TBT Art. 2.4). The import of goods and services which do not meet these standards can be forbidden, provided that the ban does not place the foreign goods or services at a disadvantage compared to the domestic ones.

According to NAFTA Art. 904.4 a measure will not be seen as an unnecessary barrier to trade if "*the demonstrated purpose of the measure is to achieve a legitimate objective*". The definition of a "legitimate objective" according to Art. 915 includes the protection of human, animal, or plant life and health, and of the environment. On the whole the definition of consumption-related environmental standards in NAFTA leaves more room for the application of trade-relevant measures, and goes beyond the GATT regulations by permitting higher national environmental standards and keeping to the principle of sustainable development. The trilateral *Commission on Environmental Cooperation (CEC)* advises the governments with scientific research findings and workshops. Agreement on the harmonisation of environmental standards is easier to reach when all nations are involved in the development of standards. This could help to avoid future cross-border environmental conflicts, if e.g. the level of air protection could be controlled by setting the upper limit for emissions from road vehicles together within the region, and not, as so far, by one-sided pressure from the USA.

In order to introduce regional standards, agreement on **transitional periods** must be achieved. The maintenance of obligatory standards must be monitored and if necessary enforced with sanctions. This takes place in practice in a decentralised manner at the local level, whereby the corresponding decision-making and sanctioning authority can be organised in a decentralised (national/local) and centralised (supranational/regional) manner. The structure and the concrete form of these enforcement mechanisms are normally established in the integration agreement itself, or are established in a supplementary agreement.

Strengths of regional (harmonised) standards

- As long as there is no established international environmental law, partial regional environmental agreements are an effective second-best solution. In some cases, norms have been developed in inter-state negotiations. Normally, however, each country sets its own environmental standards. Within the integration zone, national (non-harmonised) standards are therefore usually not very consistent and tend to be fragmentary, in part even contradictory.
- Harmonised environmental quality objectives (environmental quality standards) guarantee equal (minimum) environmental quality for all inhabitants, regardless of their geographical location.
- Regional standards can be better adapted to local conditions than internationally harmonised ones. Local *stakeholders* can have a better influence on these (including certain pro-

⁶⁵ The call by environmental organisations has been heard not to take orientation from the international norms because these tend to be on the level of the lowest common denominator.

tectionist qualities). This, however, will make them more attractive regionally than global standards.

- Because of the greater proximity of their regional institutions, they are more transparent than 'remote' internationally agreed standards.
- Environmentally aware states and integration zones can have a model function for others and by internally oriented, cause-related environmental protection measures can set the standard for others. Independently of this, states and integration zones should not allow themselves to be stopped by the lack of agreement or inability of other states from following their convictions and responsibilities by also taking global environmental measures. If in the field of the environment everybody waits for everybody else until all have found the ideal solution, then the wait will be a long one. Waiting and delaying in environmental protection, however, will lead to no respite. The problems will not become less severe, but will become worse in the future. If there should be blockages at the global level which cannot be cleared, as has happened with climate protection, problems can still be solved in the regional framework.
- With the harmonisation of national environmental standards, or the development of common regional environmental standards, there is also a reduction of the transaction costs in the integration zone. This is an incentive to agree on common environmental standards.

Weaknesses

- Because regional standards, according to prevailing practice are agreed by a process of consensus between all states involved in the integration agreement, there is a tendency towards dilution and to environmental sub-optimum standards.
- Regional standards are often not transparent (or simply unknown) and are seen as "remote" and therefore less acceptable than "local" standards.
- The determination of limits depends on adequately precise environmental information, which is more difficult to secure at the regional than at the national level.
- Regional standards do not take account of local variation in conditions.
- They offer little room for adaptation in terms of the time scale because the regulatory mechanisms mostly lag behind the real developments,
- In the case of regional environmental standards, developing countries often demand special regulations in the form of standards which have been weakened for them. This effectively means a departure from *best-practice* standards. Instead of differentiation, aids to adaptation would be better (section 5.4.3).

Opportunities

- Harmonised standards reduce the probability of location decisions being made in favour of low environmental standards. This is also true when it is to be expected that new members will adopt the regional standards (CEFTA/EU). New investors must use best-practice standards (European agreements).
- Common environmental standards are supported in the long term by the fact that the economic inter-relations between the countries are growing, so that competitive, efficient enterprises are also playing a part in determining the level of standardisation.
- Agreement of regional environmental standards is made easier if the terms are set for a determined time and are reviewed at regular intervals.
- The right to have higher national standards increases the acceptance of regionally lower standards (NAFTA).
- Harmonisation (or near harmonisation) of such standards within the integration zone reduces the disadvantage on the basis of lack of transparency of nationally varying standards because market segmentation is reduced.

- Institutional exchange of information improves the conditions for development and acceptance within the integration zone.⁶⁶
- Harmonisation of standards on the regional level depends on the heterogeneity of the countries with regard to environmental equipment and level of development, and the prevailing preferences and values (Esty/Geradin 1998). On the basis of political advantages of regional integration, the strategic behaviour of the states can be reduced in the negotiations, which increases the chances of agreement on regional environmental standards.
- If national environmental laws and standards are similar, but are implemented with different degrees of intensity, then there can be a contractual obligation to implement them at the regional level (Esty/Geradin 1998).
- A regional standardisation in integration zones between developing countries can lead to a weakening of the accusation of "environmental dumping" which is often brought against developing countries by the industrial countries (Repetto 1994:38).
- The increasing pressure of competition in regional integration can induce less competitive enterprises to try to increase the externalisation of their environmental costs in order to reduce expenditure. A regional agreement on minimum standards can make national efforts to balance out nationally different level of protection superfluous.

Threats

- Only the EU is able to set environmental standards on a sovereign, supranational level, binding for all integration partners.
- In so far as diverging national standards are retained, distortions of competition may occur. If this happens, counter measures may be required.
- Harmonisation of standards at a high level in the case of very unequal contextual conditions would be an attempt to achieve the impossible. A step by step "phasing upwards" is, however, conceivable.
- In regional harmonisation of standards, the prime objective is not to achieve an immediate full harmonisation. This would yield a higher level of transparency and certainty about rules for all those involved in the market. On the other hand, there would be too little consideration of natural comparative advantages, needs and preferences of the individual countries, and of the level of development of the integration partners. It is therefore useful to have standards adapted to different levels of development. These could apply separately for groups of states within an integration zone (e.g. the Andean group within ALADI). This possibility could be taken more strongly into account in the context of new negotiations on the Lomé agreement and in APEC.
- Inadequate administrative capacities in, legal inadequacies, and failure to implement restrict the effectiveness of standards.

⁶⁶ In NAFTA, this is encouraged by geographical proximity and by permanent political dialogue between the ministers. In addition, there is co-operation on various administrative levels of the environmental authorities, financial resources for the environmental authorities by the North American Development Bank, and the Capacity Building Programme of the BECC, which promotes focused further education and improved information policy for the staff of the environmental authorities and for small and medium enterprises.

5.2.1.3 Standards for standards

5.2.1.3.1 Necessity

In order to obtain a connection between diverging national environmental laws, it is useful to develop basic principles for national and supranational environmental standards, so-called "**standards for standards**". These could also serve as links between the different regional developments. Observation of general principles at the national level would, on the one hand, give a harmonising framework to regional environmental protection, and, on the other hand, lend more compatibility to national and regional environmental law, also with regard to international environmental and trade law. "Standards for standards" refers on the one hand to the *procedure* for the determination of real environmental standards, and on the other hand to the *type* of the standards themselves. This is not, however, the clarification of the *contents* of environmental standards.

A difference should be made between *guidelines or recommendations*, and binding *regulations* (UNCTAD 1993:10, 27f.). Apart from the EU, regional environmental agreements can therefore only set standards which will come into force after ratification and then be part of international law (i.e. binding for the states which are party to the agreement), and after their transformation into national law, also lead to binding regulations for the individual. Since, however, they only show any effect when they are also implemented on the national level, a clear difference has to be made between the agreement of standards and their implementation.

5.2.1.3.2 Approaches to harmonisation

The OECD passed its "*Recommendations on guiding principles concerning the international aspect of environmental policies*" as early as 1972. This included the principle of causality, non-discrimination, and national treatment. This is to be supplemented by the precautionary principle and risk liability. Mid 1993, the OECD added to this, taking UNCED Agenda 21 and the Rio declaration into consideration, its "*Procedural Guidelines on Integrating Trade and Environmental Policies*" (GATT 1992a, OECD 1993a). These refer, among other things, to the transparency of the standards, the obligation to consultations and international co-operation, and to arbitration in case of disputes. After a long period of abstinence, also the WTO/GATT concerned itself with environmental problems (GATT 1991). It would therefore be useful to try to achieve compatibility between the different parallel activities through common basic principles. The final objective, however, should be a consistent, binding international environmental law.

When in the development of national environmental law general principles and procedural standards were accepted and observed, it would be easier to achieve interstate recognition of national environmental law, as long as there is no supra-national regional environmental law. This does not by any means imply standards with the same *contents* (e.g. with regard to product and process standards, packaging or labelling obligations), but does reduce the probability of erratic fluctuations. Harmonisation of the contents is more difficult because there is little agreement about ideal or desirable solutions.

5.2.1.3.3 General standards for standards

- **Cooperation and voluntary participation**

The determination of environmental standards should ideally be driven by the collective recognition of the necessity for environmental protection and of a corresponding responsibility of all nations (although the so-called Principle No. 7 of the Rio Declaration speaks of a "differentiated responsibility"; GATT 1993e:5). This implies a general obligation to cooperation in developing international environmental protection standards, but does not question the voluntary nature of ratification.

- **Participation**

In all cases where norms are to be set for regions, the question arises of whether and to what extent third countries are involved in the decision-making process. Since such processes take place mainly within the industrial countries (OECD 1993:7ff.), developing countries, newly industrialised countries, and transforming countries fear that this could lead to too stringent standards, and that the specific problems and needs of developing countries and transforming countries could be neglected (OECD 1993c). Furthermore, non-participating countries would have no opportunity for innovative participation and would lag behind the industrial standards (OECD 1992:7). Their costs for information and, later, adaptation, would then tend to be higher. There are two possible types of participation:

(1) The parties who set the norms only negotiate with each other (e.g. within the EU or the OECD), and will try to take external interests into account only autonomously - 'thinking for the other countries' (**authoritarian solution**). The standards reached can thus only be valid internally, or applied to third countries unilaterally. Third countries can join the agreement later. Whether and to what extent different levels of internal interests can be taken into account in this procedure - e.g. in hearings with industry, trade, consumers, administration, science, etc. - is not to be discussed here. The danger should be pointed out, however, that norms which have been developed solely on the political/administrative level can lead to avoidable problems in practice (ICC 1991).

(2) In the process of setting norms, representatives of external interests are heard (e.g. in the case of OECD developing countries, Eastern European countries, NGOs, or international organisations) in order to identify possible problems (**participative solution**). Within the OECD, for example, a discussion is taking place about developing internal standards with a relatively high level of protection and non-discriminatory global application (OECD 1993c:3). Only one, or only a limited number of parties affected can be given the opportunity to express their opinions. Participation can relate to the whole process ("seat without a vote") or only to certain aspects (limited participative solution). Even in setting norms with a purely internal effect, it is often useful to hear external opinions.

The participative solution is always preferable, but in the regional context, authoritarian (unilateral) setting of norms is usual.

- **Transparency**

Environmental norms should not be formulated in a general and vague way, but should be as specific as possible. In regional negotiations, there is a large degree of transparency for the parties involved, but not for third countries. Furthermore, there should be a general obligation to inform, including the obligation to explain why. Art. X of GATT requires publication in this sense. It would also be useful to set deadlines for the implementation of measures, instead of requiring immediate implementation (except in emergencies). This would be good to give those involved the opportunity to put the information into practice and to adapt. It would also give them the opportunity to have some influence on the formulation of the norms, or to register their objections. Lack of acceptance of environmental norms, apart from not taking particular interests into account, is often justified by lack of information. Inadequate transparency in setting norms is one of the main causes for complaint (GATT 1993) and represents a risk which is difficult to calculate from a business point of view.

5.2.1.3.4 Standards with regard to scope

- **Global versus regional scope**

Although agreed only regionally, the standards negotiated for integration zones should apply not only internally, but also, in a non-discriminatory fashion, to third countries. This increases the incentive to take on and spread such standards. Necessary exceptions should not, however, be included in the basic principles, but should be stated explicitly as exceptions. The environmental standard itself should be generally applicable. The most comprehensive claim would be for global validity ("universality"). The smaller the group of countries setting the norms is, the stronger the discrepancy between the mandate for negotiation and a global claim. In general, it can be said that regional environmental protection norms should apply globally in so far as the environmental strain has a global effect, and all the more if the causes are also global. There is here a homogenisation with regard to responsibility and being affected, in spite of all heterogeneity with regard to the ability to deal with these problems.

- **Non-discrimination and exceptions**

There are several points of opposition to a non-discriminatory application of unilaterally fixed regional norms. Firstly, complex realities cannot be generalised - the reality of the different states is simply too heterogeneous. For this reason, case by case solutions are often more useful, in order to be able to deal with the specific causes and effects. Secondly, the ability to absorb environmental strain also depends on the level of development. From the point of view of the theory of comparative (or, usually more correctly, absolute) advantages, a levelling by general standards can be inefficient on the level of the global economy (OECD 1993b:15, UNCTAD 1993:26; Stevens 1993:611). Thirdly, this goes hand in hand with the aspect of financial and social acceptability of environmental standards. A high standard may place too much strain on some countries, and may require compensation measures (UNCTAD 1993:26f.) or a staggered implementation schedule. Fourthly, for reasons of sovereignty, different social preferences and traditions must be taken into account. Fifthly, in certain economically difficult situations, it must be possible to deviate from the rule. Sixthly, for ecological emergency situations, in which rapid action is imperative, exceptions must apply.

For various reasons, it must be possible to differentiate, and exceptions are necessary and useful ("*special and differential treatment*"). As an example, the Polluter Pays Principle (PPP) is supported by the OECD in general, but specifically limited for developing countries (Stevens 1993:608). This, however, should not call into question the basic validity of norms. Otherwise there is the danger that the exceptions will undermine the rules. A rough differentiation according to groups of countries can, however, only be of limited use, because this will result in limitation and definition problems. China, for example, is generally seen as a developing country. Russia, the Ukraine, and Poland are not. Added to this is the use of unclear terms such as *needs*, *concerns*, *requirements*.

5.2.1.3.5 Standards for effectiveness and application

- **Basic standards**

The general principles of environmental law are to be seen as basic standards. The prior estimate of the **environmental compatibility** of projects, and of the integration objectives themselves should be a basic standard. The **principle of causality** supplements the precautionary principle and corresponds to the principle of internalisation of external costs. The dilution of this by the **principle of sharing the load** within society is only acceptable if, e.g. supported by social considerations, or if internalisation cannot be carried out, e.g. because of methodological problems in measuring the damage. The logical consequence of the principle of causality is **risk liability**.

Environmental norms should have a cause for their necessity and be suitable from an instrumental point of view. There should be a reasonable relationship between the intensity of the regulation, or the application of measures, and the intended goal (**criterion of proportionality**). Environmental regulations should only be applied so far and so long as necessary to achieve the desired goal (**principle of minimum interference**). It is especially important that regulations to deal with individual cases should not be over generalised. This therefore requires permanent monitoring of the norms.

- **Standards for formulating objectives**

Environmental objectives should be formulated as precisely as possible. General objectives are often not operational, and thus not readily applicable, and therefore inefficient (GATT 1993e:7). It must be possible to deduce criteria (indicators) from the objectives, and to use these to judge whether the objectives have been reached. Environmental objectives must therefore be methodologically and scientifically well-founded. One problem is the rarely adequate availability of data (OECD 1993d:3f.), in spite of the WHO/UNEP Global Environmental Monitoring System (GEMS), which has existed since 1976 (OECD 1993b:8). Another is the fact that causal relationships are not always clearly documented, both with regard to the cause of environmental problems and to the effect of environmental protection measures (see section 2.3).

- **Product and process standards**

While product standards are allowed by international trade law, as long as they are not used in a discriminatory manner, process standards are not. This is based in turn on the ban on extra-territoriality. Hence, if the production process causes environmental pollution, but the product itself does not, then there is little that can be done other than to ban the use of the product in the integration zone entirely. Process standards with effects on international trade are only

possible on the basis of an international agreement, and even then are only binding for the parties to the contract. According to GATT regulations, they could only be globalised by a waiver.

From the point of view of sovereignty law, this makes sense. The ban on process standards, however, is an obstacle to efforts to have environmental effects outside the integration zone, either in connection with global problems, such as the gap in the ozone layer, or to avoid cross-border pollution from production processes. "Environmental degradation is best handled at its source" (OECD 1992:7). Environmental standards which do not relate to trade can therefore not be enforced outside the territory. National sovereignty cannot, however, be used as an alibi: also the interpretation of human rights law is based on international, unified standards, which cannot be re-interpreted at will on the national level.

• Instrumental standards

General principles for the development of regional environmental norms must also include instruments for environmental protection. There is prevailing theoretical agreement that internalising external costs can counter many environmental problems. With regard to the intensity or extent of cost internalisation, however, opinions diverge greatly, not least because there are no established standards for the monitoring and evaluation of environmental damage. Regardless of this, market instruments must be supplemented by legal measures, especially with regard to protection of health and defence against danger. The measured application of state intervention must take legal considerations into account, including, e.g. the advantages and disadvantages of price versus quantity instruments. On the whole, however, this aspect recommends itself for regional standardisation, but hardly for international standardisation. General principles, such as the principle of proportionality mentioned above, can also be applied here.

• Implementation of standards

The effectiveness of regional environmental standards depends primarily on the will of the individual states to implement and enforce these standards within their jurisdiction. Regionally agreed recommendations on trade are ineffective if there is no national will to implement them. In regional integration zones, it can, however, be assumed that the will to implement is greater than in other international agreements. *Within* integration zones, therefore, it should not be necessary to defend regional standards with trade or other sanctions.

5.2.1.4 Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Regional standards	++	+	+	+

++ very well suited, + well suited, o suited with qualifications, - not suitable

Regional environmental standards are good, or very good, and necessary, for all kinds of integration agreements. Under Article III of GATT, each country can demand that imported goods meet its environmental standards.⁶⁷ Product standards are permissible according to Art. XX, process standards (PPMs) are regarded as impermissible. Integration agreements should contain general standards (standards for standards) and agreements on minimum standards.

⁶⁷ See also Art. 2 of the WTO agreement on technical trade barriers.

The control of the observation of standards depends on effective administrative and legal capacity.

5.2.2 Environmental requirements in investment protection regulations

The liberalisation of internal trade in the context of the integration agreement is always accompanied by investments. Trade liberalisation without direct investments would not be effective in the long term. Direct investments are normally safeguarded by investment protection agreements. Agreements of this kind can be a part of the trade agreement, but are often separately instituted. They should, among other things, include a binding dispute settlement procedure between the states and between investors and the state.

Strengths

- Regional investment protection agreements replace a number of bilateral agreements, which in part overlap and are in part inconsistent.
- Investment protection regulations clarify environmental standards for domestic and international investors in a non-discriminatory and transparent way.
- Plurilateral investment protection agreements can be combined with environmentally related *performance requirements*, and - by binding minimal standards - can contribute to direct environmental protection. This prevents a "race to the bottom" and applies for internal and external investment *promotion* measures and agreements, and for standards for use (e.g. fisheries, forests).
- Investment protection agreements with special clauses for environmentally friendly investments increase the attractiveness of the location and are favourable to *best-practice* investments. In this context measures for the protection of intellectual property have to be underlined. Win-win aspects of this kind are a specific element of environmental protection agreements.
- Investment protection agreements contribute to the spread of environmental technology and management practices in the guest country.
- Investment protection agreements with environmental components which are in line with the trade and/or environmental agreement secure the level of environmental protection, especially on the technological level.
- Investment protection agreements which include an obligation not to lower any environmental standards as an incentive to attract foreign investments work against any potential "flight of industry" and against the formation of so-called "*pollution havens*".

Weaknesses

- It is possible to secure the environmental *status quo* (Horseman 1994:20), but investment protection regulations cannot achieve a dynamic forward development in environmental standards.
- Regional investment protection agreements, in view of global environmental problems, also with regard to environmental protection clauses, are only a *second-best* solution in comparison to multi-national agreements.
- Compared to other factors (the attractiveness of the market, stability, etc.), investment protection agreements play only a subsidiary role in investment decision making.

Opportunities

- Regional investment protection regulations can contribute to the spreading of international environmental standards and to their implementation regionally and nationally.
- Internationally active enterprises transfer domestic environmental standards (*best practices*) to their foreign investments.
- The acceptance of regional investment protection regulations can be strengthened by harmonised national fiscal or other economic incentives, including public procurement regulations.
- The incentive for this can be promoted by liability obligations of the parent company for the foreign investment in its home country, so that environmental breaches will not be seen as "*white collar offences*", and by liability regulations for the event of bankruptcy.
- Voluntary agreements with industry can reinforce this practice.
- Linking investment protection regulations with competition rules can make an industrial location more attractive.
- The public in the guest country and in the country of origin is becoming increasingly aware of direct investments, particularly with regard to the flight of industry to pollution havens. There should therefore be transparent *private-public* complaints procedures.

Threats

- Environmental standards (e.g. production bans) and national environmental administrative regulations (environmental planning and permission procedures) can prove to be restrictions on entry to the market.⁶⁸
- Environmental standards in investment protection agreements must be in line with rules on intellectual property.

Results and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Investment protection	++	+	++	++

++ very well suited, + well suited, o suited with qualifications, - not suitable

Environmental requirements in investment protection regulations are suitable or very suitable for all types of free trade agreement. In integration zones between developing countries, restrictions with regard to the setting of binding minimum standards are possible (compare section 5.2.1). WTO regulations do not make any environmental policy reference to TRIMS.

5.2.3 Liability regulations

The principle of causality states that the party which causes the environmental damage must bear the costs. Internationally, there are very many very different liability regulations in the area of the environment. Some of these are established in specific environmental liability law, others are elements of civil law. Recognition in criminal law is only in a few countries and only in exceptional cases. In most countries, the principle of liability dominates. The legal

⁶⁸ Within NAFTA so far only one environmental standard has been declared illegal. This was because it breached regulations about unlimited access to markets (NAFTA Chapter 11). In August 1998, the Canadian government was forced by a judgement of the NAFTA tribunal to lift a ban on MMT (a toxic additive to petrol) and to pay US\$ 250 million in compensation to the complaining company, US Ethyl Corporation (see section 4.1.6.1).

principle of strict liability (liability for endangering) only exists in a few industrial countries (compare section 6.2.7).

On a weaker legal level, obligations to take back goods for recycling also belong to environmental liability law because in future the duty of manufacturers and importers with regard to the disposal of products will be greater - e.g. with obligations to take back electronic devices, newspapers, or cars. There will be new labelling obligations for hazardous substances and stricter liability regulations for manufacturers and dealers. This will increase the pressure on suppliers to make public their environmental practices by eco audits or similar environmental management systems (compare section 5.4.1).

Strengths of regional liability regulations

- Obligations to economic compensation for environmental damage increase the awareness of risk, environmental awareness, and willingness to take precautionary measures on environmental matters.
- Effective environmental management protects individuals and the environmental media.

Weaknesses

- Regionally binding liability law is only possible in the EU. In other integration zones it can only be achieved by harmonisation of national laws. International harmonisation of laws have in practice tended to remain incomplete.
- A supra-national EU liability law only has the status of civil law. Environmental *criminal* law is only possible on the national level and rare.
- So far, liability obligations have usually covered only material damage. Immaterial damage is covered not by liability law but by civil law.
- In international law (as in European law) there are no functionally structured liability regulations which do not involve high transaction costs and legal risks for victims of damage and which offer a fitting match of damage and compensation. Above all regulations for cases of large-scale damage usually involve great difficulties.
- Stringent liability rules are - apart from in the EU - only possible in national law.
- Existing liability law is not preventative in nature, but provides for remedy after the cause. In real cases, much depends on the avoidance costs and the willingness of the liable party to take risks.

Opportunities

- In a "soft form" the principle of causality is included in Principle 16 of the Rio Declaration (Sands 1995:66) and thus has a basis - if a very weak basis - in international law.
- Regional integration zones cannot - apart from in the EU - establish binding supra-national law, but can only make recommendations for the harmonisation of law.

Threats

- The principle of causality is not widespread in international law - as opposed to national law.
- In national laws of developing countries environmental liability law - in contrast to the law of OECD countries - is practically non-existent (Repetto 1994:24). An exception to this is e.g. India.
- Because of lack of institutions and international agreements, at present it cannot be implemented.
- The effectiveness of national liability law is impeded world-wide by inadequate investigation facilities and lack of consistent law enforcement.

Results and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Liability law	++	o	+	+

++ very well suited, + well suited, o suited with qualifications, - not suitable

Liability law obligations secure the principle of causality. It should always be integrated into regional free trade agreements, even though its enforcement requires effective administrative and legal capacities, which are often lacking in heterogeneous and weak integration zones.

5.3 Economic instruments

Economic (market) instruments of environmental protection include the **imposition** of environmentally-related fees, taxes, and other levies, and **support** by subsidies or tax relief. They provide incentives to avoid environmentally damaging behaviour, and to promote environmentally protective behaviour. Experience with market-oriented instruments world-wide is, however, limited, although they have been introduced more widely in Europe and the USA in recent years (OECD 1994a). In both regions, however, regulatory norms predominate. Comparative empirical analyses on the basis of alternative scenarios with quantitative and price instruments are practically not available (Zamir:22).

Market instruments (taxes, subsidies, emission certificates) have a widespread bad reputation with politicians, voters, and administrations. They are favoured especially by environmental organisations and the environmental industry. (In the meantime, however, there are in nearly all EU states moves towards reforms in ecological taxation and environmentally-related subsidies.)

The following brief evaluation is much compressed, in order to avoid overlaps with the subsequent sections.

Strengths

- Market instruments have dynamic environmental effects because they provide economic incentives.
- Market instruments take into account the different economic conditions in a heterogeneous integration zone more effectively than do horizontally harmonised standards.
- Economic instruments such as product taxes are difficult to avoid, which is an advantage in integration zones with weak state capacity for control.

Weaknesses

- Market-oriented instruments do not lead directly to visible results. The rationality of regulations is therefore often easier to communicate.

Opportunities

- In the process of restructuring transforming and developing countries and building up environmental protection structures, it is useful to place the emphasis on market instruments from the beginning.

Threats

- In integration zones with considerable inflation, the effect of levies is limited if the amounts are not raised continuously.

5.3.1 Environmentally related taxes and levies

Environmentally-related taxes and levies are controlling instruments aimed at medium or long term substitutional effects (e.g. eco-taxes on energy and fuel). They are also intended to help maintain certain environmental standards or limits and to implement the principle of causality. Taxes and levies influencing the individual behaviour are unpopular instruments of financial policy because they are by their nature not stable sources of revenue. As soon as they achieve their effect, the environmentally damaging items taxed will become less common and revenues will fall. In practice, the amount of tax or levy is usually low, so that there are few changes in behaviour and the fiscal objectives are not affected. Examples are the product taxes (various vehicle and fuel taxes, batteries, lubricants, packaging, fertilisers, pesticides, throw-away articles), deposit systems (cans, plastic bottles, gas cylinders, old cars), use fees, emissions levies (air, noise, protection of soil, waste, effluent) etc. (OECD 1994a:70). Existing eco-taxes, e.g. CO₂ taxes and a large number of other "green" taxes and levies in Scandinavia and the Netherlands have developed into being sources of income rather than influencing instruments. Eco-taxes tend to be aimed at energy-intensive products from industries such as iron and steel, fuel, mineral oils, non-ferrous metals, and non-metallic minerals. In some countries, however, exactly these industries enjoy tax exemptions, so that in fact the taxes are factually on households, and at a low level. The fiscal purpose - as in the case of petrol taxes in Germany - is foremost, and experience shows that the population accepts such taxes without resistance, but they do not achieve any effective changes in environmental behaviour.

Strengths

- Environmental taxes and levies are an effective instrument for the direct implementation of the principle of causality.
- They have a dynamic incentive effect because e.g. every emission unit avoided leads to a reduction in the tax load.
- Environmental taxes and levies are an instrument with special market conformity since they only provide an *incentive* to reduce environmental consumption. The manufacturer has the freedom to choose between paying the tax or avoiding the emission.
- The criterion for economic efficiency is fulfilled, as the adaptation to the given environmental quality goal is achieved with minimum cost.
- Environmental taxes and levies can be an incentive to investment with regard to developing new technologies to avoid pollution. For the manufacturer, this can mean gaining a competitive advantage by reducing costs.⁶⁹
- As a matter of principle, environmental taxes and levies are used as influencing instruments, so that the fiscal effect is only secondary. In the case of increasing rates of taxation and elastic price behaviour of the payers, income from the tax must actually decline.
- Continuously increasing an initially low rate of taxation (inefficient in the short term) increases planning security. It is also certainly socially and politically more acceptable than the abrupt introduction of a high tax rate. The danger exists, however, that the intended control effect will be weakened by people becoming simply accustomed to the tax.

⁶⁹ Increasing the oil price has led to comprehensive innovation in the area of energy saving and use of alternative sources of energy.

Weaknesses

- Eco-taxes are economically efficient, but their ecological effect is difficult to calculate. Many developing countries have an interest in eco-taxes for fiscal reasons.
- The selection of the right level of the tax is only theoretically possible. As there are hardly any reliable data for this in industrial countries, the right rate of taxation has to be determined by a process of *trial and error*, with variations occurring over time. Discretionary measures might be difficult in developing countries. Furthermore, the influencing function during the adaptation period would be inadequate. Empirical experience shows that the rates of taxation are usually too low to achieve a significant effect on behaviour. In addition, environmental pollution can continue to increase autonomously (e.g. increasing traffic) and thereby reduce or even over-compensate for the influencing effects.
- There is the risk that eco-taxes can become a fiscal policy instrument instead of an instrument of environmental policy. This reduces their basic acceptability in the population.
- Eco-taxes are usually accompanied by a range of exemptions. They therefore become complex, and require great administrative effort.
- In the event of inflationary developments a steady rate of taxation will have a constantly declining level of effectiveness. The rate must be continuously adjusted upwards.
- Taxation or levy measures are not suitable for avoiding risks, because their ecological accuracy is limited as they do not have a direct effect such as, e.g. civil law, but only an indirect effect by setting market incentives.
- Comprehensive introduction of eco-taxes and levies which are not balanced by cost and price reductions can have an inflationary effect.

Opportunities

- Harmonisation of national eco-taxes or their introduction on a regional level would avoid competitive disadvantages of the type that at present may result from nationally different taxation systems.
- Co-operation requirements for the introduction of an eco tax can propel the integration process.
- If there is already a functioning taxation and financial compensation system within the community, the introduction of eco-taxes will be easier. Some taxed items (e.g. petrol) are relatively easy to administer and control.
- If the principle of causality has been accepted as a basic principle, it is easier to reach agreement on the rate of taxation. One possibility is a minimum starting rate to be increased over time.
- The introduction of a regionally harmonised eco tax increases its acceptability among the population, but depends on the level of development of the countries involved. The "*regulatory chill*" before profound environmental policy measures can be overcome in the context of a regional integration agreements on a higher level. A real possibility would be a system of this kind in the EU (even if with reservations with regard to associated states) and in NAFTA. It would hardly be possible, however, in integration agreements between developing and transforming countries.
- The greater the geographical spread of a system of this kind, the lower the necessity for compensation measures for distortions of competition. An isolated national introduction would have a greater effect on competition.

Threats

- The existing resistance to eco-taxes at the national level will not be reduced in the regional context, but strengthened.

- For the implementation of an eco tax system at the regional level, it is necessary for the level of integration to be already highly developed. It is unlikely that the introduction of an eco tax by a multi-lateral agreement will come about. There must be an existing regional legal infra-structure. Free trade zones are therefore less suitable for the introduction of regional taxation systems than economic zones with a deeper level of integration, such as the EU. In countries with weakly developed taxation systems, eco-taxes could mean a high level of administrative effort. The limited administrative capacities in weaker integration zones exclude the possibility of more complex solutions.
- An introduction of regional eco-taxes requires a broad consensus on environmental and taxation policy (the nature of the tax, objects to be taxed, method of levying [country of origin, country of destination principle]). This is made more difficult by the special interests of the individual countries, as the governments would have to accept partial loss of sovereignty and authority.
- Eco tax systems which are not fully harmonised⁷⁰ can be combined on the national level with competitive disadvantages for national industries and can make the processing of intra-trade more complicated.⁷¹ Environmentally strenuous manufacturing operations can be moved abroad, leading to loss of jobs in the area. This tends to lead to lack of application of eco-taxes at the national level as long as harmonisation is not achieved. (To date there have, however, been few empirical examples of "flight of industry" because of environmental levies. In the past, it was possible to connect the Maquiladora industry on the Mexican border with the USA *also* with low environmental levies.)
- Eco-taxes in one nation only do not achieve any relief for the environment if industry is simply driven outside of its borders, especially not if production processes which are even worse for the environment are practised there. At the same time, resistance to the introduction of a regional eco tax will be strengthened there.
- Levies and tax solutions depend on a well-developed taxation system. There will also be a need for a large administrative effort for control and monitoring, which will only be possible with a well-functioning tax administration. These conditions are usually fulfilled in industrial countries, not, however, in developing countries. Thus the introduction of complex eco-taxes in developing countries can fail because of lack of administrative infra-structure.
- In regional integration zones there must be a relatively high level of structural homogeneity. Heterogeneous infrastructural conditions make the introduction of unified taxation regulations more difficult.
- Eco-taxes must be included in the national taxation policy. Since the economic policy of most industrial countries at present is an offer-oriented policy, increases in taxation are politically very difficult to achieve. The eco tax must therefore be introduced in such a way as to maintain neutrality of levels of revenue because of the desired consistency of tax and levy quotas. Otherwise considerable resistance may be expected from the population and from political circles.
- Through the payment of taxes, the members of the economy are immediately affected by the introduction of eco tax. The eco tax is thus a particularly sensitive instrument, and its introduction will require wide social consensus among the population. If this consensus is not present within the integration zone, then the implementation of the system will prove to be very difficult.

⁷⁰ The EU commission, for example, proposed the introduction of a combined CO₂ emissions tax, which then, however, under pressure from interest groups, was dropped, the argument against it being that it would lead to a loss of competitiveness. The introduction of a European environmental levy did not as a consequence fail because of shortcomings in the institutional infrastructure.

⁷¹ The procedural rules in connection with the implementation of "tax on intra-community procurement" are a good bad example.

- An eco-tax functions by setting economic incentives. This requires a functioning market mechanism for the instrument to have its full effect. In industrial nations in which market mechanisms are allowed to function, the instrument will probably function if properly constructed. In developing countries, on the other hand, which do not normally have a market economy tradition, these prerequisites are less likely to be provided. In addition, a large part of economic activity takes place in the informal sector. Under these conditions, it is questionable whether market-oriented instruments will have the desired effect.
- Resistance in the bureaucracy is to be expected when attempts are made to replace civil law regulations with levies.
- The requirement to find a tax rate which is ideal for the desired environmental effect implies a high level of information on the part of the tax policy makers. As a consequence, an information system must be in place which supplies adequate data about the state of the environment. Such information systems are in fact only present in rudimentary form at the national level and in an even less developed state at the regional level. Thus the optimal design of a regional eco tax would fail because of lack of information in most integration zones.
- The lack of data is a fact for all environmental policy instruments, but has an especially important implication for the eco-tax: for optimal design of environmentally effective economic incentives, the price elasticities of demand must also be known.
- Regional eco-taxes must be secured by border compensation levies in respect of third countries. With regard to personal taxation, agreements on double taxation may be required.

Result and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Eco-taxes	(+)	-	o	-
Fees	+	o	o	o

++ very well suited, + well suited, o suited with qualifications, - not suitable

Environmentally related taxes have many strong points as market policy instruments which in general would make them very suitable for inclusion in integration agreements. An eco tax is, theoretically, a *first-best* instrument. Because of considerable methodological and political problems with regard to national implementation and regional harmonisation, they are, however, from today's point of view, not suitable for inclusion in a regional free trade agreement. Fees have far fewer problems of political acceptability. Tariff structures are as a matter of principle not suitable for integration in a regional free trade agreement. Possible are only agreements on types of levies and principles of levying. The more heterogeneous the member states are, the less likely are the prospects of achieving a harmonisation of taxation policy instruments, and thus the less suitable are they for integration in a regional free trade agreement. If regional eco-taxes are applied in a non-discriminatory manner to imports, then in terms of GATT regulations, according to Art. III:2, there are no problems. A discriminatory application to third country imports would not be allowed. Compare section 5.3.7 and 5.3.8 on eco duties and border compensation levies.

5.3.2 Subsidies

Subsidies are used in many economic areas, such as energy production, transport, agriculture, and industry. They enjoy a large amount of social acceptability. There are specific subsidies for products, sectors, processes, and special kinds of production plants (innovation subsidies), research subsidies, subsidies for development and market introduction of sustainable sources

of energy, subsidies for saving energy, and many more. Subsidies are also often used because they have a publicity effect (photo-voltaic plants, wind power plants). From an environmental point of view, a difference must be made between subsidies which are intended to support environmental relief effects (section 5.3.2.2) and subsidies which have an environmentally harmful effect and should thus be removed (section 5.3.2.1).

Opinions diverge on the definition of a subsidy as a "support measure" (OECD:1998, 8f). In the GATT/WTO regime, subsidies are direct state support, including for purposes of securing incomes and prices, tax reliefs, or "soft" credits. Subsidies allowed in GATT/WTO, as described in section IV of the agreement on *Subsidies and Countervailing Measures* (SCM, Art. 8.2.c), leave room for financial support by governments which are intended to help the adaptation of existing plants to new environmental requirements. Subsidies of this kind must be *non-recurring* and limited to 20 % of the adaptation costs. Furthermore, they may only be used for the purchase or start up of new technologies. The measure must also clearly reduce environmental pollution and must not contribute to an increase in the rate of profitability or to savings by an industrial enterprise (Schultz 1995:429f). It must also not be applied in a discriminatory manner, and must thus be equally available for all branches of industry which wish to introduce a new technology or process method.

It remains unclear whether the GATT definition allows lax environmental and health standards to be regarded as hidden subsidies (Derrick 1994:408). It also remains open whether the WTO regulation is compatible with the principle of causality, according to which the price of a product must reflect its full production costs and the resources used.

Subsidies are interference in a market which can lead to price distortions. The nature of the problem becomes clear when one considers the effect on the regional energy industry, where subsidies for non-sustainable (non-renewable) fossil fuels (coal, gas, oil) lead to an acceleration in their consumption and the concomitant increase in emissions (Adams 1997:186). From the point of view of environmental policy, direct subsidies reduce the real costs involved in exploiting non-renewable energy sources, and thus artificially reduce the price of the final product. This increases demand and reduces the willingness to change to possible substitutes (renewable energy *fuel switching*). The consequences for the environment are correspondingly negative.

Hard coal used in the generation of energy is an example of large-scale subsidies to the detriment of the environment (Adams 1997:186) in favour of subsidised employment in mining. It may be assumed that the United Kingdom would have had to increase its subsidies for coal mining considerably on the introduction of stricter European environmental standards, if it had not introduced the removal of coal subsidies in the 1980s (OECD 1998:74). A number of investigations have come to the conclusion that the removal of subsidies for a large number of non-renewable energy sources has led to significant improvements for the environment. Shah/Larsen (1992) estimate that the removal of world-wide energy subsidies would lead to a reduction of CO₂ emissions of up to 4 to 5 %. According to the OECD-GREEN model, if present energy subsidies are continued, CO₂ emissions will increase by the year 2050 by 41 % (Lee et al. 1994).

Artificially low energy prices have a negative effect on energy efficiency, especially in the sectors of industry, transport, and agriculture. In all economic sectors, low energy prices lead to less efficient use of energy resources. With regard to the use of energy, for example, the agricultural system of the USA is one of the most inefficient in the world (Koplow 1996:202) and by the artificially low level of its prices reduces incentives to increase energy efficiency.

5.3.2.1 Reduction of environmentally harmful subsidies

Strengths of the reduction of ecologically damaging subsidies

- Subsidies which favour environmentally harmful activities contradict the principle of causality. They have the effect that there is no incentive for the causer of pollution to stop his environmentally harmful activities, because his economic load is lightened. Subsidies can even be an incentive to start environmentally harmful activities. The reduction or removal of such subsidies therefore has an immediate positive effect on the environment.
- Subsidies reduction would be an especially useful measure in developing countries, because there often especially the prices of environmentally relevant goods (water for irrigation systems, energy, fertilisers, etc.) are distorted by subsidies. The artificially low prices cause increased consumption of environmentally damaging goods. Reduction of environmentally harmful subsidies improves the environmental quality (fewer subsidised fertilisers reduces the pollution of soil and water; Bommer 1998:48ff.; Runger 1993).
- Subsidies favour only a limited group, but the costs are distributed to all other taxpayers.
- Environmentally counter-productive subsidies (e.g. subsidies for fisheries) endanger the availability of resources (fish stocks) and put developing countries (in this case) at a disadvantage.
- Environmentally harmful tax reliefs (e.g. exemption from mineral oil taxes for aviation fuel) bring in environmental externalities and are opposed to the objectives of sustainable development. Subsidies are fundamentally inefficient because of their long-term intransigence effect.
- Subsidies are a strain on public finances. Reduction or removal of subsidies contributes to greater justice in taxation and increases public revenues.

Weaknesses

- Subsidies can be "sold" very well politically (although they are being seen less favourably by politicians and voters).

Opportunities

- Reduction of subsidies can be "sold" well, apart from to the groups who have so far been favoured.
- By reducing subsidies, potential for conflict is reduced.

Threats

- Regional agreements on reduction of subsidies are rare (EU, EU/USA). In most cases, the regulations of the WTO are taken over, e.g. in NAFTA (WTO 1995:58f.).
- The implementation of regional agreements on subsidies is held up when individual countries continue to grant subsidies secretly in order to secure advantages for their economies.
- Regional or multi-lateral agreements on reductions in subsidies usually exclude subsidy intensive areas, such as agriculture.
- Common (regional) subsidies can be "sold" well, because, on the one hand, the population has an advantage from the subsidy, and on the other hand the financing is also partly borne by other countries. Tax relief is also popular because it does not require tax payments, but leads to loss of earnings.
- Claims which have once been established are difficult to reverse. Once granted, subsidies start off a process of claims inflation: countries or groups which have not previously benefited from subsidies will start to demand them. If a country has once started to receive sub-

sidies from the regional community, the government of this country will oppose any reductions in subsidies.

5.3.2.2 Environmentally protective subsidies

Strengths

- If positive external effects are in place, e.g. basic research in the field of the environment, then tax subsidies are appropriate, since otherwise the activities to be supported will not be generally supported.
- SMEs often do not have sufficient capital to carry out environmental protection investments.

Weaknesses

- The selection of suitable principles for assessing subsidies is problematic. If only direct environmental protection investments are promoted, these will mostly be *end-of-pipe* technologies, e.g. retro-fitting of sulphur filters for smoke emissions. Preventative technologies, which ensure that environmental pollution will not happen in the first place, do not normally demonstrate isolatable environmental aspects, so that it is more difficult to find a basis for calculations. The consequence is that less efficient technologies are promoted.
- Subsidies require a large degree of control, since their applications have to be controlled. This calls for an efficient administration and a corresponding application of financial and human resources. These are often lacking in developing countries.
- SMEs often do not have the time or the knowledge to apply for subsidies.

Threats

- Subsidies can lead to a source of permanent regional conflict if there is not general agreement about their allocation.
- As for taxes and levies, there should be an agreed legal framework and a financial compensation system. In the case of lower levels of integration between weaker countries, this is normally not the case.
- The financial volume is usually so limited that subsidies can seldom lead to comprehensive incentives.
- The economic policy objective in many countries is the lowering of the state quota. Subsidies effect exactly the opposite. Subsidies also have to be financed by taxes or debts taken on by the state. This is opposed to the principles of an offer-oriented economic policy.
- If subsidies are to be paid, this presupposes regionally harmonised allocation criteria, in order to avoid distortions. This requires a corresponding ability to reach consensus in the integration zone.
- Tax relief is a problem, because the transparency of subsidy payments is not ensured since the loss of tax revenue is not budgeted for. In addition, only enterprises which make profits can benefit from tax advantages.

Opportunities

- There is less resistance from those who are not directly affected against subsidies which are intended to support positive environmental effects than against other kinds of subsidies, since the "beneficiary" of these kinds of subsidies is nature, and not another group of people.
- Environmental subsidies can be directly co-financed between states.

Conclusions and Evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Removal of environmentally damaging subsidies	++	o	+	+
Payment of environmentally favourable subsidies	++	+	+	+

++ very well suited, + well suited, o suited with qualifications, - not suitable

The removal of ecologically damaging subsidies is always a good measure in all integration zones and should always be an major agreement between the integration partners. Its integration in a regional free trade agreement requires a high degree of political consensus and is normally accompanied by inter-state compensations. This limits the applicability, especially to integration agreements in which industrial countries are involved. Provided that there is external aid for adjustment (section 5.4.3) appropriate agreements can also be imagined between developing countries. Subsidies are allowed under Art. XVI GATT if they are not export subsidies.

According to the WTO agreement on subsidies and compensation measures (ASCM), payments of aid to adapt existing plants to new environmental requirements are allowed.⁷² Separating this from other motives for giving subsidies is difficult to do clearly and therefore problematic.

5.3.3 Environmental certificates

Systems with tradable environmental certificates could, under certain circumstances, function in integration zones. Theoretically, trade in certificates is a convincing instrument and in many connections a *first-best* solution. A prerequisite is the definition of clearly identifiable rights, which has so far not been achieved, the formation of clear transfer rules and functioning markets for certificates, and definitions of permissible volumes of emissions. Checking the volume of emissions and the corresponding certificate and the control of companies requiring certificates could be carried out by the national environmental authorities, who in turn could be controlled by a regional authority or a regional body.

The idea of environmental certificates is a reaction to the theoretical compensation model of *Coase*, as there is no market for property rights. Although there are many methodological problems, most of them could be solved. A series of aspects arise, however, with regard to the concrete implementation. In practice, there is therefore not yet any functioning example of a regional certificate solution. Partial examples in the USA have so far not had any regional relevance for NAFTA. Costa Rica also has some experience with *Certifiable Tradable Offsets* (CTO), which are also not yet ready for regional application. Compare also section 5.3.4 on *Joint Implementation*.

Strengths

- The limits of volumes "dissected" into certificates have a direct effective environmental effect.
- A regional organisation of tradable rights is technically and politically less problematic than at international or global level.

⁷² Art. 8.2(c) Agreement on Subsidies and Countervailing Measures.

- The maximum environmental strain is predefined. Permissible volumes of emissions can be set according to regional requirements.
- The procedure is administratively relatively easy.
- Certificates are nationally and regionally flexible and take into account different regional starting positions and interests.
- Certificates could also be used in international *counter-trade or barter*.
- The implementation of the instrument does not require a high level of homogeneity between the member states.
- Economic efficiency is guaranteed, as the adaptation to environmental quality objectives is carried out at minimal cost.
- The environmental quality objective is largely independent of changes in the economic context. If, for example, the rate of inflation rises, then the value of the certificates also rises, so that the incentive effect of the instrument is not lost.
- Certificates are instruments which conform very well to markets and systems.

Weaknesses

- Regional organisation of tradable certificates is technically and politically very much more difficult to achieve than at a national level.
- Decisive for the environmental quality objective is the immission strain. A certificate solution, however, is designed for emissions problems (diffusion problem). Consequently, it must be ensured that emissions within the integration zone are largely causal for the immission load. With regionally effective damaging substances, this requires the absence of imports or exports of damaging substances.
- There is no dynamic incentive to reduce the strain on the environment to level below the one fixed. Progress in environmental technology could cause the price of the certificates to fall, environmental consumption would, however, remain unaffected by this. It is thus recommendable to decrease the value of the certificates steadily until the targeted environmental quality has been reached.
- It is questionable whether an environmental exchange will have the same flexibility as a stock exchange, since avoidance activities are connected with the production process, which cannot be changed without friction.
- The procedure for the first issue is problematic. If the certificates are issued in relation to historical environmental strain ("grandfathering") then the countries which caused most environmental pollution in the past will be rewarded, and those which caused less environmental strain will be disadvantaged. As an alternative, the group of states could sell the certificates on the market, which raises the question of the initial price. Auctions would improve the economic incentive, but are difficult to organise and would present problems for groups of developing countries.
- As emissions would have to be monitored constantly and the whereabouts of the certificates constantly controlled, this will cost a lot of effort. In addition, the behaviour of potential causers of emissions who do not have a licence must also be monitored. There would thus probably be shortcomings in implementation.

Opportunities

- To implement a certificate solution does not require as much legal context as would eco-tax. Thus a certificate solution is also imaginable for developing countries.

- Although a certificate solution on the national level has not been realised because, among other things, cross-border transfer of damaging substances makes them look impractical, this limitation could be reduced on the regional level, but only if the exchange of damaging substances across the borders within the region is relatively low. Otherwise, the certificate solution would not meet the criterion of ecological accuracy.
- Integration zones can define common emissions targets ("*bubbles*"). Thus far, the EU is the only integration zone which has done this (for CO₂). The EU prepared its obligation to reduce climate emissions by some of its members taking on the role of an environmental "advance guard" in reducing their emissions, while others were allowed to have growing emissions (*burden sharing*) [Michaelowa 1998:28]. "Bubbles" can reduce the overall transaction costs.

Threats

- There is often emotional and moral resistance to certificate systems among the population. The certificates allow their holder to pollute the environment - a system of licences to offend (trade in "indulgences").
- In order to make regional systems comparable and thus relatively equal (e.g. with regard to a global certificates market), international standards would be needed. These, however, do not yet exist. Especially with regard to determining maximum emissions volumes and the control of real emissions, there are considerable problems. Especially the accuracy of emissions measurement with regard to N₂O and methane is inadequate. This makes a horizontal comparison of differently calculated emissions values difficult.
- A central problem is thus the credibility of certificate systems, with regard to accuracy of the values, implementation controls, and sanctions. Regardless of the fact that this would require the development of at least regional, and better global valid criteria, there would be very large problems of acceptability for regional integration zones between developing countries.
- If exaggerated values are taken as a basis for the targeted reduction, the emission certificates could soon come to relate to "hot air", show fictitious reductions, and have zero ecological value.
- It is imaginable to have a certificate system at first only in highly developed and homogeneous regions, such as the EU or NAFTA. For example, emissions certificates could be introduced in connection with acid rain in EU/EFTA/CEFTA. In heterogeneous regions, such as ASEAN, it would be imaginable to have some states begin with a certificate system while other countries levy emissions fees.
- Plants which do not have the required emissions licence, and cannot buy one, will not be allowed to cause emissions - i.e. not to produce. Resistance to a certificate system will therefore probably be strongest in those countries in which many factories would be threatened with closure.
- If regional emissions are not congruent with immissions because of a cross-border effect, then the accuracy of a certificate system is not guaranteed.
- If creators of emissions are geographically concentrated then, depending on the type of the damaging substance, there is the risk that *hot spots* could be formed. The environmental damage within the individual countries would thus be unequally distributed. This could hinder the political acceptability of the instrument.
- Competition problems could occur if rich companies hoard licences in order to drive competitors off the market or close the market to potential competitors. This would be more difficult, the more heterogeneous the level of economic development of the countries is. The weaker countries would tend to be at a disadvantage. This could also be a problem for the political acceptability of the instrument.

- In an asymmetrical economic region, the distribution of the certificates among the countries could involve disadvantages for the economically weaker countries.
- "Bubbles" require a regional system of emissions trade, including monitoring, controls, and sanctions. There are not yet international stringent standards for this. Each member state would have to be responsible for its quota. Countries must not be allowed to leave the system.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Certificates	(+)	-	o	(+)

++ very well suited, + well suited, o suited with qualifications, - not suitable

Tradable certificates are ecologically effective and economically efficient instruments. Their integration in a regional free trade agreement requires political consensus and functioning markets on which the certificates can be traded and monitored. Political and practical restrictions limit the applicability in integration zones in industrial countries. There is no reference to WTO/GATT regulations.

5.3.4 Joint implementation

The concept of *joint implementation* (JI) has strong relevance for trade with environmental certificates. The basic idea is that a country or a company can make its contribution to reduction of emissions together with other companies or in another country. JI is thus closely related to tradable certificates (compare section 5.3.3). As the discussion on JI is very controversial, and developing countries in particular fear that the demands will be very high, the Kyoto protocol for JI includes a special concept for developing countries, the *Clean Development Mechanism* (CDM). A CDM should ensure that the interests of all parties to a JI are suitably represented. The legal and other details of CDMs have not yet been specified.⁷³ Experience with JI is so far limited.⁷⁴

Strengths

- JI creates environmental improvements in regions in which there are typically too few resources for environmental protection.
- Positive externalities can stem from JI (technology transfer, formation of human capital).
- JI has the potential of a double dividend, as it has both ecological and finance and employment effects.

Weaknesses

- Credit for environmental improvements in other countries will be seen as a way of buying the right to cause pollution in the company's own country.
- JI reduces the incentive for environmental improvements in industrial countries.
- Multilateral JI require an internal agreement process.
- The "crediting" in JI only covers emissions.

⁷³ Dutschke/Michaelowa (1998) make a suggestion in its support.

⁷⁴ Compare the example of Costa Rica in Dutschke/Michaelowa (1997).

Opportunities

- The guest countries will be mainly interested in indirect investments and the related economic effects, in the local reduction of emissions and the formation of human capital. The bigger countries, for reasons of negotiating strategy, will probably prefer bilateral projects. Smaller countries would be served better by multilateral JI. Investors could get involved in profitable enterprises, and would also receive emissions credits which can be used for other projects.
- JI would be especially suitable for "mixed" integration zones (NAFTA, EU-Lomé) because developing countries would not necessarily have to be bound by high standards. An example would be project between the EU and Eastern European states with regard to a reduction in air pollution.
- An imaginable variation in heterogeneous integration zones would be regional co-financing of investments by commonly financed regional environmental funds for the reduction of hot spots, or project funds in the context of financial co-operation.
- There are hardly any *hot spots* for greenhouse gases, so that investments by industrial countries in projects of regional integration zones could have a maximum use (Dutschke/Michaelowa 1998). This would conform to the concept of JI as it was established in 1997 in the Kyoto protocol. JI can be bilateral or multilateral. For the duration of the project, each investor is given "credit notes" for the amount of his investment.

Threats

- JI requires considerable institutional prerequisites with regard to "accounting".
- Problems could occur from fixing the permissible emissions quota and the distribution of the credit notes for the reduction of the original emissions. There are not yet any convincing ideas on how to do the "accounting".
- Problems are to be expected with regard to the control mechanisms, both nationally and regionally. Since smaller CDMs also have low transaction costs, there would be a tendency to have a large number of small, ecologically inefficient JIs. Industries with high levels of emissions would prefer bi-lateral JIs.
- In heterogeneous or mixed state structures, compensation payments and exceptions rules within the integration zone would be necessary.
- National or regional institutions will have diverging (egoistical) interests in carrying out JI projects. There are not yet any operational examples.
- A problem occurs for DCs, in that the first and probably most cost-effective projects will soon be "used up" and sold to foreign investors, and DCs will only be realised later at a higher cost ("losses from low-hanging fruits").

Conclusions and evaluations

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Joint Implementation	-	+	++	++

++ very well suited, + well suited, o suited with qualifications, - not suitable

Joint Implementation requires the participation of industrial countries and NICs. Apart from methodological problems in the calculation and valuation of effects, the instrument is suitable to very suitable for integration into a regional free trade agreement. In integration zones between industrial countries its use is clearly excluded. There is no WTO/GATT regulation reference.

5.3.5 Environmentally related trade facilitation and development preferences

Trade facilitation for environmentally friendly products and services can provide incentives for the raising of environmental standards. They can be granted in regional free trade zones in the form of lowering of duties and removal of non-tariff barriers for various areas:

- For environmentally friendly products and environmental technology.
- For products *produced* in an environmentally friendly manner.
- As a general trade preference for products from exporting countries which fulfil certain criteria which the preference granting countries set for environmental policy. This conditional criteria could also be used as the criteria for granting development aid.

Trade facilitation is the positive equivalent to trade restrictions (compare section 5.3.6). Since May 1998, within the unilateral *General System of Preference* (GSP) of the EU, there have been regulations which foresee low duties for imports from developing countries which maintain certain minimum environmental and social standards. At present, preferential duties are only applicable for tropical timber and certain tropical timber products, if the exporting countries can demonstrate that they have maintained the standards of the *International Tropical Timber Organisation* (ITTO) in their national legislation (EC No. 1154/98). The reduction in duties is between 10 % and 35 %, depending on the sensitivity of the product. The standards were selected because in the view of the EU they are the only internationally recognised environmental standards for this product. On the other hand, there are other environmental standards, including those of the *Forest Stewardship Council*. Exemption from customs duties for environmental technologies are foreseen in the context of the ASEAN free trade agreement, AFTA.

Strengths

- Environmentally related trade facilitation measures increase economic incentives for effective environmental policy. They are the "carrot" to the "stick" of trade restrictions.
- Trade facilitation measures for environmentally friendly products increase the availability of such products in the importing country.
- Trade facilitation measures for environmentally friendly products and services can also be used to give incentives to raise PPM-standards.
- Trade facilitation measures for products from countries which use environmentally friendly production methods (PPMs) as environmental standards are less "aggressive" than eco-taxes, which are based on an assumed difference in the production costs (Esty/Geradin 1998). Such customs preferences can be used to achieve a gradual introduction of product standards.
- Trade facilitation methods for products, which fulfil certain environmental standards can provide incentives for the protection of local environmental goods in the export country, which were not covered by international agreements (e.g. tropical forests). Thus far, however, there is hardly any experience with such instruments, apart from the customs preferences in the context of the GSP of the EU.

- Customs preferences have a latent threatening potential, because they can be suspended if a country does not solve shortcomings in its environmental policy (*suspension of benefits*).⁷⁵

Weaknesses

- The effort needed for control of the fulfilment of the conditions for the customs preferences is great and partly not practicable.
- The evaluation of environmentally friendly production methods related to different industrial locations is problematic, because there are as yet hardly any internationally recognised standards.
- A serious disadvantage is that it is not the environmental friendliness of certain traded products which is in the foreground, but the environmental legislation. For this reason, the connection of market access to environmental policy concessions is criticised as "eco imperialism", whereby the industrial countries dictate environmental policy to the developing countries. This connection of trade and environmental policy in regional and inter-regional integration agreements is therefore problematic.
- Customs preferences for environmental technologies can, in this connection, only be defined for "end-of-pipe" technologies. Integrated environmental technologies are built in to many plants, which is impossible to establish for customs purposes.
- Preferential arrangements normally exclude products and areas of trade which the importing countries consider to be sensitive because the competition potential for the export country is considerable. This primarily includes agriculture.

Opportunities

- Trade preferences can, in heterogeneous free trade zones between industrial and developing countries, give weaker partner countries help in implementing their environmental policy.
- For export-oriented countries, customs duty exemptions, lowering of duties, and other trade facilitating measures can provide incentives for greater consideration of environmental protection.
- Reduction of trade barriers with reference to environmental aspects can be easily combined with a general policy of trade liberalisation.
- Trade facilitating measures designed to improve access to markets are suitable for integration zones with a heterogeneous membership structure, in which industrial countries and developing countries co-operate with each other.

Threats

- The incentive for environmentally-related trade preferences in North-South agreements can be low for the developing countries, because the tariff protection level of the industrial countries is relatively low.
- The significance of customs preferences and other trade facilitating measures generally declines in proportion to the protective duty level of the industrial countries is lowered in the WTO/GATT liberalisation process, and most countries come to enjoy customs preferences anyway (Altmann 1997:66ff.). In connection with the diverse preference agreements of the EU, talk is already of an "erosion of customs preferences".

⁷⁵ In NAFTA, various steps are prescribed for this procedure. First the arbitration mechanism is to be applied (Art. 24 of the NAFTA supplementary agreement), then an action plan is agreed on with the country concerned, to help it to eradicate the shortcomings in its environmental policy. If the party does not conform to this, it will be called upon to pay a fine of 0.07 % of the total trade of goods to the country granting the preference (Annex 34, Supplementary Agreement). If the fine is not paid, then the customs preferences will be suspended (Art. 36, Annex B).

- The resonance of the environmental conditionality of GSP preferences has so far been low. This may be because of lack of information in the possible exporting countries, and lack of transparency about the practice. It may also be because of inadequate involvement of the partner countries, local private industry or the NGOs in designing the preference measures, so that the acceptance is low, and because of high transaction costs (in the real case, e.g. forestry law must be changed, which is out of all proportion to the profit to be expected from the customs preference). In comparison to trade profit, the political concessions may be too high.
- Environmentally related trade preferences in free trade agreements between developing countries (South-South integration) are meaningless.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Trade preferences	-	-	o	(++)

++ very well suited, + well suited, o suited with qualifications, - not suitable

Trade preferences as an environmental policy instrument are suitable for inclusion in free trade agreements in which economical strong or stronger countries are involved. The significance of customs preferences tends to decline, they are set to become obsolete. More important than further reductions in customs tariffs would be a consistent reduction of non-tariff barriers to trade and an extension of liberalisation to agricultural produce. Because the agricultural sector could become a very important export sector for many developing countries, environmental policy conditionality for liberalisation of agriculture would be particularly effective. The conditionality criteria would be analogous to the criteria for granting development co-operation, especially with regard to financial co-operation and other financial transfers. On the reference to WTO/GATT regulations, see section 1.6.

5.3.6 Environmentally related trade measures and other sanctions

A state will fulfil an environmental obligation it has entered into if the opportunity costs for non-fulfilment are higher (a "*self-enforcing agreement*", North 1993), or if non-fulfilment will bring on it sanctions imposed by other states. This, however, is problematic because enforcement of binding obligations against the will of a state is not possible. International law is no "law of subjugation", but only a co-ordination law. It has a decentralising character. There is no central legislature, and there is no central enforcing power, and no obligatory compliance to an international court. Only defence against damaging behaviour can be tried by sanctions. Agreements with binding obligations but without sanctions, and non-binding agreements dominate. Environmental agreements therefore tend to be weak.

Sanctions (in the broader sense) should motivate partner countries to fulfil environmental policy obligation in the sense of the agreement. In various international environmental agreements, there are agreed trade-relevant environmental standards - e.g. in the Washington agreement on the protection of species (CITES), or in the convention on bio-diversity.

Trade measures are import and export restrictions for certain goods. They are applied unilaterally and include trade restrictions and trade sanctions. **Trade sanctions** cover products which do not cause any environmental damage in themselves, but whose restricted import is meant as a "punishment", because other products have failed to fulfil certain standards. **Trade restrictions** limit or prevent the import of products which do not fulfil domestic product and

PPM **standards** (compare section 5.2.1) or contravene other regulations of national or regional trade policy (Stevens 1994:9). As well as restrictions on quantities, or **bans on imports** against countries or individual goods, **countervailing duties** can also be imposed (section 5.3.7) and **export restrictions** according to Art. XX GATT in order to counter shortage of *essential* goods and pre-serve natural resources.

Other sanctions can include in particular:

- Suspension or reduction of trade preferences (e.g. EU-Lomé, compare section 5.3.5).
- Reduction of financial support from regional funds (as in the EU in connection with the structural and cohesion funds).
- Reduction or cancellation of other transfers and adjustment aid (compare section 5.4.3).
- Agreed fines (EU).

Trade measures and other sanctions are the "stick" to the "carrot" of trade preferences. In the context of free trade agreements, trade measures for the enforcement of environmental standards can be inwardly or outwardly oriented. They are possible on the national level and on the regional level. Unilateral measures which are agreed in the regional agreements are permissible under GATT for cross-border environmental burden. Art. 28 ECT (Amsterdam) forbids quantitative restrictions and measures against imports from other member states, but also contains in Art. 30 ECT (Amsterdam) a number of exceptions according to which trade in the single market can be limited if the foreign product is not discriminated against in favour of a domestic product. Permissible reasons are analogous to GATT Art. XX on protection of health and life of persons, plants, and animals. The exceptions are always judged on the basis of whether they stand in opposition to the objective of creating a single market. NAFTA, on the other hand, forbids in Art. 315 its members (with the exception of Mexico) generally and explicitly from restricting trade, including with natural resources.

Trade measures for the implementation of *non-product related* PPM standards can be applied if a country

1. is obliged by an international agreement to apply measures,
2. is authorised by an international agreement to apply measures,
3. applies measures because it regards this as being necessary in order to achieve the goals of an international agreement (so-called agreement related measures)
4. applies measures without a corresponding agreement but appeals to general principles of international law (OECD 1994:157).

At least in the first two cases, in which trade measures are legitimised by international agreements, they must also be implemented in regional agreements. Trade regulations from international environmental protection agreements transformed into national law should be secured in a regional agreement, especially if not all of the countries in the integration zone are also involved in the corresponding multilateral environmental agreement. For the legitimisation of trade measures, exception clauses are required in the trade agreement.

Unilateral trade measures corresponding to cases 3 and 4 can also be taken over into regional agreements in order to protect cross-border and global environmental goods. In the selection of measures and instruments on the regional decision-making level, the **congruence criterion** should be observed. This states that the environmental policy decision makers adequately represent the group of those concerned. In the ideal case, the competences of the environmental policy measures are to be allocated according to geographic distribution (Huckestein 1993:333; Brockmann et al. 1997:38). On contractual involvement in the integration agreement, compare section 6.

Unilateral trade measures established in a regional trade agreement can only be justified, in compliance with the congruence criterion, for cross-border environmental strain or cross-border use of resources, within an integration zone. According to current GATT law unilateral trade measures cannot be agreed in regional agreements to protect global environmental goods. The trade agreement must contain a clause stating that obligations arising out of multilateral environmental agreements will not be suspended and that unilateral trade measures are permissible in the event of cross-border external effects.

In formulating exceptions clauses, multilateral agreements may be specified (interpreted) or criteria for multilateral environmental agreements may be developed which must be fulfilled by an agreement in order to qualify as a multilateral agreement. For example, NAFTA Art. 2101 refers to Art. XX GATT:

„GATT Article XX and its interpretative notes, or any equivalent provision of a successor agreement to which all Parties are party, are incorporated into and made part of this Agreement. The Parties understand that the measures referred to in GATT Article XX(b) include environmental measures necessary to protect human, animal or plant life or health, and that GATT Article XX(g) applies to measures relating to the conservation of living and non-living exhaustible natural resources.“

In choosing the means for the implementation of standards, their influence on trade must be taken into account. The core questions are whether the instrument which least hinders trade is to be used, or whether purely environmental consideration will determine the choice of instrument. In contrast to GATT, in the SRM terms in the NAFTA agreement, it is not the instrument which least hinders trade which is to be preferred, but the principle that no "unnecessary" trade restrictions should occur is to apply (NAFTA 904.4). The room for manoeuvre for national environmental policy is less limited in this way by trade policy.

Strengths

- Trade measures and other sanctions can have the effect of removing shortcomings in the agreed implementation of environmental policy. Apart from the connected economic consequences, there is also and above all the effect of a publicly effective "lever".
- Trade measures can work efficiently directly against cross-boarder environmental strain.
- Trade measures on the PPM basis can work indirectly against extra-territorial environmental strain.

Weaknesses

- Trade measures and other sanctions create a hostile atmosphere.
- They are only a theoretical third-best solution with regard to efficiency and effectiveness for cross-border environmental strain if a first-best solution (a regional agreement on environmental standards) and a second-best solution (eco-taxes) cannot be implemented (Brockmann/Osório-Peters/Bergmann 1998:56).
- Environmental policy motivated trade measures tend to be used by industrial countries against developing countries, while it is exactly the industrial countries which are the main causers of environmental problems.

Opportunities

- Implementation of product standards and product-related PPM standards in the import of goods whose use causes environmental damage are allowed according to GATT/WTO and

are also uncontroversial in regional environmental agreements between developing countries as long as they are not used in a discriminatory manner.⁷⁶

- Trade measures lose their potential aggressivity in integration zones which are characterised by collective preference for consensus forming.
- Trade measures are included in a number of international environmental agreements. Their inclusion in regional free trade agreements is no problem in terms of GATT regulations.

Threats

- The effectiveness of trade measures and other sanctions is often less than had been hoped for. In any case, they are a strain on the climate of co-operation. Only in consolidated and very stable integration zones with a highly developed legal culture (EU) can e.g. fines be used without having a negative effect on the integration process.
- Trade measures for the implementation of non-product related PPMs and for the protection of *global commons* are not covered by Art. XX GATT and are thus illegal in the context of international trade law.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Trade measures	o	o	o	O
Other sanctions	++	-	-	-

++ very well suited, + well suited, o suited with qualifications, - not suitable

Trade measures in a regional integration agreement in internal relations are only a suitable instrument in exceptional cases to implement environmental policy objectives, because they would have a considerably negative influence on the integration process. Policy instruments are usually much more suitable. Nevertheless, the instrument should be integrated into the free trade agreement as an *ultima ratio*. It can also be observed that sanctions are often threatened (e.g. between the USA and the EU) but usually with such a long approach time that a political solution is usually found before the threat is made real (compare section 5.3.7 on eco duties in this respect). In more highly developed groups of countries with deeper integration (EU, perhaps also NAFTA) other sanctions (e.g. fines) are good or very good instruments. In external relations, restrictions on quantities of imports or exports are covered under the terms of Art. XI GATT which stipulates norms for exceptions to the basic ban. They can also be allowed in connection with Art. XX. Art. XI does not require any complementary internal measures.

5.3.7 Ecological tariffs

Eco tariffs are based on the fact that foreign enterprises, because of lower environmental standards than those in the country levying the duties, have fewer costs for environmental protection, and can thus supply at a lower price. Their sales price is thus lower than the "correct" price, which they would have to charge if all environmental costs were included. Thus the suspicion of "environmental dumping" is raised. Eco duties are thus **anti-dumping** or **anti-subsidy duties** ("compensation duties") if the lower foreign price is based on government subsidies. An eco duty theoretically covers the difference between the import price of a prod-

⁷⁶ The Brazilian import ban for non-biologically degradable detergents has been confirmed by the Mercosur workgroup for environmental questions (Mattos de Lemos 1999:3).

uct which is too low because of non-internationalised costs abroad, and the inland price of the same product, which, ideally, should include all environmental costs. In contrast to *Border Tax Adjustments*, eco duties do not refer to different (eco) tax burdens (compare section 5.3.8).

Strengths

- Eco duties prove incentives for the internalisation of costs, if they can be properly measured.
- They are theoretically a second-best solution for defence against environmental dumping and cross-border environmental pollution, if regional environmental standards are not in place or are not complied with.

Weaknesses

- Eco duties contravene the principle of trade liberalisation.
- They contravene the principle of co-operation as they are applied unilaterally.
- In the context of regional integration, co-operative solutions are much more probable. Eco duties would then be superfluous, even as a second-best solution.
- In principle, eco duties with reference to PPM standards are not allowed according to WTO/GATT regulations.
- Independently of this, they are difficult to reconcile with the requirements in GATT regulations for anti-dumping duties or anti-subsidy duties (compensation duties): their level can only be determined arbitrarily; the different environmental levels in the different countries, and the different preferences, cannot be taken into account. The extent of environmental strain abroad caused by non-internationalisation of environmental costs is almost impossible to determine because of lack of appropriate procedures. It is difficult to distinguish subsidy effects for the same reasons.
- Eco duties are not as effective as negotiated solutions.

Opportunities

- Eco duties have a certain "green" attraction and are often propagated by protected sectors and by environmental protectionists.

Threats

- Eco duties, especially in the form of anti-dumping duties, run the risk of being misused for protectionists purposes. Branches of industry in which environmental pollution is high and measurable, and for which the application of eco duties is thus simple, are often resource-intensive branches, such as primary industries and agriculture, which are usually strongly protected.
- For an application of eco duties, a number of so far unclarified methodological problems must be solved with regard to meeting GATT regulation for anti-dumping and anti-subsidy duties.
- The application of eco duties within a regional integration zone can lead to prices on other markets for these products being increased, in order to make up for the losses incurred because of the eco duty. These cross-subsidies are counterproductive (Esty/Geradin 1998). Compensatory eco duties involve high transaction costs and are inefficient.
- They are practically impossible to negotiate into a regional agreement because political resistance to introduce duties for environmental reasons is too strong.

Conclusions and evaluation

	IC/IC	DC/DC	NI/DC	IC/NIC/DC
Eco duties	o / (-)	o/(-)	o/(-)	o/(-)

++ very well suited, + well suited, o suited with qualifications, - not suitable

Eco duties are not suitable or not necessary for internal use in regional integration agreements. Negotiated solutions are always more effective and more efficient. At best, eco duties can be seen in the form of a trade measure as an instrument of *ultima ratio* integrated into a regional free trade agreement. In external relations, eco duties always contravene GATT, because "bound" duties must not be increased according to Art. II. According to Art. XXVIII, a unilateral with-drawl of such concessions would require full compensation, or would give grounds for reprisals. Otherwise, eco duties are only allowed against states which are not members of the WTO. Independently of this, it is hardly possible for eco duties to fulfil the conditions for anti-dumping and anti-subsidy (compensation duties) stipulated by GATT. Compare section 5.3.8 on border tax adjustment.

5.3.8 Border tax adjustment

Border Tax Adjustments (BTA) are levies intended to ensure that the same level of tax burden applies for goods consumed within a country, regardless of whether they were produced in the country or abroad. They presume an inner-regional levying of taxes. The border adjustment tax is intended to offset the difference in taxation, in contrast to eco duties, which are intended to offset different levels of internalisation of environmental costs (compare section 5.3.7). BTAs are levied on imports and remitted to exports. They can be used in the internal and external relations of a free trade zone.

Strengths

- BTAs can offset competitive disadvantages caused by e.g. different levels of energy tax.
- They can secure eco tax systems against external threat.

Weaknesses

- BTAs are imposed on certain clearly defined goods. The separation between these and substitution goods can be difficult.
- BTAs cannot get to the cause of the problem with process-related environmental strain.
- If exports goods are relieved from energy taxes, there is no incentive to save energy in the production process. A general reimbursement of levied eco-taxes would practically be an environmentally harmful subsidy (Adlung 1997:184).
- On the other hand, the environment will receive only little relief if energy-intensive products are imported in large quantities. Without BTAs, this can lead to an increase in imports. In the case of energy taxes, this can mean that goods produced in an inefficient manner with regard to energy are imported and that global CO₂ emissions increase.
- The administrative effort required for processing BTAs is high.
- If other environmental policy instruments than eco duties are used abroad, BTAs can in fact cause a double strain. In addition, there will be no compensation on the border for exports for costs which have been incurred by e.g. keeping to emissions standards.

Opportunities

- Adaptation costs for foreign manufacturers can be reduced by a fund for the financing of environmental protection measures in foreign industry. The revenues from BTAs can go in part into these funds.

Threats

- Measuring *BTA* for individual products is difficult if the total scope of the tax is different over the different levels of production and if the production processes at home and abroad are very difficult. With the CO₂ tax, this is the case for Sweden, Finland, Norway, and the Netherlands (Adlung, 1997:184). Similarly difficult is the tax adjustment for the imports when it has to be calculated on the basis of cross-border emissions or on the geographical distance of the importing country. Full taxation could only be justified in terms of "*global commons*" - i.e. if the territory of the importing countries or persons in it are not directly affected.
- *BTAs* have an especially hard impact on environmentally intensive exports from third countries, and have a detrimental effect on their competitive position. For these companies, it is only worth changing production procedures if a large enough part of their production is sold on the market which levies the *BTA*. This would have an especially strong impact on NICs or developing countries which export e.g. steel, aluminium, or chemical products.
- Agreements would be needed to avoid double taxation.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
BTA	(+)	o	o	(+)

++ very well suited, + well suited, o suited with qualifications, - not suitable

Under the (negative) condition of the existence of various taxation systems within a region, *BTAs* - like other types of taxation involving border offsets (e.g. VAT in the EU or consumer taxes) - can narrow the gap between different competitive conditions and are not problematic in internal relations. If *BTAs* are levied in external relations on goods from third countries, they are allowed under Art. II:2 and III:2 of GATT, as long as the principle of treating the same as domestic goods is maintained. Tax refunds for exports would also not constitute a non-allowed export subsidy according to Art. XVI. A controversial point is whether taxes on "*physically incorporated inputs*" justify *BTAs*, e.g. taxes on CFC, packaging or vehicle taxes with progression according to energy efficiency. This is because the allocation problems involved would mean that the fixing of the level of the compensation would be arbitrary and could be misused for protectionist purposes (Wiemann 1999). It is questionable whether it would be permissible to use *BTAs* if there are no cross-border emissions (e.g. to promote precautionary environmental protection) (Esty/Geradin 1998). *BTAs* related to the production process (emissions taxes, waste water taxes, taxes for *non-physically incorporated inputs*) are, like PPMs, not in conformity with WTO.

5.4 Political measures

5.4.1 Political dialogue on trade and environment

The political dialogue between the member states is the highest decision making level for the regional integration agreement. The political dialogue prepares for integration agreements and accompanies their implementation. The establishment of environmental policy aspects in this

agreement must be agreed at a very high political level, and must be politically accompanied even after the conclusion of a formal agreement. The continuation of political dialogue is established in all integrating agreements.

The political dialogue is influenced by economic interdependence and ecological interdependence (Biermann 1998:104). All states are affected by global environmental problems, if in very different dimensions. In the strict sense of the word, this could be described in a scientifically and technically objective manner, e.g. in terms of readings for dangerous substances. For political practice, however, the subjective political awareness of the effects is much more important, and is often at a much lower level than the objective effect. The people of many developing countries see changes in climate, or the gaps in the ozone layer as a problem of the industrialised countries. They have no sense of global ecological interdependence. In many developing countries, the governments can act without any special regard (and not only in environmental terms) for the interests of the people. Political awareness is therefore a direct function of the interests of the ruling group. This, naturally, has an effect on their readiness to include environmental aspects in regional free trade agreements. It is therefore strategically important in such cases to use the political dialogue to try to make the ruling groups aware of their environmental responsibility.

In the context of the political dialogue, agreement has to be reached on many points:

- Prioritisation of environmental policy in the integration zone.
- Identification and prioritisation of shared environmental problems.
- Creation of transparency about existing national standards.
- Protection of existing national standards.
- Basic agreement on regional environmental quality aims.
- Agreement on institutions and procedures with regard to *single or parallel track* negotiations, general environmental evaluation of the trade agreement, monitoring of national and regional environmental policy, balancing different environmental standards, and arbitration of disputes.

An important aspect of the political dialogue is agreement on the **institutionalisation** of environmental policy in the form of regional institutions and bodies. In contrast to the multinational level, there are on the regional level variously effective environmental institutions. Most institutions are, however, weak and primarily serve mainly for political dialogue. Meetings of ministers and work groups for co-ordination of environmental policy are the most common institutions. Institutions with their own powers are only to be found in the EU (DG XI) and NAFTA (CEC), which have tasks which go beyond the mere exchange of information. With increasing depth of integration, it is necessary to harmonise trade, economic, and environmental policy. *Deeper integration* increases the opportunity to align macro and sectoral policies and thus to avoid or solve possible environmental problems.

Strengths

- Because of its formal lack of binding force, the context of the political dialogue can be used to reach agreement which would not be possible in formal negotiating situations.
- Creation of mutual credibility makes it possible to overcome policy failure on the national level, e.g. by the reciprocal removal of subsidies or non-tariff trade barriers which have a negative influence on the environment.
- Political dialogue on the inclusion of environmental aspects in trade agreements also contributes to the avoidance of disputes. Trade policy disputes arise especially because of unilateral measures which were taken without consulting the other side.

Weaknesses

- A political dialogue involves no binding obligation. The effectiveness of the political dialogue requires the willingness of both partner countries to implement the results achieved.
- The implementation of agreements reached in political dialogue can be hindered or prevented by a large number of factors.

Opportunities

- Experience and knowledge gained in the regional context on the effects of trade liberalisation on the environment can be used in multilateral environmental and trade negotiations (the idea of the regional agreement as a laboratory).
- There is basic consensus that the principle of sustainable development, and thus environmental protection, should be established in free trade agreements.
- In many integration areas, the political dialogue is at the centre of co-operation on the environment. Exchange of information and consultation before and after concluding the free trade agreement is considered to be very important.
- Regional agreements such as EU, APEC, NAFTA or the EU co-operation agreements offer a suitable context for permanent dialogue on trade and the environment.

Threats

- The political dialogue on trade and the environment at the global level, especially between industrial countries and developing countries, has so far received little attention. This makes acceptance of the problem at regional level more difficult.
- The WTO provides only a limited context for negotiations of this kind. An environmental organisation with similar powers to the WTO will not come into existence in the near future. There is thus the lack of a binding basis for the integration of environmental aspects on the regional level.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Political dialogue	++	++	++	++

++ very well suited, + well suited, o suited with qualifications, - not suitable

Political dialogue is established in all free trade agreements. The remarks above render a further explanation superfluous.

5.4.2 Environmental action plans

Environmental action plans identify, make concrete, and analyse all relevant environmental problems. These are brought into context with the environmental objectives. These are used to generate a list of priorities and an action plan.

Regional environmental action plans are working plans of the regional environmental institutions for the implementation of priority environmental objectives which will lead to a short or medium term improvement in environmental quality. They are a generally accepted and proven instrument for inter-state co-operation. Examples of regional integration zones are:

- The *Mediterranean Action Plan* (MAP) of UNEP.
- The environmental action plans in the context of APEC.

- The *Border XXI Programme* for the US/Mexican border region.
- The CEC's environmental action plans for chemicals.

Environmental action plans refer to the introduction and development of environmental policy and environmental law, the creation and developments of an institutional framework, development and maintenance of environmental monitoring systems, including the analytical capacities, training of staff and running of programmes to increase awareness. Public participation is important for success. A central aspect of an environmental action plan is the monitoring of the environmental situation, to the results of which the required measures will be adapted. Environmental action plans are mostly implemented by national governments, the regional institutions co-ordinate the activities.

Environmental action plans are often aimed at specific problems, e.g. the use of an international river, the co-ordination of reforestation efforts, protection of the seas (MAP), the sustainable use of fish stocks (CARICOM) or other resources, development of eco-labels, *sustainable cities* (APEC), control of trade with chemicals, toxic waste (CEC) or with endangered animal species, *capacity building*, working to clear up *hot spots* (APEC) etc.

According to agreed criteria, such as realisability, transparency, efficiency, and cost-effectiveness, quantifiable environmental objectives are selected. Environmental action plans include financial plans, time schedules, monitoring and evaluation mechanisms. The OECD approach to environmental action plans in Eastern Europe includes reforms of economic and environmental policy, build up of institutions and financing (OECD 1993:1).

Strengths

- Environmental action plans operationalize the aims of environmental agreements. They set (as far as possible, quantifiable) targets, measures, and instruments to make economic adaptation processes as environmentally friendly as possible.
- The main points of the environmental action plan should ideally be identified before the liberalisation of trade, in order to use the usually scarce available means efficiently.
- Environmental action plans can be used successfully in the short term to remove and prevent negative environmental consequences, if the states involved are interested in co-operation, the necessary institutions are created, all players are involved in the implementation, and funds are secured.

Weaknesses

- Environmental action plans are usually not binding. When co-operation partners drop out - for whatever reasons - without having fulfilled their parts, then environmental action plans lose their stringency.
- Environmental action plans are limited because of their range. They cannot absorb the effects of any sectoral restructuring (e.g. in agriculture).
- The action plans implemented or foreseen so far in the various integration areas aim at only very limited policy reform.

Opportunities

- Cross-border environmental strain and use of shared resources increase the necessity for environmental action plans and the willingness to implement them.
- By involving development banks, transfers for development cooperation and private institutions, the range of environmental action plans can be increased.

Threats

- The success of environmental act in plans is impaired by lack of clear, quantifiable targets. Strategic visions are usually developed, but not always transferred to the operational level.
- There is usually a shortage of funding for the implementation of environmental action plans. The possible real improvements are thus systematically under-realised.
- Environmental initiatives are often not linked strongly enough with national policy, although they are mainly implemented on the national level. Important projects planned by work groups are often not implemented.
- The willingness of the various national players to cooperate regionally varies.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Environmental action plans	++	+	+	+

++ very well suited, + well suited, o suited with qualifications, - not suitable

The usefulness of environmental action plans does not need to be justified again after the above analysis. The relatively limited evaluation "+" is based on the practical experience that the integration of the instrument in regional free trade negotiations tends to be restricted to declarations if adequate funding is not available and the political will to implement it is lacking.

5.4.3 Adaptation support, compensation, and co-operation on environmental policy

The transfer of environmental technologies to developing countries and co-operation in the development of environmental technologies, as agreed in Agenda 21, are prerequisites for raising environmental standards in NICs and developing countries. In the context of regional integration, both aspects can be adapted to and focused on the local situation and promoted. Principle 6 of the Rio Declaration calls for special attention to the needs of developing countries. Principle 7 recognises that "*in view of the different contributions to environmental degradation, States have common, but different responsibilities*". These principles can be met by conditioned adaptation support and the introduction of higher environmental standards by means of technology transfer and development co-operation.

Technology transfer and development co-operation are voluntary measures, with the help of which, within regional and inter-regional integration agreements, industrial countries can contribute to improving environmental standards in developing countries and NICs. This potential for improvement of PPM-related environmental standards in NICs and developing countries has hardly been exploited so far. With regard to accuracy, both conditioned adaptation support for certain areas (e.g. for environmental protection at the workplace, or substitution of certain chemicals in the context of an environmental action plan) and general programmes for the promotion of environmental effectiveness are useful.

Both in NAFTA and APEC, technology transfers for the raising of environmental standards are parts of the integration programme. However, in spite of the great importance attached to technology transfers, the funds available are not great. In the context of APAEC, the USA insist on commercial technology transfer in the context of *public-private partnership*, while the Asian NICs are interested in transfers and development of adapted technologies with more state involvement. Japan has set up and financed a first centre for technology transfer. In-

struments in NAFTA include commercial financing of communal infrastructure together with advice, above all in the north of Mexico by means of a regional development bank. Various programmes and projects between the EU and third countries, especially with Asian countries, are concerned with the transfer of environmental technology. The demand for environmental technology is determined by the level of environmental standards. *“In the cases where cleaner technologies offered no cost advantage over existing or traditional production technologies, industries had no incentive to import them. ... In some cases, ..., international agreements were largely responsible for the introduction of these new environmental standards”* (OECD 1995:)

The spreading of environmental technology is facilitated by trade liberalisation. Trade has a 75% share of net capital flow, foreign direct investment 18%, and development aid 7% (OECD 1995). Technology transfer includes the transfer of technology in the narrower sense (also as hardware) and also managerial techniques and knowledge. The transfer of environmental technologies takes place by trade, however, the OECD has found that trade *policy* has little influence on technology transfer. Nevertheless, inter-state integration does support the following aspects:

- Sale of machines and equipment.
- Exchange of generally available knowledge and technologies.
- Agreements on the sale of patents and *know-how*, advice and project development, technical co-operation.
- Build up of environmental plants based on bilateral and multilateral agreements.
- Direct investment in the form of joint ventures.
- Co-operation in research and development of enterprises and state institutions.
- Transfer of knowledge by long-term co-operation of large enterprises and suppliers.

The private sector obviously plays an important role in the transfer of environmental technologies. Companies from industrial countries supply environmental technology on the world market which has been developed under the pressure of higher environmental standards in the industrial countries. In addition, states can agree *Business Charters (codes of conduct)* with companies, which form voluntary obligations to transfer environmental technology and raise environmental standards which have not been fixed by the state, and to promote co-operation with companies in order to use their networks for the spread of environmental technology, e.g. through suppliers.

Furthermore, transfer of technology takes place by means of development cooperation between companies and developing countries. Development cooperation is needed in areas which are not adequately covered by national policy. Focused policy advice is almost more important than granting credits in this respect. Development cooperation in the area of environment is largely concentrated on large-scale projects in the public sector, such as disposal of waste water, urban infrastructure, rural development. Most of the technologies promoted are end-of-pipe technologies adapted to the needs of large companies (Heaton/Banks/Ditz 1994). To this end, it is necessary to build up institutions which can adapt technologies to the needs of companies and develop them (*capacity building*). In North Mexico, the EPA supports Mexican authorities in the implementation of environmental standards in the export industry with training measures. Projects and programmes for the promotion of trade and commerce also promote *capacity building*. These and other compensation instruments represent a mutual right of veto: donor countries can cut off support if the agreed response from the receiver country is not adequate, receiver countries can make environmental measures dependent on financial support.

The build up of effective and efficient capacity for administration, advice, implementation, and transfer of technology and knowledge has to be a central aspect of regional environmental policy. Besides this institutional dimension, involvement of civil society is an important aspect of *capacity building*.

Strengths

- Adaptation support corresponds to the criterion of fairness of distribution because developing countries are provided with funds for areas in which they are not able to take adequate action.
- Granting development co-operation funds is linked to maintenance of environmental policy criteria by many countries. Adaptation aid promotes environmental co-operation between north and south and is an incentive for developing countries to set and implement environmental standards (*upward harmonisation*). The concept of harmonisation of environmental policy standards within the NAFTA countries places the main emphasis on conditional aid in developing and implementing national standards, especially in Mexico (Houseman 1994:28).
- Trade promotion projects facilitate access to markets for products from developing countries made in an environmentally friendly way, with information about markets and quality requirements and the development of special eco-labels for products from developing countries.

Weaknesses

- Adaptation aid in the form of technology transfer and development co-operation are only a *second-best* solution with regard to efficiency and effectiveness, since they can seldom tackle the causes of environmental strain.
- Adaptation aid can promote a "recipient mentality".

Opportunities

- Linking transfers to the implementation of environmental standards is accepted by most of the receiver countries.
- Technology transfers and development co-operation are voluntary measures of foreign policy and are therefore not subject to GATT/WTO regulations.
- Regional, sector-related environmental technology centres which create and maintain connections between the main players in the technology transfer process can develop and recommend regional environmental standards.
- Finance institutions which promote investment and environmental technology, especially in developing countries, can offer finance and advice.

Threats

- In the donor countries, the extra funds required (for the environmental policy co-operation, and perhaps also for the necessary changes in existing programmes for development co-operation from an environmental point of view) are not included in the environmental budget, and thus are not transparent.
- The effects of technology transfer and *capacity building* are also limited by poverty. There are many investigations of the positive connection between environmental awareness, relevance of environmental problems and level of information on environmental issues on the one hand, and levels of income on the other (e.g. Dunlap / Mertig 1996, Teuschner 1995:77 ff., Frey 1992).
- The need for environmentally-related *capacity building* in developing countries and NICs is enormous, while the funds available for adaptation aid are very low.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Co-operation	++	++	++	++
Adaptation aid	+	-	(+)	++

++ very well suited, + well suited, o suited with qualifications, - not suitable

The usefulness of including a cooperation agreement in a regional free trade agreement does not require explanation. Adaptation aids are also suitable in heterogeneous integration zones, but require economically powerful partners (e.g. Brazil/Argentina in Mercosur). It is also useful between industrial countries (structural weak sub-regions).

5.4.4 Arbitration of disputes between states

Institutions and agreements on arbitration serve to settle disputes between states in two areas: disputes on trade and the environment (influence of trade on the environment, and vice versa) and "pure" environmental problems. Between the states of the EU and NAFTA and of the former CUSFTA, disputes of this kind have arisen in different ways. This is practically unavoidable, as the governments are under constant protectionist pressure at the national level (WTO 1995:61). It also, however, depends on the cultural environment; in APEC, with its strong Asian influence, the partner states see themselves almost as members of a large family in which disputes are solved by reaching a consensus. However, because of its lack of depth, APEC also produces fewer real conflicts of interest.

Environmental pollution coming from abroad can also happen without the partner having breached the agreement - e.g. in the case of contamination of waterways, or emissions of damaging substances into the air (so-called *spill-overs*). In these cases, international common law sometimes applies, according to which e.g. the state causing the damage is obliged to make compensation payments to the state suffering the damage. Sometimes international treaty law applies, if appropriate international agreements are involved. Offences of this kind can be heard by the international court of justice in the Hague. Practice, however, shows that usually a mutual agreement between the states will be reached. This applies, e.g. also for the members of the *Economic Commission for Europe* of the United Nations (UN-ECE), which has agreed on an internal arbitration mechanism. The international court of justice has not, however, so far had to deal with an environmental dispute. On the other hand, there is a whole series of environmental disputes within the EU, in some of which the European Commission has taken action against member states before the European Court of Law in Luxembourg. In some cases, member states have taken each other to the European court, as in the case of France against Germany because of the latter's ban on PCP (an environmentally harmful wood preservative) because this was seen as a breach of the agreement, being a trade restrictive measure. The court found in Germany's favour and rejected the French suit.

Arbitration mechanisms are necessary in order to prevent barriers to trade in the form of product or production standards, and in order to prevent distortions of competition by environmental standards which are too low, or which are not enforced. Disputes arise especially in connection with measures taken unilaterally without consulting the other party. It is therefore important to recognise potential fields of conflict already at the negotiation stage of the integration agreement and to develop appropriate *dispute settlement* measures.

The introduction of ecological instruments at the regional and national level has an economic effect. Trade measures also have an environmental effect. If a country which has suffered damage at the hands of a partner country does not want to simply accept the injury caused, it will try in the context of international negotiations to have the damage made good. Formal arbitration is normally only an almost last means, since disputes can be avoided or reduced by political dialogue and co-operation. APEC has an intermediate solution in the form of the *APEC Council* (of Ministers), which is also an arbitration body. Environmental policy co-operation in solving cross-border environmental problems was already widespread in most integration areas before the formal agreement was made, so that negotiated solutions are always probable. As demonstrated by Coase, efforts can be made to persuade the country causing the damage to change its behaviour by economic incentives or by economic or political pressure. Whether and to what extent this will be successful depends on the corresponding distribution of power.

With regard to the authority of a final arbitration ruling, several options are available. Arbitration by the international court in The Hague would require both parties to submit to the arbitration process. In only a few cases does the arbitration ruling have a supra national effect (the European Court in the EU, practically NAFTA and APEC). In the WTO, an arbitration ruling is valid if it is not rejected by *all* of the WTO members, including the complainant. An opposite model requires (as earlier in GATT) that all members, including the defendant, accept the arbitration ruling.

The final means would be sanctions.⁷⁷ Confrontation rarely achieves progress in environmental policy. The consideration of sanctions as a means of enforcing environmental interests is therefore primarily a theoretical consideration. Even if the integration agreement would allow this, sanctions such as trade restrictions or other harsh implementation instruments in the integration area can hardly be implemented unilaterally against another country, as they would seriously disrupt the political process. They are usually avoided in advance by negotiations or by regional arbitration mechanisms.

Strengths

- Arbitration mechanisms always include the obligation to hold dialogue at an early stage and to negotiate, before formal proceedings can be considered. Therefore, in most cases, before sanctions, compromises, voluntary action, or other forms of amicable settlement are reached.
- Formal arbitration leads to legally binding decisions.
- Disputes in the area of trade and the environment are dealt with in NAFTA (in a similar manner as in the WTO) by an institution for the settlement of *trade* disputes (FTC). In the EU and in NAFTA, however, environmental experts are involved in the arbitration process. All regional arbitration mechanisms are an opportunity to avoid the environmental shortcomings observed in the WTO.
- At the global level, *peer pressure* is often not enough to ensure compliance with the agreement. Formal arbitration mechanisms in the regional context therefore also help to achieve global environmental norms.
- If the onus of proof is on the complainant (as in NAFTA), the risk of the arbitration mechanism being overloaded with trivial complaints is avoided. If the onus of proof is on the defendant (as in the WTO), then this promotes the principles of precaution and prevention in environmental policy.

⁷⁷ We are concerned here with sanctions against partner states, not with the implementation of public sanctions against private parties.

Weaknesses

- Formal arbitration proceedings do not take place in an environment free of politics, and will be subject to internal and external pressures.
- Arbitration mechanisms in the context of the free trade agreement often have an economic bias, so that the ecological perspective tends to receive too little attention.
- If the onus of proof is on the complainant, evidence can be withheld by restricting access to information. If the onus of proof is on the defendant, there is the risk that the arbitration mechanism will be overloaded with trivial complaints.

Opportunities

- A good balance between environmental policy and trade policy already at the national level reduces the probability of conflicts between states.
- If the integration agreement includes binding environmental regulations, arbitration procedures will be facilitated, as there will be fewer possibilities for interpretation.
- An arbitration mechanism which envisages a progressive procedure through consultations, hearings, and settlement proposals in search of consensus, before any final arbitration ruling is made, will be easy to realise.
- Formal arbitration mechanisms will be the less important, the stronger the culturally-influenced tendency to seek consensus.
- Early involvement of neutral experts increases the acceptability of arbitration rulings. In order to avoid disputes within NAAEC it is advised to hold consultations with experts before a decision by an arbitration body is made (CEC, 1996:40).
- The enforcement of arbitration decisions is helped by "soft" sanctions (putting to public shame) which do not strain the atmosphere for integration as much as hard sanctions would.

Threats

- In integrations agreements which do not include regulations for conflicts in the field of trade and environment on the regional level, recourse will have to be taken to the GATT/WTO arbitration mechanisms. These are not well enough equipped to deal with environmental issues.
- In forming regional arbitration mechanisms, attention must be paid to the GATT/WTO conformity of decisions, as there is otherwise the risk that law will develop differently on the regional and the multilateral level.
- Arbitration mechanisms require the parties to the agreement to submit to the decisions of the arbitration body. So far, formal arbitration mechanisms have only been established in the EU and NAFTA. In other agreements, disputes must be solved by negotiation.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Arbitration	++	++	++	++

++ very well suited, + well suited, o suited with qualifications, - not suitable

The sense of including arbitration mechanisms in a regional free trade agreement does not require any further justification after the considerations above.

5.4.5 Public complaints procedures

Public complaints procedures involve conflicts between the state (i.e. national or perhaps supra-national institutions) and members of the public. Public complaints procedures are always to be dealt with and established at the national level. In the context of an integration agreement, agreement should also be reached with regard to **procedures** and **criteria for judgement** in order to achieve comparable treatment of citizens' interests throughout the region. Complete harmonisation between different legal systems is not possible and not desirable.

Strengths of public complaints procedures

- The interests of the public are taken into account in terms of redress.
- The authorities charged with the implementation are subject to continuous constructive criticism, which contributes to efficiency.

Weaknesses

- The question of the onus of proof cannot be solved satisfactorily: If the onus of proof lies with the state, which must prove that certain environmentally relevant acts or aspects are acceptable, then the complaints system can be over-strained.
- If the onus of proof is on the complainant, as is the case in NAFTA, this restricts the rights of minorities to defend their interests. Nevertheless, evidence should be provided that the principle of precaution and prevention has been taken into account.

Opportunities

- The stronger the democratic culture in an integration area, the more effectively will the interests of its citizens be taken into account.
- Public participation in the development of an integration zone is supported by a right to information (Houseman 1994:33).

Threats

- In integration areas with little democratic tradition, the interest of the public are often accorded only secondary importance, so that complaint procedures tend not to offer much hope of success.
- Experience in NAFTA shows that complainants have only limited access to relevant official information, and
- Transparency is impaired if the results of the procedure are not published.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Complaints procedure	++	(++)	(++)	++

++ very well suited, + well suited, o suited with qualifications, - not suitable

Effective complaints procedures require a democratic environment. This can not be seen as being adequately available in all integration zones. Nevertheless, the instrument should always be included in free trade agreements.

5.4.6 Reporting duties and monitoring

So far, regulations on the duty to report are only included in the EU and NAFTA/NAAEC (NAFTA Chapters 7 and 9). According to NAAEC Art. 4, it is incumbent upon the member countries to publish all environmental standards and other regulations:

1. „*Each Party shall ensure that its laws, regulations, procedures and administrative rulings of general application respecting any matter covered by this Agreement are promptly published or otherwise made available in such a manner as to enable interested persons and Parties to become acquainted with them.*
2. *To the extent possible, each Party shall (a) publish in advance any such measure that it proposes to adopt; and (b) provide interested persons and Parties a reasonable opportunity to comment on such proposed measures.*“

The public is given the opportunity to comment on environmental standards and other rules. In the context of the political dialogue on the harmonisation of environmental policy, an exchange of information takes place, which is promoted by the regional institutions. The higher level information includes environmental standards in the areas of SPS and TBT and justifications for measures and explanation of methods and procedures for setting standards. The NAFTA agreement does not provide for public participation in the decisions of the arbitration mechanism, nor even for the right to information (Houseman 1994:33). On the other hand, in disputes which fall under NAAEC the decisions of the panel will be published. In addition, Article 7 of NAAEC, stipulates that documents in procedures before national courts must be published.

A necessary basis for the duty to report is continuous monitoring of the environment and of environmental policy. Suitable regional institutions and bodies should be created in advance (WWF 1998a, *European Environmental and Development Centre* 1998). Central elements of the monitoring system are environmental standards (environmental quality targets) and indicators which they describe (more details in Chapter 2). Independently of an *ex-ante Environmental Impact Assessment* (EIA) in the planning phase of a regional free trade agreement, there should be regular follow-ups stipulated in the agreement to make it possible to work against negative developments. In some integration zones, these are a part of the trade agreement (EU, NAFTA, APEC). They are supplemented by EIA (zones) for projects and programs.

Strengths

- Environmental reviews of trade policy contribute to efficiency and effectiveness of the environmental policy measures used. They make information available on the environmental effects of trade measures and form the basis for determining environmental policy objectives. "Environmental reviews have helped to develop strategies to address regional-scale environmental impacts due to increased economic activity related to trade liberalisation" (WTO/CTE 1996).
- Carrying out an EIA requires co-operation between the players from the fields of the economy and the environment who are involved in the study. An EIA provides policy recommendations for measures and instruments.
- Having the duty to report gives the states an incentive to *good housekeeping*.
- Obligations to apply environmental laws should be legally enforceable, e.g. on the basis of an obligation to publish as in NAAEC, and the results of the investigation should be made available to the public. The CEC works out indicators for the implementation of environmental laws, in order to make the duties transparent (CEC 1998:78).

Weaknesses

- Agreed obligations to report are not usually linked to sanctions for failing to do so.⁷⁸
- The method used for the EIA and other environmental reports is very heterogeneous and the quality varies accordingly (compare section 2.3).

Opportunities

- Acceptance of the need for environmental reporting is increased by establishing it in the integration agreement.
- It is important not only to observe and to document, but also to take counter-measures immediately. In order to offset any lack of political will, binding obligations and automatic mechanisms should be agreed (regulation mechanisms).

Threats

- Environmental reports on the national, or at a lower level only make sense for regional integration if they are evaluated and accessible. This requires a system which can pool decentral data in environment and environmental policy data basis. Such regional data centres would have to be brought together on an even higher level, as is intended with the Environmental Law Centre established in Bonn in March 1999.
- Criteria, mechanisms and methods for securing participation, access to information, and reliability of environmental reports are predominantly not available or not binding.
- In most integration areas the data basis for environmental reports is very fragmentary (compare section 2.3 on the methodology of EIA).
- Failure to meet the obligation to report can seldom be countered by confrontation. A careful, constructive reintegration should be worked towards. Arbitration procedures such as those of WTO or the ILO (in their results) do not promise much success on the regional level.
- Supporters of liberalisation in particular can be expected to resist acceptance of environmental reporting, because the political consequences of such a study for the process of trade liberalisation are unpredictable and are a potential risk. In particular, there could be political demands for delays in trade liberalisation for reasons of environmental protection.
- Public access to environmental information is limited. It is therefore possible for interest groups to bring their particular interests into the reporting (IISD, 1994).

Conclusions and evaluation

In spite of some methodological problems and technical problems in the application - including an *ex-ante Environmental Impact Assessment* - environmental monitoring is a very suitable (and necessary) instrument for all types of integration.

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Reporting, monitoring	++	++	++	++

++ very well suited, + well suited, o suited with qualifications, - not suitable

The existing methodological and practical problems in implementing obligations to report and the carrying out of continuous environmental monitoring do not stand up against the basic suitability of the instrument for all regional free trade agreements.

⁷⁸ The theoretical sanctions of the EU for not keeping to the convergence criteria also have no teeth, because the states involved also have to decide about themselves, and thus practically have a right of veto.

5.4.7 Formation of institutions

The EU is internationally an atypical example with regard to the formation of institutions in the course of an integration process. Institutions with supra-national powers such as those in the EU (Council, Commission, Parliament, Court) which are responsible for the environment, do not exist in any other integration area. Commissions and work groups, on the other hand, are widespread, and are partly institutionalised as offices (e.g. in NAAEC/NAFTA the *Commission for Environmental Co-operation, CEC*), partly just as bodies which meet.

Strengths

- Institutions provide intra-regional division of labour with a permanent structure. They thus have a stabilising effect.
- Institutions can develop more sustainable and effective specialisation as they are established for a long term.

Weaknesses

- Bureaucratic institutions can make intra-regional co-operation more difficult.
- Institutions can develop their own dynamic, which in some areas can be beyond political control.
- Inadequate institutionalisation can become a bottleneck in the integration process. The problems to be solved grow with increasing integration. Without suitable mechanisms, public participation is especially difficult.

Opportunities

- Permanent, formal environmental institutions with powers which go beyond exchange and comparison of information are founded, experience shows, only in the process of deeper integration. This allows on the one hand usually desired flexibility, and on the other hand is a result of holding on to national authority.
- For deeper levels of integration, supra-national institutions are thus useful which are also responsible for any sanctions against deviations from the agreement.

Threats

- The heterogeneous nature of integration zones makes functional institutionalisation more difficult, especially with regard to the transfer of decision-making powers.
- A minimalist approach to institutions, without delegation of authority, has the disadvantage that even small problems have to be solved at a high, or at the highest level. This results in unnecessary politicisation, and can make developments on other levels disproportionately difficult.
- Institutions which are provided with inadequate authority and inadequate resources are limited in their effectiveness and efficiency.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Formation of institutions	++	o	+	(+)

++ very well suited, + well suited, o suited with qualifications, - not suitable

5.5 Voluntary measures and obligations of industry

On the level of the company there are a large number of voluntary environmental measures. These include unilateral commitments of industry to certain environmental targets (e.g. lowering of CO₂ emissions) and agreements between the state and the private sector. There is also the use of eco-labels (compare section 5.5.2) and the application of environmental management concepts (such as the eco audit of the EU and the ISO 14000 series on the international level; compare section 5.5.1). In the case of direct investments, companies undertake, for example, to maintain or improve minimum standards ("*compliance plus*"). Because of their voluntary nature, such measures are not only suitable for inclusion in an integration agreement, but should also be an informal element of national and regional environmental policy.

Strengths

- Voluntary measures by industry support and supplement state environmental policy.
- By unilateral commitments and agreements between the state and the private sector, environmental objectives can be achieved which would not seem to be otherwise achievable at present by means of civil law or economic instruments.
- Co-operation between the state (or regional institutions) and companies can gain time in the implementation of environmental policy objectives. Problems and difficulties can be identified earlier and clarified if all parties are involved at an early stage.
- Co-operation solutions can help to reduce asymmetries of information between the state and industry.
- Since the administrative effort required is very low, the instrument can be applied at all levels of integration.
- Reporting obligations are an incentive to companies to pursue *good housekeeping* policies.

Weaknesses

- Voluntary commitments and agreements of industry are non-binding and not enforceable. Breaches do not attract sanctions. They therefore have a low status with environmental organisation and the environmental protection industry.
- There is always the danger that voluntary commitments will lead to compromises at the cost of third parties who were not involved in the agreement (SRU 1998).
- Accepting offers of unilateral commitment from industry can weaken the negotiating position of the state, also in other environmental matters.
- Unilateral commitments often cover measures which industry would have taken anyway.
- Unilateral commitments seldom cover high risk areas - e.g. the safety of ocean tankers. (Not even the disasters of the *Torrey Canyon*, *Amoco Cadiz*, or the *Exxon Valdez* have led to any unilateral commitments by the shipping companies.)
- Unilateral commitments may be entered into with the ulterior motive of avoiding formal and more stringent regulations by the state. The danger of dilution of planned state environmental policy cannot be excluded.
- Co-operation with the state and voluntary commitments are usually in regard to specific problems. This leads to a fragmentary approach and cannot replace comprehensive instruments (e.g. eco levies).

Opportunities

- In integration zones, obligations on the national level can also be extended to subsidiaries and suppliers in other countries.
- The existence of a functioning and strict environmental civil law increases the incentive for companies to agree alternative measures with the authorities.

- In the Netherlands, companies or organisations which have not entered into any voluntary commitments are subject to stricter regulations than those which have (Michaelowa 1998:25). This increases willingness to enter into such commitments. The OECD (1994b:188) has proposed analogous fees for non-participation in collective voluntary commitments.

Threats

- Voluntary commitments require *reliable* players (companies, organisations, institutions) in the private sector.
- The European Commission has laid down minimum criteria for environmental agreements (COM, 96:561) which are not kept to in all cases:
 - Quantifiable objectives,
 - Intermediate objectives,
 - Monitoring,
 - Periodic reports,
 - Legally binding status and sanctions for non-fulfilment,
 - Participation and transparency towards the public.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Voluntary commitments	o	+	+	+

++ very well suited, + well suited, o suited with qualifications, - not suitable

In industrialised integration zones, co-operational culture between private industry and the state makes an arrangement in respect of voluntary agreements (in the form of an integration agreement) unnecessary. In other integration zones, voluntary agreements are worth mentioning in the free trade agreement and should be connected with co-operation with the state in order to promote this instrument.

5.5.1 Environmental management systems

Voluntary measures which can be used to set up and implement environmental standards include environmental labelling (compare section 5.4.2), voluntary commitments of industry, and environmental management systems (system standards). There are in-company and supra-company environmental management systems. In-company systems aim to reduce the negative effects on the environment of the company's activities, especially in the context of an **environmental audit**. Supra-company systems aim to reduce the flows of materials during the whole value-adding process of a product (Chahoud 1998:30).

The eco audit on the EU level and in the ISO-14000 series⁷⁹ at the international level establish environmental management and systems for environmental testing in industrial plants. They agree in most areas. They serve in the context of harmonisation of standards for the comparative evaluation of precautionary environmental protection measures in companies. In Mercosur, ASEAN, APEC, and NAFTA, there are a large number of initiatives to introduce environmental management systems.

⁷⁹ ISO = International Standards Organisation

Within the EU, a "bridging paper" has been produced, which contains 16 additional criteria which an ISO-14001 certified company must fulfil in order to be able to take part in the eco audit successfully. The transparency of the rules for implementation in ISO-14001 is much higher than for the EU eco audit. The EU eco audit, however, is considered to be more demanding than ISO-14001. The weaknesses of ISO-14001 in comparison to the eco audit include the fact that there is no obligation to publish the results and an environmental declaration. There is also no obligation to have them audited by an environmental verifier and no official registration of a location.

Further criticism of the ISO-14001 standard refers to the lack of involvement of *stakeholders*, such as environmental organisations, in the process of certification, and to the fact that the companies certified according to ISO-14001 world-wide do not necessarily adhere to the same standards. The ISO-14001 standard refers much more to local and national laws and (environ-mental) standards: "*Companies will follow the compliance requirements of applicable law and regulation, which will mean local or national regulation*" (Benchmark Environmental Consulting 1996). Advantages of ISO-14001 lie in the fact that companies world-wide are seeking certification. 119 countries are currently members of ISO. For an evaluation of suitability in the context of regional free trade agreements, it is not necessary to go into the differences between the two approaches.

Strengths

- The instrument is voluntary.
- Unified regulations within the integration area lead to harmonisation of the level of company environmental protection level and comparable competitive conditions.
- In integration agreements in which many NICs and developing countries are involved, transaction costs can be reduced by regionally agreed environmental management systems.
- Environmental protection at the company level is not reduced to fragmentary measures, such as the avoidance of waste, but covers all environmental media.
- Because of the low level of interference, the instrument is easy to implement.
- Environmental audits promote the spread of best-practice methods.
- The required agreement on regional audit standards contributes to the harmonisation of common environmental policy objectives.

Weaknesses

- The instrument is voluntary. This means that it will only be accepted by companies with environmental orientation.
- Consumers are not normally aware of environmental audits.
- Regionally limited environmental management systems can only be compared internationally to a limited extent.
- Because of the relatively high costs of environmental audits, small and medium sized enterprises are at a disadvantage, meaning that they are mainly accepted by larger companies.
- The availability of qualified environmental auditors is limited, especially in developing countries. The qualification criteria for certifying audits is not internationally harmonised. Although the costs for certification are high, it does not necessarily lead to an improvement in environmental quality, because:
- Environmental management systems do not define concrete environmental objectives, but concentrate only on the effectiveness of management. This also limits their comparability (Chahoud 1998:32).

Opportunities

- In North-South agreements, environmental management systems can be promoted in the context of an environmental action plan.
- Regional standards for environmental management systems are easier to develop if there are already common environmental policy objectives within the integration zone.

Threats

- The countries involved must agree on unified material standards which the companies must fulfil.
- For exporters in the developing countries, the demand for certification (e.g. according to ISO-14001) can be a barrier to the market.
- In many (developing) countries, environmental aspects are at most of secondary importance when making purchasing decisions. This impairs the readiness of companies to take part in voluntary environmental audits.
- Building up regional audit institutions and the highly specialised control capacity is cost-intensive and usually does not have high priority.
- Material flow management throughout the value adding process is practically unknown in the international (regional) dimension.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Eco-audits	++	o	+	+

++ very well suited, + well suited, o suited with qualifications, - not suitable

Eco-audits should not be obligatory in a free trade agreement. Mention as a recommendation on a voluntary basis increases the spread of this very useful instrument - in spite of its limitations. As private and voluntary measures, eco-audits do not have any relevance in terms of WTO/GATT regulations.

5.5.2 Regional eco-labels

Eco-labels serve to identify certain environmentally friendly qualities of a product. They are positive standards. They can be restricted to one characteristic (e.g. consumption) or can take in all factors involved in the production, use, and disposal of a product (life cycle analysis).⁸⁰ While in Germany the "Blue Angel" is based on a single or on several environmental criteria, the European environmental label, the "European Flower" ("Margerite") is awarded taking into account the whole **life cycle** of a product (*life cycle: from cradle to grave*).⁸¹

A difference should be made between voluntary labelling and a national or regional labelling obligation. Obligatory labels must satisfy the GATT *Agreement on TBT*. The EU demands in its foreign trade policy a basic approval of labelling obligations by the WTO. On the regional level, voluntary environmental labels, e.g. the *Forest Stewardship Council* (FSC⁸²) can be

⁸⁰ A life cycle analysis involves all parts of the production process: raw materials, production (including packaging), distribution (including transport), use, and disposal. In all production stages, environmental effects are comprehensively analysed: production of waste, contamination of the soil, water and air pollution, noise, energy consumption, consumption of natural raw materials, effects on the eco system.

⁸¹ Chahoud (1998), 17 &c., gives a very informative overview of current environmental labels in the EU.

⁸² The Forest Stewardship Council consists of non-governmental organisation, timber trading companies, native indigenous peoples, local forestry organisations, and certifying organisations. There are about 100 members

adopted. For eco-labels, as for other environmental standards, the basic principle of non-discriminatory application to domestic and foreign products applies. Initiatives for regional eco-labels exist in the EU, Mercosur, and ASEAN. The CEC/NAFTA can make recommendations for eco-label standards. UNEP (1997b) offers an overview of various labelling schemes.

Strengths

- Eco-labels increase market transparency by making ecological product characteristics clear, increasing consumer information and supporting purchasing decisions.
- They promote environmental consciousness among consumers, their environment-related preferences, and the spread of environmentally friendly products, especially if consumers are prepared to pay higher prices for these.
- Voluntary labelling is always in conformity with GATT.
- Labels can bring product-related or image-related competitive advantages to companies.
- Regional labels (EU environmental label, the "blue angel") take into account local conditions and norms.
- Environmental labels are different from minimum standards for products in that they seek to reward ecological leadership.
- Environmental labels meet the growing need of consumers for environment-related information on products.
- They often enable the creation of a market for environmentally friendly products by creating or strengthening the demand for such products (Markandya 1997:5).

Weaknesses

- Eco-labels refer primarily to environmental standards which were developed in industrial countries, and are often not adapted to the needs of developing countries.
- Obligatory labels can be seen as protectionist measures in the sense of PPMs, if they refer to the production process. Obligatory labelling for products which require maintenance would be advantageous for domestic producers.
- One label does not cover all environmentally relevant aspects.
- The criteria for awarding labels are not transparent. They vary from country to country, and from product to product. Private ideas of environmental friendliness could thus achieve, objectively seen, disproportionate prevalence.
- Parallel existing environmental labels mutually weaken the force of their statement. State labels compete with private ones, private ones with other private ones.
- Eco logos suggest environmental friendliness which is not, however, absolute. It can only be understood relatively, in that eco-label products are more environmentally friendly than other comparable products.
- If the instrument is not to lose its credibility, the information provided by the manufacturers must be checked for accuracy. Control and administrative effort is thus required and must be implemented by national authorities.

Opportunities

- Labelling environmentally friendly products in an integration area by shared standards is more efficient than the parallel development of national labelling systems. This applies in particular for NICs and developing countries where there is a certain potential for eco-

world-wide. The role of the organisation is the accrediting and monitoring of certifying organisations and control of the certifying process. Tropical and boreal forests are certified. The number of certified forestry companies world-wide is growing steadily. There are tested forestry companies in Brazil, Costa Rica, Mexico, Honduras, and the USA.

products, but the national markets are small, or the transaction costs for the creation of appropriate institutions are high.

- The development of guidelines for environmental labels promotes their accuracy and solidity.
- Public purchasing guidelines can promote the spread of eco-labels.
- In the context of regional integration, increasing pressure of competition increases the number of products offered, so that more environmentally friendly products can be offered, for which the demand on the small market was previously too small.
- Development of regionally standardised environmental logos promotes the harmonisation of products standards and environmental quality objectives within the integration community. Harmonisation of product standards leads to a reduction of competitive disadvantage by varying product standards.
- This can also lead to a partial harmonisation of environmental law. Harmonisation of regional regulations avoids the danger of eco-dumping.
- The market created by regional integration gives companies incentives to differentiate products, and thus facilitates the creation of markets for products with eco-labels.⁸³
- If there are different labels for similar products within a regional integration area, then harmonisation of environmental labels will also reduce the transaction costs and set shared environmental standards.

Threats

- The increasing number of eco-labels, and their inadequate level of information, cause uncertainty among consumers. There are competing national, regional, and international labels within integration areas, other markings developed by public authorities, and private sector labels based on often intransparent criteria.
- If the countries within an integration zone have to agree on the same ecological criteria, there is the danger that these might be agreed on the basis of the lowest common denominator and that the environment would only benefit to a small extent from the introduction of such a label.
- Environmental logos which have only weak requirements contribute to a dilution (or *downward harmonisation*) of eco-labels.
- Different priorities for environmental protection in individual countries makes the finding of a consensus for shared criteria difficult.
- The environmental consumption of previous efforts ("ecological backpacks") is often not taken into account.
- A low level of environmental awareness among consumers makes the use of an environmental logo useless, since the motive of environmental protection does not play a part in the purchasing decision. This may be the case especially in developing countries, or among poorer sections of the population, where the motive for the decision to purchase is simply the lowest price.
- Eco-labels are in principle in conformity with GATT. In the case of voluntary eco-labels based on a life-cycle approach and, therefore, also on PPM criteria, no general statements about GATT conformity are possible (Chakarian 1997:264 f.). Judgement from case to case is necessary here.
- If the award criteria are not internationally harmonised, then the products are not internationally comparable. Eco-labels thus have similar problems to those on agreement of regional environmental standards.

⁸³ The introduction of an eco-label for the banana market in Europe is called on for environmental policy reasons. In the context of the common regulations for the banana market, contingents for "eco bananas" are to be identified.

- Eco-labels can suggest to the consumer that by using environmentally friendly products, he has freed himself from responsibility for environmental policy.
- Eco-labels serve as marketing instruments for the sale of products. In terms of environmental policy, this is sending out the wrong signals. If the aim is to reduce environmental consumption, then incentives to avoid consumption must be provided. Eco-labels have exactly the opposite effect.

Conclusions and evaluation

	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Eco-labels	+	(+)	+	(+)

++ very well suited, + well suited, o suited with qualifications, - not suitable

Eco-labels can be used as an effective instrument of environmental policy as long as they are transparent and non-discriminatory, and are based on an open process (Vossenaar 1997:33). Within the regional integration zones, regional eco-labels should be developed for main groups of products with significant environmental effects in terms of production or consumption, or existing national or international labels should be adopted, as has been the approach with the "green point" in the EU (which was also adopted by Mercosur). The labels should first be devised on a voluntary basis, mainly to reduce the effort required for control. Obligatory labelling should only be considered when environmental standards have been established.

The applicability of eco-labels is impaired by various weaknesses and difficulties. Establishing them in the free trade agreement can therefore only be recommended within limits. The reservations are the stronger, the weaker the level of development of the integration partners is. Nevertheless, in the long term, a harmonised spread of eco-labels and their integration in the free trade agreement is useful. As long as eco-labels are used at the private level, there is no relevance to WTO/GATT regulations. Obligatory labels which meet the criteria of the WTO agreement on technical obstacles to trade, especially with regard to transparency of the requirements, are un-problematic terms of WTO regulations.

5.6 Suitability of the instruments: conclusions

The following table 5/4 provides an overview in summary of the suitability of environmental policy instruments for integration in a regional free trade *agreement*. This is in no way a statement that the instrument is ecologically or environmentally suitable. This evaluation would require an assessment of the instrumental advantages and disadvantages of an instrument on the one hand, and practical or political aspects on the other hand, which would speak for or against application in an integration zone. These practical perspectives are dominant with regard to the evaluation. Eco-taxes, for example, are theoretical *first-best* instruments. However, because of considerable methodological and political problems with regard to national implementation and regional harmonisation, they have only very limited suitability for integration in a regional free trade agreement.

Fig. 5/4: Summary evaluation of environmental instruments

Instrument	Type of integration			
	IC/IC	DC/DC	NIC/DC	IC/NIC/DC
Civil law	++	o	+	+
Standards	++	+	+	+
Investment protection	++	+	++	++
Liability law	++	o	+	+
Eco-taxes	(+)	-	o	-
Fees	+	o	o	o
Reduction of environmentally negative subsidies	++	o	+	+
Payment of environmentally positive subsidies	++	+	+	++
Certificates	(+)	-	o	(+)
Joint implementation	-	+	++	++
Trade preferences	-	-	o	(++)
Trade restrictions	o	o	o	o
Eco-taxes	o/(-)	o/(-)	o/(-)	o/(-)
Border Tax Adjustments	+	o	o	(+)
Political dialogue	++	++	++	++
Environmental action plans	++	+	+	+
Co-operation	++	++	++	++
Adaptation	+	-	(+)	++
Arbitration	++	++	++	++
Complaints procedure	++	(++)	(++)	++
Reporting, monitoring	++	++	++	++
Formation of institutions	++	o	+	o
Voluntary commitments	o	+	+	+
Eco-audits	++	o	+	+
Eco-labels	+	(+)	+	(+)

++ very suitable; + suitable; o suitable with reservations; - not suitable; in brackets = weaker;
 IC = Industrial Country; DC = Developing Country; NIC = Newly Industrialised Country.

Without going into the matter in detail here, it should be mentioned that regional free trade agreements do present the opportunity to agree on instruments which do *per se* clash with WTO/GATT regulations, such as trade restrictions on the basis of *PPMs* (see section 6.1.2 for details).

5.6.1 General Evaluation

- The overview makes it clear that the **type of integration** (in the sense of type of the integration partners) plays a major part in determining the suitability of most instruments for the integration zone. This can be explained by the fact that for the effective application of many instruments, there must be a context which tends not to be present in developing countries. Civil law instruments, for example, require functioning administrative and judicial structures for their implementation, as do environmental standards. Instruments of this kind, which include regional environmental standards, *border tax adjustments*, and reduction of environmentally negative subsidies, are therefore mainly suitable for free trade agreements between industrial countries, or in which industrial countries are involved. In-

dustrial countries should therefore use their influence to establish environmental protection instruments in regional free trade agreements involving developing countries or NICs, perhaps on the basis of financial support or other incentives, such as environmentally-related trade preferences.

- The **predominant suitability** of co-operative instruments, including political dialogue, environmental action plans, *EIAs*, and environmental monitoring, arbitration rules, and complaints procedures, is not surprising. Regulations for protection of investments, e.g. combined with environmental obligations, are suitable for all kinds of integration. Voluntary instruments, such as eco-audits, or eco-labels, are suitable for more highly developed partner countries.
- On the other hand there are various instruments which, regardless of the type of integration, for various reasons, are **not really suitable** for integration in a free trade agreement. These include eco-taxes and fees, eco duties, and trade restrictions.

5.6.2 Agreements involving industrialised countries

Especially with regard to future negotiations on the involvement of the EU in interregional or bi-lateral free trade agreements with individual countries, the following points should be considered:

(a) For regional free trade agreements between industrial countries, nearly all environmental policy instruments are suitable or very suitable, with the logical exception of instruments designed specially for developing countries (e.g. *joint implementation*, or environmentally related trade preferences). The limited suitability of e.g. eco-taxes or certification is based primarily on technical implementation problems, which also reduce political acceptability.

(b) In "mixed" free trade agreements between industrial countries, NICs and developing countries, special emphasis should be placed on the suitability of environmentally related trade preferences and - as mentioned at the beginning - co-operative instruments. Industrial countries especially can promote the integration of these instruments in regional free trade agreements combined with economic incentives for the developing countries involved. Less suitable are eco-taxes and fees (for the reasons just mentioned), and trade restrictions and eco duties, especially because it will hardly be possible to achieve the consensus required for these. Other instruments, such as the formation of institutions and environmental liability law, require a greater **depth of integration** than free trade or preference agreements, which is not normally present in IC/NIC/DC agreements, and is therefore to be regarded as a K.o.-criterion.

In real cases, therefore, the assessment of the suitability of an instrument, both the **level of development** of the countries involved, and the **depth of integration** must be taken into account.

6. Political conclusions and recommendations

The following sections summarise the analytical and empirical findings from the previous chapters in the form of political conclusions and recommendations. In section 6.1 perspectives will be examined which have reference to the *formal design* of free trade agreements. In section 6.2 some important *aspects of content* are addressed which should be part of a regional free trade agreement and which were dealt with in detail in Chapter 5 on environmental policy instruments. Chapter 7 deals with *aspects of negotiating strategy*.

6.1 Contractual integration of trade and environmental aspects

6.1.1 Free trade agreements as opportunities for regional environmental policy

Regional free trade agreements offer a very good opportunity to establish a comprehensive environmental protection system beyond the national level. The restructuring process which is always associated with economic integration is a favourable context for the simultaneous development of environmental policy at the regional and national levels. The willingness to co-operate between the members of a regional integration zone is generally greater than that between countries not connected by such a bond. Fundamental values between the partners become more similar, which has been observed not only in the EU. This is favourable for regional environmental policy. Regional integration thus opens up opportunities for environmental protection which (at present) on a global level are otherwise hardly possible.

Recommendation:	The political motivation to create a free trade zone should be used to integrate environmental protection at a high level of priority into the integration process.
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The bond between the members of a regional free trade zone can be used to strengthen collective environmental awareness in the integration zone. In integration zones, wealthier countries show more solidarity and a sense of partial collective responsibility with their poorer geographical neighbours as is the case with multi-national environmental agreements, so that social and economic asymmetries can be better taken into account. This is true to a certain extent also the other way round; many developing countries show more understanding for environmental ideas of their partners than for those of remote industrial countries which are not connected with them. In the EU, various funds are used to counter asymmetrical strain. In NAFTA, on the other hand, the principle predominates that unequal strains must be dealt with at the national level. The latter would hardly be possible in more heterogeneous integration zones than NAFTA.

Free trade agreements mean a clearly more consistent liberalisation of trade than at the multi-lateral level of the WTO. They can therefore have a much stronger leverage effect, which can be used for environmental objectives. This is reinforced by the fact that the members of a free trade zone (usually) have common interests, often also shared values. They usually have common borders, share resources and sources of energy, have similar weather conditions and perhaps also similar topographies. This facilitates not only basic agreement on common re-

gional procedures, but also the ability to do this with a greater degree of differentiation and with greater intensity than would be possible in a multilateral context.

Within an integration zone, there is more *peer pressure* (or the "*mobilisation of shame*") to actually carry out agreements made than is the case for the implementation of international environmental agreements. The political commitment to economic integration initiates impulses and has an influence on ecological integration.

Regional environmental policy can only be an extension of national policy. If it does not have a supra-national character (in the sense of international law), then it cannot replace national policy in any way. Regardless of regional or supra-national guidelines and harmonisation, environmental law should mainly be developed - harmonised - at the national level. This facilitates its acceptability and helps to reduce resistance to regulations "from the top".

Recommendation:	The dynamic developed in regional free trade zones should be used increasingly for environmental policy objectives.
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A functioning integration process develops its own dynamic, with various pull and push factors. In the regional association, with deeper integration, there is a kind of snowball effect of harmonisation which is not to be observed to this extent between states which have no or only loose connections with each other. This has an effect on the breadth and depth of environmental policy, and changes during the integration process. In the EU, for example, there is a trend to harmonise environmental standards which is obviously better accepted in a real single market than it would be in integration zones with less depth. In NAFTA too, environmental policy has a high status. In the course of time, this should lead to sustainable improvements in environmental law and in environmental policy. Mexico has already adapted various environmental protection norms to stricter US norms. An effective regional environmental policy at the same time improves the "climate" for environmental policy at the national level and contributes to overcoming fragmentation at the national level. It is also clear, however, that a regional environmental policy requires more agreement and co-ordination between the states than parallel national efforts. A prerequisite for this is the corresponding political will to overcome national state perspectives, which also applies with regard to openness for participation and for the promotion of public environmental awareness ("good governance").

Geographically limited integration zones tend to be less prone to conflict than larger areas. Whereas on the global level conflicts of objectives exist between the participants (e.g. between exporters of tropical timber and countries which do not have tropical timber), regional zones are often "free" of these problems and therefore less restrained from agreement on measures. On the other hand, especially the inter-regional agreements (EU/Mercosur, EU-Mediterranean zone, APEC) offer opportunities for global environmental protection and for international harmonisation of standards (see Chapter 4).

Recommendation:	Regional environmental policy agreements should primarily have a regional perspective.
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In regional free trade agreements, the de-territorialisation (globalisation) of environmental damage can be opposed by re-territorialisation. In the context of the WTO, the developing countries are fairly unanimous in their rejection of inclusion of environmental subjects in international trade negotiations, because they are afraid of protectionist abuse. The regionally possible environmental policy integration with positive contributions to global environmental protection cannot offset the fact that in other regions the global environment continues to be

put under strain. On the other hand, a regional environmental first-mover policy weakens the danger of the *first-mover disadvantage*, as there can be competitive disadvantages on the economic level for unilateral national environmental policies.

6.1.2 Contractual basis of environmental protection

There is a widespread fear that the possibilities for forming regional environmental policy are restricted by the standards of the WTO regulations, which at present are not very environmentally oriented. There is, however, no judicial foundation for this policy, which should be overcome.

Recommendation:	The treaty states of a regional free trade agreement should increasingly also include elements in their environmental policy which clash with current WTO/GATT policy.
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There are a number of options for establishing environmental policy aspects in regional integration agreements:

1. Integration of environmental policy in a new free trade agreement.
2. Appropriate amendments or additions to an existing free trade agreement (as in the EU).
3. Conclusion of a separate environmental agreement (as in NAFTA).
4. National environmental policies without a regional contractual basis, with coordination by political dialogue (as in APEC).

On 1: Both the WTO/GATT agreement and international or regional environmental agreements are equal elements of general international law. If there are clashes between two countries because of two international agreements, the situation is to be judged on the basis of the Vienna Treaty Law Convention of 1969. If both agreements refer to the same object, then a norm in an older agreement will be deemed to have been replaced by a corresponding norm in a later agreement (*Lex-posterior*, and *Lex-specialis* rules).⁸⁴ A condition is that both agreements apply for both of the countries involved, and the norm of the younger agreement clashes with the norm of the older agreement (Art. 30, Vienna Convention on Treaty Law).⁸⁵

Thus the WTO Agreement of 1995 (GATT 1994) dominates over *earlier* concluded environmental agreements for those countries which are parties to both agreements. This applies for all relevant environmental agreements. If an environmental agreement, however, came into force for both countries *after* 1st January 1995, and if both countries are members of the WTO, then the environmental agreement has priority over the WTO agreement (GATT 1994).

The newer agreement, however, must not mean a weakening or dilution of GATT principles, as in this case the *Lex-posterior principle* would not apply, and third countries could proceed against attempts to diverge from WTO norms. There is always the possibility that a third country could object to the introduction of environmentally-related measures, even if these only have an effect in the internal relationship within the regional free trade zone, because according to Art. XXIV:8 of GATT, duties and "other restrictive trade measures" are to be *removed*. It is, however, not to be expected that objections will be brought against measures which have a more restrictive effect on inner relations than on outer relations.

⁸⁴ "*Lex posterior derogat legi priori*", meaning roughly: New law replaces old law. Compare Diem 1996:61ff..

⁸⁵ The case in which not all parties to the older contract are also parties to the newer contract is not dealt with here (Art. 4, Vienna Convention on Treaty Law).

It thus follows that the members of a regional free trade agreement *among themselves* can agree on (restrictive) environmental regulations and apply them *internally* even if they clash with WTO (GATT 1994) rules (e.g. with regard to PPMs⁸⁶, which, according to GATT may not serve as a justification for trade restrictive measures). The norms of GATT 1994 are effective for these countries' relationships with each other only if they are not over-ridden by newer (more restrictive) environmental agreements. As all relevant international environmental agreements were concluded *after* GATT 1947, trade restrictions by environmental agreements form members of an environmental agreement *among themselves* do *not* clash with the rules of GATT 1947.

An application of environmental norms of a regional free trade agreement to third countries which are members of GATT 1947 or WTO members, but not members of the newer environmental agreement, is only possible under consideration of the corresponding WTO/GATT compatibility. In practice, it is therefore legally contradictory that trade restrictions, e.g. the Washington Convention on the Protection of Species, applied to third countries are implicitly accepted (Diem 1995:116).

In terms of WTO law, it is not the formulation of environmental measures in the internal relationships between members of an integration zone which is problematic, but the outside relationship to non-members of the integration zone. Here it should be checked *in each case* whether the norms of the integration zone, which are applied unilaterally to third countries, are permissible in terms of WTO regulations. A general statement is not possible.

On 2: A change in an existing trade agreement in order to incorporate environmental aspects is especially necessary if, on the basis of the regulations of a regional free trade agreement, conflicts with national, regional, or global environmental policy aspects arise. The existing contractual aspects would then have to be adapted and consolidated. Environmental policy exception clauses may have to be added to the integration or trade agreement. Supplements to the trade agreement are necessary especially if trade policy instruments are to be used to create incentives for the spread of environmentally friendly products or technologies, or if environmental standards with an effect on trade are to be recognised. For WTO/GATT compatibility, the comments on (1) above apply by analogy.

On 3: If environmental aspects are not to be included in an integration agreement which is to be newly negotiated, or if the existing original integration agreement is not to be changed, then it would be useful to conclude a **supplementary environmental agreement** as in NAFTA (compare sections 3.2 and 4.1). For WTO/GATT compatibility, the comments on (1) above apply by analogy.

On 4: In agreements of the APEC type, *concrete*, sector-related regional environmental policies are rarer. Environmental protection is included in APEC as an integrational principle. Environmental policy, however, is mainly carried out in the context of unilateral, only partly concerted actions. The national policy is decisive for the selection of fields of action and the formulation of measures and instruments. As we are not concerned here with (regional) binding environmental agreements, WTO/GATT conformity should be checked for GATT 1947 or 1994 regulations for unilateral measures by individual countries.

⁸⁶ Process and Production Methods.

To summarise, it should be emphasised that for the parties to environmental agreements which came into force after 1st January 1995, including those which were concluded in the context of a regional free trade zone, contrary to a widespread opinion, there are *no* limits to the scope for formulating environmental policy. Problems with GATT regulations can only arise in connection with the application of environmental norms to non-members of the regional free trade zone.

6.1.3 Political and public dialogue

Recommendation:	The political dialogue between the members of a regional free trade zone should concentrate more on environmental policy. Environmental policy specialists should be involved in this process.
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The political dialogue prepares for integration agreements and accompanies their implementation. The continuous carrying out of political dialogue is established in all integration agreements. In section 5.4.1 the political dialogue as an instrument was examined, which need not be repeated here. With regard to the preparation of real negotiations on agreement, it is important to involve also the middle and lower levels of administration and politics in the preparation and decision-making process. Their interests have an effect on the inclusion of environmental aspects in the trade agreement. Local communities or states in federations have to accept changes in environmental law, or in investment rules, and perhaps also limitations of their decision-making powers by the integration agreement. State and private **environmental experts** should be brought in to the preparations for the negotiations at the earliest possible time. The participation of representatives from environmental ministries in the negotiations, e.g. on environmental standards, is a decisive factor for the inclusion of environmental aspects in the concrete formulation of the trade agreement, as was demonstrated clearly by the negotiations for NAFTA. In NAFTA, the participation of representatives of civil society had positive results for the consideration of environmental aspects in the free trade agreement. NGOs from Canada and the USA were e.g. re-presented in the consultative bodies for trade liberalisation (Houseman 1994:8).

Recommendation:	The mostly weak legal quality of international environmental law should be (partly) compensated for in regional free trade agreements on the level of the political dialogue.
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International environmental law has three fundamental weaknesses:

- Firstly, it is fragmentary, full of gaps, and self-contradictory. The large number of international environmental agreements, conventions, and codes vary greatly both in terms of contents and in terms of the legal systems. They are mainly concentrated on isolated details and excluded specific problems, such as the protection of the soil. Their acceptability on the national level therefore varies greatly.
- Secondly, international environmental law is usually reactive, only responding to recognised environmental problems. Precautionary and preventative aspects are underdeveloped. The securing of existing values is in the foreground. Environmental effects in terms of the inter-generation perspective are practically not considered at all.
- Thirdly, international environmental law is *soft law*.

Hard law is binding international norms in the sense of international treaty law and international common law, as formulated in Art. 38(1) of the statutes of the International Court of Law in The Hague. The concept of *soft law* can be understood in a number of ways:

1. The international environmental agreement contains no obligations which are binding in international law (*soft law* in the more specific sense). This applies for guidelines, recommendations, and "obligations" to co-operation.
2. The international environmental agreement is binding in international law; its formulations, however, are linguistically so weak ("will attempt", "so far as possible", "as appropriate for each country") that there are practically no obligations at all (also *soft law* in the more specific sense).
3. The international environmental agreement contains basically binding obligations in terms of international law, but no sanctions for the event of a breach. This is the most common case and represents *soft law* in the extended sense.
4. The international environmental agreement includes binding obligations and possible sanctions, but it and its sanctions are hardly applied in practice (*soft law* in the broadest sense, also a widespread variant).

The usually only weak and vague obligations of international environmental agreements are not directly and immediately effective on the level of concrete negotiations, and are not linked to sanctions to deal with breaches. They are therefore only of value if they are actually complied with. This can only take place by transformation on the national legal level. This means, however, seen world-wide, a patchwork of environmental protection law. At the national level, only island solutions can be realised. What, however, is the use of that if the "the others" do not cooperate? The necessity for a **harmonisation** at a supra-national level of law is apparent. The effectiveness of environmental norms depends on the will of individual states to implement and enforce these norms. Russia or India, for example, have excellent environmental laws. These laws, however, are largely ignored, and no sanctions are imposed. Apart from in the EU, there is no supra-national authority which can take action in the event of breaches of international contractual regulations. As is usual with international agreements, resort to the usual political arbitration mechanisms or to international law is possible. The resulting delays in reaching agreement can, however, cause waiting costs because in the meantime environmental damage continues or is introduced.

It must be emphasised again that environmental policy deficits and resulting bad environmental quality in many cases *cannot* be traced back to the fact that the existing environmental norms are incomplete or inadequate, but to the fact that they are not applied and not enforced. The terms "should", "ought to", and "it is necessary that" in national environmental policies, and other formulas of recommendation are symptomatic. The establishment of binding environmental norms in a free trade agreement and the contractual agreement on their implementation are therefore possibly necessary, but certainly not sufficient conditions for an improvement of regional environmental quality.

On the other hand, however, the fact cannot be overlooked that many international environmental agreements, which have each been signed by a large number of states, were not later ratified (e.g. the *UN Convention on the Law of the Sea* of 1982, which was signed by a total of 161 states). Not a few environmental agreements have therefore never come into effect; others have then come into effect for a much more limited number of states, who ratified them, than originally intended. The national administrations are often not able to cope with the growing flood of international agreements and not able to get them through the national ratification process in a suitable form.

6.1.4 Strategic considerations

Recommendation:	The strategic possibilities of inter-regional free trade agreements should be used more intensively for environmental protection purposes.
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Free trade agreements have a strategic quality which is not always fully appreciated. They should be used to push ecological, as well as economic and political interests. This is made clear by increasing activities to formulate bi-regional free trade agreements, which are clearly to be classified as **strategic alliances** (compare the examples in section 3.6.6). The Federal Minister for Foreign Affairs, Fischer, said at the Rio Conference in June 1999, with reference to the EU: "Only if we unite can we, as Europeans, determine our destiny, in part, ourselves." We can certainly make the analogous interpretation that we - Europeans, Germans - can have an influence on developments in the territory of our partners by means of inter-regional integration agreements, and can have a positive influence on the environmental policy there. This, however, will only be possible on the basis of compromise on both sides, in which the EU will and must make concessions in the form of liberalisation of agricultural produce, and, in turn, will be able to demand environmental policy progress ("package solution").

In various integration zones (NAFTA, Mercosur, APEC) individual countries dominate because of their economic and political strength. Apart from the formal status of environmental protection in the integration agreements, the development, and therefore the effectiveness of regional environmental policy is thus constantly determined by the specific interests of these countries.

In regional free trade agreements, there tend to be more favourable starting conditions for effective regional environmental protection than in inter-regional agreements. Nevertheless, the strategic opportunities should be made use of, also in inter-regional agreements - above all with NICs, transformation and developing countries - to emphasise the aspect of ecological *good governance*.

6.2 Conceptional aspects

Recommendation:	Environmental protection and sustainable development should be included in the preamble and in the main text of agreements.
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An important basis for the inclusion of environmental aspects in regional integration agreements is the establishment of environmental protection as an aim of the agreement. EU, NAFTA, APEC, SADC, Mercosur, the EU-Lomé-agreement and the Barcelona Declaration on the MFTZ have established sustainable development and environmental protection as general aims and basic principles of the integration. (The aim of sustainable development has also been added to the new preamble of the WTO.)

Recommendation:	Regional environmental norms should be transparent, and the obligation to implement them legally enforceable.
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The free trade agreement should include an obligation to implement and enforce existing national and regional environmental norms. This is also useful if the environmental costs of the integration partners do not diverge because of different environmental *norms*, but because of

their different *implementation* (Esty/Geradin, 1998; Feretti, 1994:121). Many developing countries and NICs have high environmental standards, often derived from those of industrial countries. They are not, however, enforced because of a lack of effective institutions and political will. An obligation of this kind can counter the accusation of "environmental dumping" against developing countries (Repetto 1994:38).

The obligation to use environmental norms should be legally enforceable - e.g. by an obligation to publish, as exists in the context of NAAEC. The results of investigations should also be published. CEC processes indicators in order to make the implementation of environmental laws transparent (CEC 1998:78). Obligations to implement environmental standards are not trade measures and are therefore not included in GATT/WTO regulations.

Recommendation:	Basic principles of environmental protection should be established in regional free trade agreements.
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The regional free trade agreement should include environmental principles such as the principle of causality. In addition, environmental policy - taking into account the principle of subsidiarity - should be established in all sectors as an integrating principle for the formation of policy (EU, APEC). Environmental policy must be an important part of total policy. An environmental regional agreement must define at least three aspects:

- Status of environmental policy in the context of integration policy, and
- the priorities within environmental policy. This can be supplemented by
- instrumental priorities with regard to the introduction of new instruments and modification or abolition of existing instruments and measures. In order to achieve optimisation of environmental policy, environmental action plans should be adopted.

Although hardly quantifiable in regional agreements, this should clarify the need for a budgetary context for regional environmental policy.

Recommendation:	Environmental quality objectives and environmental standards should be agreed on the regional level.
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In existing integration agreements, no quantitative protection targets have yet been defined. Instead, co-operation measures have been agreed to solve cross-border environmental problems, to implement international environmental agreements, and to realise national environmental policy. Nevertheless, on the regional level, **environmental quality objectives** should be defined by **environmental minimum standards**. Regional agreements will primarily relate to regional environmental problems. It would, however, be favourable to also establish the validity of international environmental agreements in free trade agreements (e.g. NAFTA, Mercosur); this, however, will depend on whether the members of the integration zone have largely ratified these environmental agreements.

Recommendation:	The right of each state to its own environmental standards should be established.
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The acceptability of regional agreements on environmental protection - especially in North-South agreements - will be increased if states are granted the right to have their own environmental policy. This relates both to the selection of environmental quality objectives, and to the instruments for their implementation. The right to national environmental policy is favourable for developing countries because it allows them to have their own suitable envi-

ronmental standards. On the other hand, there are also incentives to develop environmental standards and to set higher environmental standards.

Recommendation:	Regional environmental policy agreements should take the differing capacities of the member states to implement them into account.
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The more homogeneous a group of countries is, the better are the prospects of establishing common environmental protection at the regional level. An essential aspect is the fairness of the distribution of effects and burdens. The inadequate progress in the realisation of the climate protection agreement demonstrates this. With heterogeneous integration zones, it must be expected that political awareness of environmental problems will be less developed in the economically weaker countries, but that the environmental policy interests of the industrial countries can be used to enforce economic interests. A Chinese prime minister once said, "Ecology is for the rich countries, poor countries cannot afford it" (quoted in Goeudevert 1992:32). Indira Gandhi said at the first UN Conference on the Environment in Stockholm in 1972: *"How can we speak to those who live in the villages and in the slums about keeping the oceans, rivers and air clean when their own lives are contaminated at the source?"*⁸⁷ Developing countries thus have the possibility of demanding economic concessions from the North as a reward for taking environmental policy action. For some developing countries, the main motive for taking part in international environmental negotiations seems to be the desire to pursue non-ecological interests, such as finance or technology transfer (Williams 1993:19). Agreement on regional environmental policy can thus, especially in North-South integration agreements, be achieved more easily by economic compensation, in order to take different capacities into account.

It has been observed that in integration agreements in which only developing countries and NICs are involved, environmental aspects are largely restricted to declarations. Even in (seen formally) the new and possibly "modern" integration zone Mercosur, which with Brazil and Argentina certainly does not include underdeveloped countries, no clear environmental policy commitment can be seen at government level. Also environmental interest groups are not able to have any effective influence on national or regional government policies. The main causers of pollution, on the other hand, industry and agriculture, have in this context little interest in carrying out environmental policy on their own initiative. On the contrary, close relationships between business and politics often seem to have a strong braking effect on environmental policy. It is interesting that industry is often supported in this by the trades unions, who are worried about the supposed loss of jobs.

Environmental protection is always more difficult to implement in areas where other problems, economic, social, are more urgent. In these areas, the environmental awareness of the people is at a correspondingly low level. Economic development also means a certain amount of environmental strain. However, there is a clear positive correlation between per capita income and expenditure on environmental protection (Jänicke 1996:20; see also Chapter 2). As a consequence, the integration agreements of the EU, EFTA, and NAFTA do not only contain declarations of environmental policy intent, but also concrete areas of action in which the practice of environmental protection is carried out. The European Environmental Agency reports, however, that general environmental quality in the EU in the recent past has not improved, in spite of a large number of union-wide regulations. Especially the sectors of transport and energy production have shown signs of environmental deterioration, mainly because

⁸⁷ Quoted from Goedevert 1992:32 and Struthers, David, The United Nations Environment Programme after a Decade, *Denver Journal of International Law and Policy*, 12.1983:2/3, 281, quoted by Biermann 1998:119.

of the net increase in demand, although capita consumption of energy has decreased (EEA 1999 and MFTZ Environment Monitor 1.1999:6).

6.3 Aspects of contents

Recommendation:	The regional free trade agreement should be based on a previously carried out <i>Environmental Impact Assessment</i> , and include provision for continuous environmental monitoring.
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An ecologically-oriented free trade agreement must nowadays be based on a previously carried out *Environmental Impact Assessment*. Without reliable and up to date environmental data, rational policy decisions are not possible. Appropriate financial resources must be made available. (It is difficult to understand why EU's announced environmental study on the Mediterranean Free Trade Zone has not yet been decided on, while an *Environmental Impact Assessment* of the next WTO round is already in preparation.) The integration agreement should prescribe a basic environmental analysis and continuous follow up in the form of Environmental Reviews on the basis of regional environmental monitoring. This requires systematic processing of data by building up and maintaining a regional environmental monitoring system. Ecological aspects should be included in *Trade Policy Reviews*. It is important to have agreement on a common methodology for the evaluation of environmental effects (as described in detail in Chapter 2, especially section 2.3.3).

Recommendation:	A regional free trade agreement should include arbitration mechanisms for cases of dispute which also refer to environmental protection.
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On arbitration mechanisms, a distinction should be made between controversies between states, and disputes between the state and the civil population. Each requires its own arbitration rules (compare sections 5.4.4 and 5.4.5).

In the case of disputes between states, solutions are often found at the political level. It is nevertheless useful to agree on arbitration mechanisms in free trade agreements, in order to have a starting position in case disputes may not be possible to solve politically. In some cases, it is a matter of a decision on basic principle, on which each side wants to obtain an official decision, as political decisions have no legal bearing. The panel procedures in NAFTA or the WTO are examples of functioning solutions. In the EU, the European Court of Law may be responsible for environmental disputes. In the Asian region, there are, for reasons of traditional culture, hardly any formal mechanisms for the settlement of disputes, since consensus is an assumed principle of integration. In the case of intercultural differences (APEC), there may therefore be different priorities. The additional protocol to the Mercosur agreement also does not contain any arbitration rules.

The processing of disputes between the state and civil society is a matter for complaints procedures. Because of different legal systems, an interstate agreement on this should contain basic principles and guidelines in order to promote consideration of citizens' interests in the integration zone.

Recommendation:	To support the implementation of national and regional environmental standards, a free trade agreement should include ecological conditionality in its rules for public procurement.
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The usually large volume of public procurement in an integration zone can provide effective leverage for the implementation of environmental standards. The type and scope of the criteria to be considered depends on the possible regional harmonisation of environmental standards, since heterogeneous national standards can lead to internal distortions of competition and discrimination.

Recommendation:	The free trade agreement should make it possible for member states, in their national laws on competition, to allow consultation and cooperation between enterprises in order to improve environmental protection in the industry.
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In many countries, there is well developed law on competition which includes provisions to prevent agreements between companies to the disadvantage of the consumers. Co-operation between companies for environmental reasons - even if of the nature of a cartel - should be allowed. It can be observed, however, that the power of the states to form foreign trade policy is declining. International enterprises occupy areas of influence between and beside the states which can only be inadequately controlled by national legal instruments. Intra-regional and inter-regional business competition takes place partly in the form of confrontation, partly in the form of co-operation. Globalisation of trade and investment, however, also overcomes regional borders. Regionalisation is primarily a state or political phenomenon, which does not limit the globalisation process in the business world. Parent companies usually have subsidiaries in different regions, so that from the point of view of trans-national enterprises, the regions are multilaterally open.

Recommendation:	Regionalisation of environmental policy should be institutionally founded.
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Regionalisation of environmental policy does not necessarily lead to environmental improvement if it is not implemented and enforced nationally. To this end, appropriate political and administrative structures are required at the regional and national level, for which financial and human resources **capacities** must be secured. **Responsibilities** must also be defined, in order to influence all environmentally-relevant areas of policy - e.g. agriculture and forestry, energy and transport. The most important institutional aspects are:

- **arbitration,**
- development of regional **environmental standards,**
- development of regional and harmonisation of national **eco-labels,**
- environmental **monitoring** and **evaluation.**

In practice, however, many integration agreements have important shortcomings in the institutional area, both with regard to effectiveness and efficiency, and, especially, with regards to control, enforcement, and the ability to impose sanctions. These shortcomings are intensified - and this is often observed - if the political will to carry out the agreement is lacking, and/or the law of liability is inadequate.

Recommendation:	Strict liability should become a basic principle of environmental liability.
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The implementability of environmental legal standards is impaired if the law on environmental liability is inadequate. There is a trend in the field of public law and civil law for the principle of strict liability to replace the principle of liability only in case of negligence. This should also apply in international law for environmental liability between states. State liability in the form of protection of private persons or enterprises who have suffered damage or injury would also be useful. On the broad multi-lateral level, it is difficult to achieve consensus in this matter. Even massive environmental catastrophes such as *Bhopal* or the tanker accidents with the *Torrey Canyon*, *Amoco Cadiz*, and *Exxon Valdez* have not lead to the introduction of state compensation guaranties. It would be much easier to imagine this happening in a regional context.

7. Thoughts on negotiating strategy

7.1 Integrated or separate negotiation of environmental aspects (single or parallel track)

Environmental aspects are included in the contractual foundation of a free trade zone especially if integration is intended to go beyond mere liberalisation of trade towards a deeper level of regional integration. The variety of existing free trade agreements reflects the various forms of political dialogue and negotiations. There are agreements in which environmental aspects and trade aspects are integrated in a single contractual text (EU, Mercosur) [*Single Track*, or *Single Undertaking*], and others in which environmental policy and trade policy are incorporated in separate contracts (NAFTA) [*Parallel Track*]. The difference lies not so much in the editorial intermeshing or separation of the contractual texts as in the view of the negotiating strategy, since it is possible to integrate parts of a contract which were negotiated separately into a single text. The essential point is whether the one component of the contract can be established without there being agreement on the other, or whether it is only possible to have both of them together as one "package". The decision about which "track" version to use is a central point in the political dialogue before the beginning of the negotiations on regional integration.⁸⁸

Recommendation:	Environmental protection in the context of regional free trade agreements should always be negotiated in <i>Single Track</i> procedure. Only if this is not possible should <i>Parallel Track</i> negotiations be carried out as a second-best alternative.
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In single track negotiations, consensus must be reached on every detail. This is time consuming, but necessary, because in practice majority decisions are not usual. The United Nations' principle of "one country one vote" tends to be rather unrealistic today. In the European Union, the foundation treaty of the union was negotiated as one package and in this sense, *Single Track*, although, naturally, many different negotiations took place and are taking place. "*Parallel Track*" can mean two things: either parallel negotiations take place on trade and the environment, or the environmental policy aspects are negotiated after the trade policy integration agreement, but not integrated into the existing trade agreement.

Further examples: Separate negotiations took place in the context of regional integration in the Asia-Pacific zone and in NAFTA. The EU preferred *Parallel Track* in the bi-regional negotiations with Mercosur (in contrast to the partners, who preferred a *Single Undertaking*, particularly because in the course of negotiating packages compensatory compromises are possible). On the other hand, Mercosur demanded a consistent *Parallel Track* in the context of the Free Trade Area of the Americas (FTAA) in which environmental issues were accepted as a subject for discussion without any relation to trade (Tussie/Vásquez 1998:245). In Central America, a new regional institution for economic co-operation was founded, with environmental protection on its agenda, parallel to MCCA. The subjects left open at the end of the Uruguay round of negotiations - the so-called "built-in agenda" - are automatically and separately further negotiated in *Parallel Track*, whereas in a new WTO round of negotiations they could be changed into *Single Track*. On the other hand, there are a large number of regional environmental agreements which cover only environmental problems, without reference to trade (Baltic Sea, Alps, Black Sea, Valdivia Group, etc.).

⁸⁸ Negotiations in "Double Track" procedure are again different from Single or Parallel Track. See below.

Within the EU, common environmental policy, as an *integration principle*, is a cornerstone of integration (Geradin 1996), which is not the case in all other regional integration agreements so far. Trade and competition policy rules to balance different environmental standards have not yet, however, played any part in agreements between the EU and developing countries. This has been because on the one hand the EU was able to establish its product standards, and there was no need to consider competition policy, and, on the other hand, environmental policy has (so far) played little part in EU external policy. In NAFTA and APEC, trade and environmental questions were negotiated in parallel, because at first trade liberalisation dominated the agenda, and only in the course of the negotiating process did environmental protection come into the agenda. (On APEC, see Zarsky 1998). Figure 7/1 shows which negotiating variants were used for relevant agreements.

Fig. 7/1: Single or Parallel Track negotiating process for trade and environment

Single Track	Parallel Track
<ul style="list-style-type: none"> • EU • EFTA • Mercosur • SADC • EU-Lomé 	<ul style="list-style-type: none"> • NAFTA • APEC • ASEAN • MCCA

The two different negotiating strategies do not necessarily lead to significantly different results. The essential differences are in negotiating strategy and negotiating technique. Both *Single Track* and *Parallel Track* can be used to harmonise environmental policy and trade policy. As in both cases an early evaluation of the environmental success of trade liberalisation should take place, inter-weaving of the contents is essential, no matter which track variant is chosen. There are, however, some considerations which speak for the one or the other procedure.

Separate negotiations make it possible to disconnect economic integration and environmental aspects, which can be both an advantage and a disadvantage. *Separate negotiations* are suitable if the structure of interests in trade policy and environmental policy are not congruent. An essential advantage of separate negotiations is that consensus can be reached on environmental policy without pressure from the trade or investment policy agenda (Zarsky 1998:149ff.). Otherwise, the whole process of negotiation could come to a standstill because agreement could not be reached on a detail. Developing countries in particular reject the combination of trade liberalisation and discussions of environmental standards, because they expect that environmental aspects will mean an additional obstacle to economic development. If one sees this positively, it can be a way of ensuring that environmental policy is not completely excluded from the co-operation agenda. The WTO symposia at the beginning of 1999 in Geneva on "Trade and the Environment" were symptomatic of this. The conclusions of the subject of the "environment" were largely un-connected to those on "development". Similarly, a separation of "sustainable" development into the components of "trade" and "environment" can hardly initiate any synergy effects.

Advantages of separate negotiations lie in the fact that different paces of negotiation are possible in the fields of trade liberalisation and environmental policy. On the other hand, it is a disadvantage if this is exactly what one wants to avoid. The field of conflict 'trade-environment' (e.g. with regard to competitive effects) can be kept out of the negotiation process in this way (Zarsky 1997). Environmental policy compromises are in this way not directly linked to the advantages of free trade, and vice-versa. In the EU-Mercosur negotiations, the

Latin American partners feared that the EU would pick out the best points for itself. Agreements such as NAFTA and APEC have obviously achieved substantial results in the field of liberalisation of trade because trade liberalisation policy and environmental policy were negotiated separately. In this process, however, the supplementary environmental agreement of NAFTA developed a dynamic of its own. Independently of the main agreement, independent fields of policy and projects came into being. So far, however, it has not been possible to influence trade policy for environmental policy reasons. In APEC at present, exchange of information and consultation in the context of the political dialogue and pilot projects are the centre of attention. Co-operation on environmental policy is weak, because there is not yet a coherent environmental policy concept (Zarsky 1998).

Excluding environmental policy, or postponing it to a later date, implies the danger that it can fade into the background of political priorities. The possible winners and losers of trade liberalisation will try to influence the process to their own advantage, which will also have an effect on environmental policy. A separate ecological integration round would then perhaps be made dependent on the success of the first round, and would thus take a long time. In *Parallel Track*, there is the danger that economic development and environmental protection are moved too far apart and that problems are avoided rather than solved. The separation can lead to loss of important cross-connections in the contents, so that either the environmental consequences of trade or the trade policy consequences of environmental policy may not be adequately taken into account. If the negotiating processes are linked, and take place largely in parallel, early harmonisation and adaptation methods are possible. A common negotiation is also favourable for the forming of arbitration mechanisms for cases of dispute in the interface of trade and environment, which requires familiarity with their interdependent relations.

Parallel negotiation can also lead to the parallel development of procedures, institutions, and regulations. This can be a disadvantage if it leads to doubling and gaps, but an advantage if the different requirements of each area are taken more fully into account.

A parallel agreement on environmental protection contains the danger that *end-of-pipe* modes of thinking dominate. In NAFTA, for example, more seems to have been invested in reactive environmental protection than in preventative environmental protection. It is important, however, to make a connection between environmental protection and economic development to support sustainable development. From this point of view, *Single Track* procedure is to be recommended to establish a connection between trade economic effects and the ecology of a free trade zone. This should link the aims of economic liberalisation with a sustainable environmental policy.

In geographically neighbouring countries, there are usually already co-operative mechanisms in place to deal with cross-border problems before an integration agreement is reached. These can be used for environmental policy co-operation and be further developed, without including them in the text of the trade policy agreement (NAFTA, MFTZ, Mercosur, SICA, SADC). It is also useful to negotiate a supplementary agreement for more technical detailed agreements on products and PPM minimum standards. Regional standards for eco-labelling or environmental management systems also need not necessarily be integrated into the text of the main agreement and can be established in parallel agreements.

A *Single Track* for trade and environmental questions in regional negotiations is more suitable for agreements between industrial countries because the environmental standards in the countries involved are more homogeneous and there are fewer conflicts on competition policy than in North-South agreements. If trade and environmental questions are to be negotiated together

in North-South agreements, the resistance from the developing countries is greater, thus leading to more pressure for transfers for environmental policy adaptation costs. Parallel negotiation can have a negative effect if no economic possibilities are created which can be used to work against resistance to accept environmental policy aspects in the agreement. In *Single Track*, direct and more rapid reaction is possible in order to work towards package solutions. In *Parallel Track* negotiations, there may be "trickle losses" between the parallel negotiation situations and groups.

Fig. 7/2: Pro and contra arguments for *Single* or *Parallel Track*

Single Track	Parallel Track
Prerequisite: Environmental policy is an integral part of integration policy.	
	(+) No pressure from the trade agenda
(+) Creation of economic compensation possibilities	
(+) Direct and immediate reaction	
(+) Package solutions	
(+) Connection between trade economic effects and the ecology of the free trade zone	(-) Disconnection of economic development and environmental protection
(-) Blocking of progress in negotiations	(+) Different pace of negotiations
(+) Facilitates arbitration	(-) Avoidance, disconnection of problems
	(-) "Trickle" losses between negotiation situations and groups
	(+) Technical supplementary agreements and details
	(-) Unconnected development of processes, institutions, and regulations
(+) Early harmonisation and adaptation measures possible	

The advantages of one variant are usually the disadvantages of another, so that a "mirrored" presentation in the summary in Fig. 7/2 is not necessary. A summary of advantages (+) and disadvantages (-) is not practical because of weighting and other reasons.

7.2 Double track

The integration agreement must - usually - be ratified on all points and including all supplementary agreements by the contracting parties. The strategic aims and the operative components of a regional environmental policy must be borne by all parties to a regional integration agreement. In practice, this means a principle of unanimity, with a right of veto even for the weakest member country. This excludes from the very beginning the possibility of agreement on maximum positions, and means in practice the formulation of minimum positions according to the principle of the lowest common denominator (*downward harmonisation*, or even dilution).⁸⁹ If this is not possible, it is usual to agree on special regulations and exceptions in

⁸⁹ Harmonisation in the real sense of the word often does not take place. This would be an agreement on minimum standards which, related to countries with lower starting standards, could mean an improvement, without the standards of the other countries necessarily having to sink.

the contents and/or the time scale. Working out the contents of the agreement therefore requires very careful analysis of interests, motives, and restrictions of the various parties.

From this point of view, a "Double Track" approach is recommendable. This means that basic consensus is established e.g. in a general environmental agreement, which is integrated into the regional free trade agreement. This will contain few concrete obligations and is to be seen as *soft law* in the narrower sense defined above. The basic agreement can then be supplemented over time and step by step by protocols, supplementary agreements, programmes, etc., thus becoming *hard law* in the international sense. Environmental standards, for example, can be agreed in *hard law* protocols with limited validity.

Conclusion

Dealing with environmental and trade questions in a single negotiation process requires, according to experience so far, environmental policy to be seen as an integral and largely equal part of regional integration. Including environmental policy in an integration agreement which is *primarily economic* gives environmental policy greater political significance (including in comparison with other areas of policy) and more realistic chances of being implemented than if it is negotiated only on a (non-committal) international level, or as a side issue. *Single Track* procedure for regional free trade agreements is always to be preferred. Separate negotiations or negotiations on a separate environmental supplementary agreement are usually carried out if environmental policy (similarly to labour and social policy) is accorded a lower priority.

Regional Trade Agreements (RTAs) Notified to the GATT/WTO and in Force in November 1999

A. Agreements notified under GATT Article XXIV

	Agreement	Date of Entry into Force	Notification Date	Examination Status
1	<u>Treaty of Rome, establishing the European Communities – EC⁹⁰</u>	01.01.58	24.04.57	examination concluded (1957)
2	EC/Algeria	01.07.76	28.07.76	examination concluded (1977)
3	EC/Andorra	01.07.91	25.02.98	under examination by CRTA
4	EC/Bulgaria	31.12.93	23.12.94	under examination by CRTA
5	EC/Cyprus	01.06.73	13.06.73	examination concluded (1974)
6	EC/Czech Republic	01.03.92	13.05.96	under examination by CRTA
7	EC/Egypt	01.07.77	15.07.77	examination concluded (1978)
8	EC/Estonia	01.01.95	30.06.95	under examination by CRTA
9	EC/Faroe Islands	01.01.97	19.02.97	under examination by CRTA
10	EC/Hungary	01.03.92	03.04.92	under examination by CRTA
11	EC/Iceland	01.04.73	24.11.72	examination concluded (1973)
12	EC/Israel	01.07.75	03.07.75	examination concluded (1976)
13	EC/Jordan	01.07.77	15.07.77	examination concluded (1978)
14	EC/Latvia	01.01.95	30.06.95	under examination by CRTA
15	EC/Lebanon	01.07.77	15.07.77	examination concluded (1978)
16	EC/Lithuania	01.01.95	26.09.95	under examination by CRTA
17	EC/Malta	01.04.71	24.03.71	examination concluded (1972)
18	EC/Morocco	01.07.76	28.07.76	examination concluded (1977)
19	EC/Norway	01.07.73	13.07.73	examination concluded (1974)
20	EC/Palestinian Authority		30.06.97	examination not started
21	EC/Poland	01.03.92	03.04.92	under examination by CRTA
22	<u>EC/Certain Non-European Countries and Territories (PTOM II)</u>	01.01.71	14.12.70	examination concluded (1971)
23	EC/Romania	01.05.93	23.12.94	under examination by CRTA
24	EC/Slovak Republic	01.03.92	13.05.96	under examination by CRTA
25	EC/Slovenia	01.01.97	11.11.96	under examination by CRTA
26	EC/Switzerland and Liechtenstein	01.01.73	27.10.72	examination concluded (1973)
27	EC/Syria	01.07.77	15.07.77	examination concluded (1978)
28	EC/Tunisia	01.03.98	23.03.99	under examination by CRTA
29	EC/Turkey	01.01.96	22.12.95	under examination by CRTA

Quelle: www.wto.org

⁹⁰ Accession of Austria, Finland and Sweden is currently under examination

	Agreement	Date of Entry into Force	Notification Date	Examination Status
30	<u>Stockholm Convention, establishing the European Free Trade Association – EFTA</u>	03.05.60	14.11.59	examination concluded (1960)
31	EFTA/Bulgaria	01.07.93	30.06.93	under examination by CRTA
32	EFTA/Czech Republic	01.07.92	03.07.92	examination concluded (1994)
33	EFTA/Slovak Republic	01.07.92	03.07.92	examination concluded (1994)
34	EFTA/Estonia	01.06.96	25.07.96	under examination by CRTA
35	EFTA/Hungary	01.10.93	23.12.93	under examination by CRTA
36	EFTA/Israel	01.01.93	01.12.92	under examination by CRTA
37	EFTA/Latvia	01.06.96	25.07.96	under examination by CRTA
38	EFTA/Lithuania	01.08.96	25.07.96	under examination by CRTA
39	EFTA/PLO	01.07.99	21.09.99	not yet transmitted to CRTA
40	EFTA/Poland	15.11.93	20.10.93	under examination by CRTA
41	EFTA/Romania	01.05.93	24.05.93	under examination by CRTA
42	EFTA/Slovenia	01.07.95	18.10.95	under examination by CRTA
43	EFTA/Turkey	01.04.92	06.03.92	examination concluded (1993)
44	Faroe Islands/Iceland	01.07.93	23.01.96	under examination by CRTA
45	Faroe Islands/Norway	01.07.93	13.03.96	under examination by CRTA
46	Faroe Islands/Switzerland	01.03.95	08.03.96	under examination by CRTA
47	Faroe Islands/Estonia	01.12.98	09.12.98	examination not started
48	Croatia/Slovenia	01.01.98	25.03.98	under examination by CRTA
49	<u>Central European Free Trade Area - CEFTA</u>	01.03.93	30.06.94	under examination by CRTA
50	Czech Republic/Estonia	12.02.98	03.08.98	under examination by CRTA
51	Czech Republic/Israel	01.12.97	30.03.98	under examination by CRTA
52	Czech Republic/Latvia	01.07.97	13.11.97	under examination by CRTA
53	Czech Republic/Lithuania	01.09.97	13.11.97	under examination by CRTA
54	Czech Republic/Slovak Republic	01.01.93	30.04.93	examination concluded (1994)
55	Hungary/Israel	01.02.98	24.03.98	under examination by CRTA
56	Israel/Poland	01.03.98	18.12.98	examination not started
57	Israel/Slovenia	01.09.98	18.12.98	examination not started
58	Poland/Faroe Islands	01.06.99	29.09.99	examination not started
59	Poland/Latvia	01.06.99	29.09.99	examination not started
60	Poland/Lithuania	01.01.97	30.12.97	under examination by CRTA
61	Romania/Moldova	01.01.95	24.09.97	under examination by CRTA
62	Slovak Republic/Estonia	12.02.98	03.08.98	under examination by CRTA
63	Slovak Republic/Israel	01.01.97	30.03.98	under examination by CRTA
64	Slovak Republic/Latvia	01.07.97	14.11.97	under examination by CRTA
65	Slovak Republic/Lithuania	01.07.97	14.11.97	under examination by CRTA
66	Slovenia/Estonia	01.01.97	20.02.97	under examination by CRTA
67	Slovenia/Latvia	01.08.96	20.02.97	under examination by CRTA

	Agreement	Date of Entry into Force	Notification Date	Examination Status
68	SLOVENIA/LITHUANIA	01.03.97	20.02.97	under examination by CRTA
69	Slovenia/Former Yugoslav Republic of Macedonia	01.09.96	20.02.97	examination not started
70	Estonia – Latvia-Lithuania⁹¹	01.04.94	15.06.99	examination not started
71	Turkey/Bulgaria	01.01.99	04.05.99	examination not started
72	Turkey/Czech Republic	01.09.98	12.01.99	under examination by CRTA
73	Turkey/Estonia	01.07.98	12.01.99	under examination by CRTA
74	Turkey/Hungary	01.04.98	12.05.98	under examination by CRTA
75	Turkey/Israel	01.05.97	18.05.98	under examination by CRTA
76	Turkey/Lithuania	01.03.98	08.06.98	under examination by CRTA
77	Turkey/Romania	01.02.98	18.05.98	under examination by CRTA
78	Turkey/Slovak Republic	01.09.98	12.01.99	under examination by CRTA
79	<u>Agreements on Customs Union</u>	08.10.97	06.04.99	examination not started
80	Kyrgyz Republic/Moldova	21.11.96	15.06.99	examination not started
81	Kyrgyz Republic/Kazakhstan	...	29.09.99	examination not started
82	Kyrgyz Republic/Russia	24.04.93	15.06.99	examination not started
83	Kyrgyz Republic/Ukraine	19.01.98	15.06.99	examination not started
84	Kyrgyz Republic/Uzbekistan	20.03.98	15.06.99	examination not started
85	<u>Kyrgyz Republic/...</u>	15.04.94	01.10.99	examination not started
86	United States/Israel	19.08.85	13.09.85	examination concluded (1987)
87	Canada/Chile	05.07.97	26.08.97	under examination by CRTA
88	Canada/Israel	01.01.97	23.01.97	under examination by CRTA
89	<u>North American Free Trade Agreement - NAFTA</u>	01.01.94	01.02.93	under examination by CRTA
90	<u>Central American Common Market CACM</u>	12.10.61	24.02.61	examination concluded (1961)
91	<u>Caribbean Community and Common Market CARICOM</u>	01.08.73	14.10.74	examination concluded (1977)
92	<u>PATCRA</u>	01.02.77	20.12.76	examination concluded (1977)
93	<u>Closer Economic Relations Trade Agreement – ANZCERTA</u>	01.01.83	14.04.83	examination concluded (1984)

⁹¹ Free Trade Agreement came into force on 01.04.94, Free Trade Agreement on Trade in Agricultural Products came into force on 01.07.97 and the Agreement on Abolition of Non-Tariff Barriers to Trade came into force on 01.07.98

B. Agreements notified under the Enabling Clause

	Agreement	Date of Entry into Force	Notification Date	Examination Status
94	<u>Montevideo Treaty (1980), establishing the Latin American Integration Association – LAIA</u>	18.03.81	01.07.82	---
95	<u>Asunción Treaty-MERCOSUR</u>	29.11.91	05.03.92	under examination by CRTA
96	<u>Cartagena Agreement – Andean Group</u>	25.05.88	12.10.92	---
97	<u>Tripartite Agreement</u>	01.04.68	23.02.68	examination concluded (1968)
98	<u>Unified Economic Agreement among member states of the Gulf Cooperation Council – GCC</u>		11.10.84	---
99	<u>Common Market for Eastern and Southern Africa (COMESA)</u>	08.12.94	29.06.95	---
100	<u>Preferential Tariffs among members of the Economic Cooperation Organization – ECO</u>		22.07.92	examination concluded (1992)
101	<u>South Asian Preferential Trade Arrangement – SAPTA</u>	07.12.95	25.04.97	---
102	<u>Bangkok Agreement</u>	17.06.76	02.11.76	examination concluded (1978)
103	<u>Agreement on ASEAN Preferential Trade Arrangements</u>	31.08.77	01.11.77	examination concluded (1979)
104	<u>Laos/Thailand</u>	20.06.91	29.11.91	---
105	<u>South Pacific Regional Trade and Economic Cooperation Agreement – SPARTECA</u>	01.01.81	20.02.81	examination concluded (1981)
106	<u>Melanesian Spearhead Group</u>	1984	07.10.99	---
107	<u>Protocol relating to Trade Negotiations among Developing Countries</u>	11.02.73	09.11.71	---
108	<u>Global System of Trade Preferences - GSTP</u>	19.04.89	25.09.89	examination concluded (1989)

C. Agreements notified under GATS Article V

	Agreement	Date of Entry into Force	Notification Date	Examination Status
109	<u>Treaty of Rome</u>	01.01.58	10.11.95	under examination by CRTA
110	<u>European Economic Area – EEA</u>	01.01.94	10.10.96	not yet transmitted to CRTA
111	<u>North American Free Trade Agreement – NAFTA</u>	01.04.94	01.03.95	under examination by CRTA
112	Canada/Chile	05.07.97	13.11.97	not yet transmitted to CRTA
113	EC/Bulgaria	01.02.95	25.04.97	not yet transmitted to CRTA
114	EC/Czech Republic	01.02.95	09.10.96	not yet transmitted to CRTA
115	EC/Hungary	01.02.94	27.08.96	under examination by CRTA
116	EC/Poland	01.02.94	27.08.96	under examination by CRTA
117	EC/Romania	01.02.95	09.10.96	not yet transmitted to CRTA
118	EC/Slovak Republic	01.02.95	27.08.96	under examination by CRTA
119	<u>ANZCERTA</u>	01.01.89	22.11.95	under examination by CRTA

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