MICHAEL SUCCOW FOUNDATION
for the Protection of Nature

PROTECTED AREAS IN UZBEKISTAN
SCOPING NOTE: POST 2012 CLIMATE FINANCE OPTIONS

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The content of this publication lies within the responsibility of the authors.

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List of abbreviations and acronyms

AHW LCA	Ad Hoc Working Group on Long-term Cooperative Action
A/R CDM	Afforestation and Reforestation Clean Development Mechanism
BMBF	German Ministry of Education and Science
BMU	German Ministry of Environment, Nature Protection and Nuclear Safety
CDM	Clean Development Mechanism
CER	Credit / allowance equivalent to one ton of CO_2
CIDA	Canadian International Development Agency
COP	Conference of Parties
DNA	Designated National Authority
EU ETS	European Emissions Trading Scheme
FAO	Food and Agriculture Organisation
GCF	Green Climate Fund
GEF	Global Environmental Fund
GHG	Green House Gas
GIZ	German organization for International Cooperation
GTZ	Former GIZ after restruction (see GIZ)
ICI	International Climate Initiative of German Government (BMU)
JICA	Japan International Cooperation Agency
lCER	long-term CER
LED	Low-Emission Development
LoA	Letter of Agreement
LULUCF	Land Use, Land Use Change and Forestry
MSF	Michael Succow Foundation
MRV	Measuring, Reporting and Verification
NAMA	National Appropriate Mitigation Action
NAP	National Adaption Plan
NGO	Non-governmental organization
NIE	national implementing entity
tCER	temporary CER
PA	Protected Area
PMR	World Bank's Partnership for Market Readiness
REDD	Reduced Emissions from Deforestation and forest Degradation
REDD+	REDD focusing on developing countries
UNDP	United Nations Development Program
UNEP	UN Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard

1. Preamble

Funded by the **International Climate Initiative** of the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), the **Michael Succow Foundation (MSF)** operates and implements the project "**Protected Areas in Uzbekistan—Model Regions for Sustainable Development**". Main focus of this project is the mid-range transfer of existing, strictly protected nature reserves (so-called "Zapovedniki") into international protection categories through the creation of buffer zones and a management concept that includes the development of eco-tourism, the creation of new sources of income for the local population, the integration of the populace in the environmental efforts, and networking with political and scientific agents.

Three nature reserves have so far been identified: the Ecocenter Jeyran (near Bukhara), the Hissar Zapovednik, and the Surkhan Zapvednik. The identification of a forth area is on-going, the target region being Karakalpakstan. So far, three different locations have been spotted for protection: (i) the wetlands of the river delta of Amudarya; (ii) the non-populated border zone with Kazakhstan and Turkmenistan (around Lake Sarykamysh; and (iii) the densely populated zone around of the Badai Tugai Nature Reserve.

While all three locations are currently checked against the specific protection needs, the relevant conservation threats, and the achievable long-term results, the MSF wishes to **explore synergies** that may be tapped into when assessing the areas not solely from the viewpoint of **nature conservation** but also from a **climate regulatory and international climate finance** perspective. In particular, the MSF wishes to investigate

- what **international climate finance formats** are, or could be made, available to help **facilitate nature conservation and sustainable land-use practices** in the project area(s); and

- what **actions are needed** at (i) the **institutional**, (ii) the **operational**, and (iii) at the **financial** level to pursue the most promising formats.

Between 22 and 26 January 2012, Sebastian Schmidt (MSF) and Moritz von Unger (CF) undertook a scoping mission to Tashkent and Nukus to discuss the options for land-use based climate intervention in Uzbekistan and Karakalpakstan in particular with officials from the Ministry of Agriculture and Water Ressources, the State Commission UzHydromet (responsible for climate inventory work for Uzbekistan and national focal point to the United Framework Convention on Climate Change (UNFCCC), a member of Parliament of Uzbekistan; various development organizations including the Asian Development Bank, JICA, the World Bank, UNDP and GIZ; and representatives of non-governmental organizations in Tashkent and Nukus.

In the following we present the findings of our mission and a preliminary assessment of climate finance options for the project area(s) in question including a list of actions and suggested priorities.

2. Mission Findings

However, despite the fact that several of the main ecosystems of Uzbekistan—desert ecosystems of the plains, foothill, river, mountain and coastal ecosystems—are under intense pressure, especially from deforestation, forest degradation, other land degradation and unsustainable irrigation, the land use, land use change and forestry (LULUCF) sector has so far received only limited attention from a climate and climate finance perspective.

For **mitigation**, the existing CDM projects are all outside this sector.[1] While there has been a cross sector training program on GHG emission reduction and CDM projects financed by the Canadian International Development Agency (CIDA), and while between 2007 and 2009 there have been attempts to implement an approx. 200 hectares afforestation project in *Djambai* and *Zaamin* under the CDM (a Letter of Approval (LoA) was issued by the Ministry of Economy as the country's Designated National Authority), the plans were finally abandoned. From our discussions with staff of the Main Forestry Department in the Ministry of Agriculture and Water Ressources we learned that abandonment was due to an investment decision of the foreign investor to pull out of the project. From an institutional perspective, however, Uzbekistan has also so far failed to submit—through the Ministry of Economy as its CDM Designated National Authority (DNA) to the CDM Executive Board — its Afforestation and Reforestation (A/R) data, namely its definition on forests, i.e. its selection of (i) a single minimum tree crown cover value (must be between 10 and 30 per cent), (ii) a single minimum land area value (must be between 0.05 and 1 hectare), and (iii) a single minimum tree height value (must be between 2 and 5 meters). While a country is free to set certain values, as long as the given range is respected, the submission of these data is a mandatory precondition for engaging in A/R CDM, and once such submission is made, the data remains fixed for all CDM projects registered prior to the end of the first Kyoto commitment period (31 December 2012).[2]

The **limited A/R activities** under the CDM are echoed by a lack of policy prioritization on the LULUCF sector in general. According to the second national communication of 2008, the country's "National and Sector Mitigation Programmes" disregard the sector entirely and focus instead on the oil and gas sector, the energy generation sector, the industrial, the household and the transport sector.

[1] Of the 13 projects, six are N2O projects, another six are gas leakage projects (mainly from gas distribution equipment), one project is a landfill project, cf. the CDM project database, UNFCCC, http://cdm.unfccc.int/Projects/projsearch.html.

[2] Decision 5 CMP 1, Annex, paragraph 8.

International climate cooperation on **adaptation** has been little pronounced meanwhile. Although intensive warming is observed on the whole territory of Uzbekistan with the average temperature having increased by 0.29 C since 1951 and a projected increase in droughts, mudflow and floods, glacial lake outbursts and avalanches, Uzbekistan has not made a submission to the Adaptation Fund, and we gathered no evidence that Uzbekistan was working on a National Adaptation Plan (NAP) following the modalities and guidelines for least developed country NAPs. In fact, neighboring countries have shown more activism on this point. Kazakhstan has been working on a National Program on Adaptation to Climate Change since at least 2009, and Turkmenistan has (via UNDP) applied for, and was awarded by the Adaptation Fund, funding for a sustainable farming project (volume close to 3 million USD). While Uzbekistan remains committed to a sustainable development and adaptation path and while important initiatives—mostly outside the scope of climate intervention—are being implemented (cf. the Trans-boundary Water Management Programme of the GIZ to reduce irrigation losses or the Agriculture in Flatland Plains Programme of UNDP/GEF to increase cotton yields by up to 100%; see generally the substantial afforestation initiatives in the former Aral seabed as part of the National Forest Plan of 2006), an adaptation roadmap addressing risks, protection needs and response measures is missing.

Concerning **progressive climate finance instruments** such as the programmatic approach under the CDM and post 2012 climate action and climate finance opportunities, Uzbekistan has not been very vocal thus far. In particular, the country has no Programme of Activity registered, and it has not made a submission of “nationally appropriate mitigation actions” (NAMAs) even though as a Non-Annex-I Party it has been invited to do so under the Copenhagen Accord (Conference of the Parties (COP) 15, Copenhagen), the Cancun Agreements (COP 16, Cancun) and the Durban Outcome (COP 17, Durban). The country has equally not made a submission on new market mechanisms and is not part of the World Bank’s Partnership for Market Readiness. It has thus far also not engaged in Reduced Emissions from Deforestation and forest Degradation (REDD) activities, e.g. UN REDD Programme, Forest Carbon Partnership Facility, and Forest Investment Programme.

Interest in new climate finance formats among Uzbek officials and stakeholders is growing, though. Both UzHydromet and the Main Department of Forestry of the Ministry of Agriculture and Water Ressources stated in direct talks that they would appreciate to understand better the emerging concepts, in particular NAMA development. UzHydromet in its role as UNFCCC focal point will oversee a NAMA establishing process that may be finalized already by 2013, but this is subject to capacity which for the time being is missing. While we could not meet directly with the Ministry of Environment and the State Committee for Nature Protection, it appears that both authorities are generally interested in contributing, too. On the regional level, while we did not meet with Ministry representatives, we were able to discuss Karakalpakstan’s position and vision with Member of Parliament of Uzbekistan. All officials and other stakeholders that we did speak to stressed, however, that Government support will focus on those cooperation tools and international climate finance formats that promise clear benefits—ecologic and economic—to Uzbekistan.

Discussing through our mission the country's success with establishing a **strong CDM**, we learnt that the institutional set-up with the Ministry of Economy serving as DNA was significant. The Ministry of Economy has key competences in the country (including on the regional level); it has used them early on to kick-start the CDM (having the personal support of the then Vice-Minister); and maintains close links to the private sector which was instrumental in particular in the early phase of the CDM (in particular Mitsubishi).

On the ground and as part of the German International Climate Initiative (ICI) the BMU has recently commissioned a project on low carbon development assistance to various Central Asian countries.[3] For Uzbekistan it is aimed to design a country-wide NAMA for the building sector.

3. Existing and Future Climate Finance Formats

As the international community is struggling to put in place a long-term international climate change regime, the current international regulatory situation is characterized by its transitional and preparatory nature, continued international negotiations and widespread, mostly bottom-up piloting initiatives. As Parties to the UNFCCC agreed at Durban to install a second commitment period for the Kyoto Protocol from 2013, the existing climate finance mechanisms, notably the CDM, remain relevant, even though today's most important market, the European Emissions Trading Scheme (EU ETS) will not accept any credits from projects that are registered after 2012 (with an exception for least developed countries).This is less an issue for LULUCF credits which are excluded from the EU ETS altogether, but countries across the globe may soon begin to discharge their CDM facilities due to the fundamental change in the market.

In the meantime, new market mechanisms and market approaches, including those linked to NAMAs, are being defined and tested in a growing number of countries. These are to supplement public funding sources that will be provided either from Government-to-Government, through multilateral development banks or, in the future, through the Green Climate Fund which has been established in Durban but is not yet operational (and lacks material funding for the time being). As a whole, developed countries have pledged funds for developing countries in the amount of 30 billion USD covering the years 2010-2012, leading up to a 100 billion USD annually from 2020.

Uzbekistan has yet to find its place on the climate finance trajectory for the years to come. In particular for the land-use sector it has various options, from using existing mechanisms including voluntary carbon markets to NAMA interventions including crediting or sectoral options, adaptation policies and projects, and REDD programs. In the following we give an overview of the options and assess each of them for their potential, gaps and opportunities in relation to the envisaged Project.

[3] *Integrated Approach to Developing Central Asian NAMAs* (commissioned to DIW and DIW econ, among others).

3.1. CDM A/R Project

The **CDM**, a well-established instrument in Uzbekistan, may be used to support on-going initiatives by the Uzbek Government to afforest large areas of Karakalpakstan, especially in what used to be the Aral seabed to avoid soil erosion through wind and other impacts. The relevant national authorities may seek technical assistance for CDM development through the World Bank Community Development Carbon Fund or the European Investment Bank's Multilateral Carbon Credit Fund.

CDM development faces a number of challenges, however. *First*, Uzbekistan has not yet submitted its A/R data to the UNFCCC (see above), a pre-condition for any CDM afforestation project. *Second*, other than the carbon intensity of the plant, the feasibility of a **Saxaul** (*Haloxylon* spec) **afforestation project** both in methodological (measurability of emission reductions/carbon sink, reference scenario, additionality, permanence, etc.)[4] and in operational (institutions, governance, enforcement, oversight) terms needs to be assessed. For the operational side: A saxaul afforestation campaign was successfully implemented with the support of BMBF and the GTZ in the 1990s, but more recent attempts showed mixed results, apparently due to large-scale human-induced degradation (cattle grazing and logging). *Third*, the **additionality** of the measure, i.e. its deviation from the scenario that would occur in the absence of the measure, needs to be shown. A recent report commissioned by the UN Food and Agriculture Organization (FAO) and the Main Department of Forestry of the Ministry of Agriculture and Water Ressources states a "tendency […] that [the] share of anti-erosion forestry constantly grows" and that "every year appears new forests over an area of 40.0 thousand hectares, more than 80% in the desert area".[5] If this claim is true, there seems little room for additional afforestation measures, although this will very much depend on the peculiarities of the potential project site and its exposure to the natural afforestation ongoing. *Fourth*, it should be noted that CDM forestry projects generate temporary credits only, i.e. long-term CERs (lCERs) or temporary CERs proper (tCERs) which both have expiration dates and need continued replacement. The temporary nature has made forestry CDM credits unpopular, and the private sector has largely stayed out of purchasing them due to the EU ETS restrictions. However, CDM forestry credits remain a valuable option for Annex I Parties to comply with their obligations under the Kyoto Protocol, in both the first and the second commitment period. In addition, the EU's Effort Sharing Decision holds in important detail, i.e. EU Member States can comply with their EU internal targets by using tCERs and lCERs, and there is no project registration limit. Thus, as of 2013 the market for forestry CDM credits becomes considerably bigger.

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[4] See generally on the difficulties involved for CDM A/R projects: World Bank, BioCarbon Fund Experience. Insights from Afforestation and Reforestation Clean Development Mechanism Projects (2012), http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/57853_ExecSumm_Final.pdf.

[5] FAO and Forestry Department of the Ministry of Agriculture, Financial Strategy for Forestry Sector (2011), page 5-6.

3.2. The Voluntary Markets

The voluntary carbon markets have been fast growing over the years, and they cover, among others, various areas of the LULUCF sector largely neglected by the regulated markets, in particular the CDM. Thus, next to afforestation and reforestation interventions, the **voluntary markets** have established a carbon crediting framework for activities such as REDD, sustainable forest management, peatland protection and restoration, and they are currently piloting various mitigation activities in the agricultural sector, on the one hand, and in wetlands, marshlands and mangroves, on the other. The Verified Carbon Standard (VCS) in particular has been spearheading LULUCF carbon projects. It also offers a good alternative to the issuance of temporary credits practiced under the CDM. While addressing risks of permanence through a buffer mechanism that pools shares of credits from a larger project portfolio and retires an amount of credits that equals any amount that is lost in a particular project due to fire, degradation or other event.

Certain activities foreseen for the Project area(s) may qualify as carbon project activities under the VCS and other standards, e.g. afforestation, reforestation (along the rivers), REDD, wetland restoration and/or protection and sustainable land management. Any engagement does not come without challenges, though. Just as in the CDM case above, the potential for carbon output needs to be assessed and it may well be the case that the reduction potential will not be massive not least due to the particular desert vegetation profile.

Then, there is to date no liquid price market for voluntary carbon credits. Rather, the market is still very personalized, philanthropic and brokerage-fuelled. Furthermore, several of these activities are not yet operational under the VCS or any other standard. The wetland standard, for instance, is in development state; projects will go in test phase and it may take years for the realization of first credits. Finally, the voluntary markets largely depend on the initiative of the project proponent and its investor. There is virtually no international Government-to-Government framework that could support the development of a project development plan, and there are also no obvious channels for technical assistance.

3.3. Multilateral Carbon Finance Campaigns

The upcoming third tranche (worth 65 million USD) of the **World Bank BioCarbon Fund**, as announced in Durban in late 2011, will “focus on reforestation and agriculture projects that go hand in hand with co-benefits such as decreased soil erosion and increased land-fertility”. It is a carbon finance facility, thus it aims at generating tradable emission reduction rights, but goes beyond the restrictions of today’s CDM in addressing LULUCF and “wider landscape management”. Thus, the Fund has a Kyoto compliance window and a non-Kyoto compliance window under which it tests, in a “landscape approach”, carbon quantification in croplands, grasslands, rice paddies, wetlands and biochar.

The **World Bank’s Partnership for Market Readiness Fund** (100 million USD) provides funding for building market readiness components and for testing new market instruments. It is not limited to certain mitigation sectors; rather, it aims at facilitating common market enabling tools such as MRV systems, data collection, baseline setting and establishing regulatory institutions. 15 developing countries are currently participating, mostly emerging economies.

Of the two initiatives, the third tranche of the BioCarbon Fund appears to be the more accessible instrument as it focuses on LULUCF related issues and as it does not require regulatory action towards across economic sectors, as the Market Readiness Fund does. Note, however, that the World Bank may put an emphasis on projects and measures in least developed countries[6]. However, this will probably not take the shape of an exclusion criterion, and other criteria such as specific vulnerability of the ecosystem concerned may play an equally crucial role. At this stage, while the tranche has not yet been launched, close coordination with World Bank staff may put Uzbekistan in a good position to apply for funding, when the call for proposals opens.

3.4. NAMA Funding Options

The **NAMA concept** goes back to the negotiation agenda of the Bali Action Plan of 2007. It aims to engage developing countries in country-driven emission reduction activities that may encompass anything from **policies, programs or projects to sectoral or national emission goals**, that are subject to stringent **measurement, reporting and verification (MRV)**, and that allow access to support from developed countries in the form of technology, capacity-building and finance.

In 2009, the **Copenhagen Accord**, a widely supported but formally not adopted document, invited non-Annex I countries to communicate to the UNFCCC Secretariat intended NAMAs, which would be recorded under Appendix II to the Accord. By 2011 almost 50 countries had submitted NAMAs to the UNFCCC. These submissions include pledges by all major developing country emitters who, together with developed countries, represent 80 percent of global emissions. For the **Central Asian countries**, **Tajikistan** and **Afghanistan** have made submissions. Country submissions vary greatly, though, in format and detail of content, and include anything from vague expressions of intent to detailed lists of investment projects or national mitigation commitments.[7]

Generally, there is a distinction between domestic (or unilateral) NAMAs and international (or supported) NAMAs, the former being implemented and financed by the developing country concerned, the latter being subject to international MRV and international funding.

At the **Durban conference** in late 2011, Parties to the UNFCCC agreed on the following chapters for every NAMA submitted to the UNFCCC by developing countries with the aim to seek international support:

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6 http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/ENVIRONMENT/EXTCARBONFINANCE/0,,contentMDK:23065970~pagePK:64168445~piPK:64168309~theSitePK:4125853~isCURL:Y~isCURL:Y,00.html.

7 See FCCC/AWGLCA/2011/INF.1, at http://unfccc.int/meetings/cop_15/copenhagen_accord/items/5265.php.

- **description** of the **action**;
- (ii) identification of the **national implementing entity**;
- (iii) the **expected timeframe** for implementation;
- (iv) an **indicative cost** estimation for both NAMA preparation and NAMA implementation;
- (v) the amount and/or type (financial, technological, capacity-building) of **international support** sought;
- (vi) an **estimation of emission reductions** achieved;
- (vii) other **indicators of implementation**; and
- (viii) other relevant information including **co-benefits**.

This list of chapters is perhaps more than some had hoped for. After all, it brings clarity to the level of mandatory detail for NAMAs (most country submission so far fail the threshold required for the future registry); it puts an emphasis on the measurability of emission reductions (thus putting in question soft measures with an unclear impact on emission reductions achieved); it avoids the pitfalls of additionality by focusing on “incremental costs”; and it requires the identification of a “national implementing entity” (associating the governance structure known from the Adaptation Fund).

Yet, the list may ultimately raise more questions than it solves. It leaves unanswered what is really meant, when reference is made to a “national implementing entity”. The Adaptation Fund model may prove little helpful when tackling the needs to structure and scale up domestic mitigation action. Also, when comparing the concept with the CDM precedence: Is the national implementing entity meant to replace the CDM’s domestic institutional governance body, the Designated National Authorities (DNAs); or should it rather serve as a nation-wide operational entity comparable to the coordinating and managing entities known from the CDM’s programmatic approach (Programmes of Activity)? Does it have to be a national, public entity or would a regional or private entity do? Then, what are other indicators of implementation? Is this a vague formula to capture standards of measuring, reporting and verification (MRV)?

Perhaps the biggest uncertainty concerns the question of creditability and markets. Although the literature makes frequent reference to “credited NAMAs”, the NAMA regulatory is largely silent on the matter. It is true, the Cancun Agreements consider the establishment of a “market-based mechanism” to complement “*other means of support for [NAMAs] by developing countries*”[8], and the Durban Outcome indeed “*defines a new market-based mechanism, operating under the guidance and authority of the Conference of the Parties, to enhance cost-effectiveness of, and to promote, mitigation action*”.[9] Yet an overarching framework to link or translate NAMAs into a market-based mechanism is lacking, and it remains to be seen whether the Ad Hoc Working Group on Long-term Cooperative Action (AHW LCA)—the

[8] Decision 1, COP 16, para 80 (b).

[9] Decision 2 COP 17, para 83.

mandated body to conduct a work programme "to elaborate modalities and procedures"—[10]will be able over the course of this year to compensate for the failure of Parties to give a clear direction of what commodity the new market mechanism is to trade and whether it is generated through NAMAs.

Taking NAMAs off the ground

This puts the NAMA concept to a test; yet, Governments and international development banks and agencies are determined to explore its feasibility nonetheless. Despite the lack of an internationally defined framework for NAMAs, various NAMA pilots are emerging around the world. The transport sector, which has been largely by-passed by the CDM mainly due to methodological problems (in this similar to LULUCF), has emerged as a popular NAMA concept thus far, with proposals under development in Chile, Brazil, China, Laos and Indonesia. Increasingly, countries also focus on holistic land-use NAMAs, examples are Kenya, Nepal, Peru, Vietnam, Brazil and Indonesia, but also the non-tropical countries Mongolia and Montenegro. Note, however, that most of the NAMA proposals are not yet very detailed or advanced towards a state of implementation-ready, although some have progressed from mere concept to a more elaborate proposal stage.

Example Mongolia

In its NAMA submission to the UNFCCC, Mongolia envisages to

(*agriculture*)

- Limit the increase of the total number of livestock by increasing the productivity of each type of animal, in particular cattle;
- Sustainable development and good governance for the animal husbandry sector;
- Refining livestock breeding in accordance with social needs of the pastoral nomadic economy;
- Improving veterinary works and services;
- Developing livestock husbandry adapted to climate, nature and ecologic change;
- Creating a network of meat procurement and sale;

(*forestry*)

- Natural regeneration;
- Plantation forestry;
- Agro-forestry;
- Shelter-belt;
- Bio-electricity;
- Reforestation;
- REDD;
- Community-based forest management improvement; and
- Sustainable use of forest resources.

[10] Decision 2, COP 17, para 84.

Leading bilateral donors for NAMA readiness activities include Germany (International Climate Initiative), Netherlands and the Nordic countries, while Japan's Bilateral Offset Credit Mechanism and World Bank's Partnership for Market Readiness (PMR) explore market-based approaches for scaling up national mitigation action.

Building land-use NAMAs: Example Indonesia

Indonesia now has a presidential decree on land-based NAMA, combining REDD+, peatland emission reduction, restocking of above- and below ground carbon pools regardless of forest/non-forest status of the land, and reduction of methane and nitrous oxide emissions from agriculture. It probably is the first non-annex 1 country in the world to have such a holistic perspective on emissions from the land-based sectors. The presidential decree gives substance to the NAMA (Nationally Appropriate Mitigation Action) commitment to reduce its 2020 emissions by 26% that Indonesia made to the international community, as part of the UNFCCC climate negotiations. Within 12 months all districts and cities (more than 400 in total) will have to provide their own action plans within the sectoral priorities that were established at national scale.

Most current NAMA initiatives focus on screening priority sectors and policies for NAMA potential, identifying suitable NAMA concepts and elaborating the most promising concepts into full-blown proposals. Guiding activities include data gathering, baseline determination, estimation of mitigation potential and costs, policy formulation and implementation, MRV framework, financing, and – last but certainly not least – required institutional arrangements.

Why it is currently not settled where the on-going NAMA initiatives will be heading and whether they will ultimately pave the way for international rule-making on NAMA definition, development and finance, it is a **unique moment** for developing countries around the globe to be **among the first** to **define country priorities** and **establish ready-to-implement NAMAs** for international donors, bilateral or multilateral markets to take note and eventually invest.

Regional Land-Use NAMA for Uzbekistan

The development of a land-use related NAMA for Uzbekistan touches operational, institutional and financial questions, and there has to be a firm commitment on all levels in order to facilitate successful implementation.

Operations

The operational question is mainly twofold: What and who? The What: For the activities to be selected there are no ex ante restrictions. All kinds of action the reduce GHG emissions or sequester carbon are eligible: crop change, switch of carbon sensitive agriculture techniques, irrigation works, livestock related interventions, wetland protection and restoration, REDD etc. To make use of synergies and streamline and simplify procedures, a comprehensive approach is recommended, i.e. combine the various actions in one NAMA, with the obvious caveat that the complexity should not hamper or slow down the process and that each action should remain implementable, as far as possible, as a stand-alone intervention.

For each action the barriers and feasibility should be tested, the baseline and expected emission reductions calculated, implementation milestones and timelines as well as the MRV defined. For the different aspects to be investigated, see the NAMA Idea Note (in reference to the 'project idea note' or 'PIN' known from the flexible mechanisms of the Kyoto Protocol) attached as **Annex I** to this Scoping Note. To date, there is little precedence, if any, for the preparation of a comprehensive (beyond REDD) land-use based NAMA. It appears that the analysis for tropical countries, in this respect, is the most advanced.[11]

The Who: A national implementing entity (NIE) has to be selected. Following the precedence from the Adaptation Fund, this can be a regional entity, a regional Ministry for instance or a state agency, or a multilateral bank. It is not evident yet whether private entities are eligible NIEs, too. The practice from CDM programmatic approaches would support this; however, the Kyoto Protocol is explicit on the possibility of involving private entities in the mechanism. For NAMAs, this awaits clarification.

Other than the regulatory requirements, however, the identification of a strong, capable and committed NIE prepared to take ownership over the NAMA is crucial. The reason why the CDM became an operational mechanism despite the fact that the procedures were (and are) long and cumbersome, despite that fact that the investment risk has been massive in many countries and despite the fact that the trading infrastructure had to be built from scratch, was that "project owners" took all challenges to bring the project alive. There is a clear incentive in the CDM—the revenues from credit sales—which is not necessarily the case for NAMA implementation. However, the concept of "NAMA ownership" needs to be established and practiced for NAMA implementation to become successful. It may well be that a Government entity is ready to assume the role as NIE and NAMA owner. But this issue has to be looked at with care. Various models including the option to install a NAMA operations entity (publicly or privately organized) or to mandate a non-Governmental organization with the matter should be assessed.

Institutions

For a NAMA to be successful, political affinity and institutional feasibility are essential; and suffice to say, political support usually requires support at all levels of (national, regional and district) government. Support can be successfully secured through the involvement of the local government and stakeholders in the selection of NAMAs and through solidly embedding actions in the country's climate change and development frameworks.

[11] See, for instance, regarding comprehensive GHG measurement, a recent gap analysis prepared for Indonesia: EU and GIZ, Measurement, Reporting, Verification of GHG Inventory and RAN-GRK, RAD-GRK mitigation actions (NAMA). Gap Analysis Report for Indonesia (2012), http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/ENVIRONMENT/EXTCARBONFINANCE/0,,contentMDK:23065970~pagePK:64168445~piPK:64168309~theSitePK:4125853~isCURL:Y~isCURL:Y,00.html

Coordination with on-going initiatives will be helpful. The UNDP Project "Supporting Uzbekistan in Transition to a Low-Emission Development (LED) Path" (Budget 1.2 million USD) seeks to analyse mitigation potential per sector, compile a list of mitigation policy instruments and identify structures for conducting MRV. The first LED draft is projected for 2013, the final document for 2014. While a Regional LULUCF NAMA may be developed in a more ambitious timeframe, synergies and cross-information should be sought through the process.

For the Uzbek context, a distinct aspect is further to be taken into account. Unrelated from the question which authority acts as focal point for UNFCCC matters—in Uzbekistan it is UzHydromet— or is otherwise authorized to communicate with the UNFCCC (the Uzbek ambassador to Germany) to make any Uzbek NAMA submission, the domestic governance structure for an international climate finance instrument is central for the success or failure of said instrument. In Uzbekistan, the role as domestic governing institution for the CDM has been taken up by the Ministry of Economy; and for all its results, it has proved an effective body. It appears to be an advantage, if the Ministry of Economy were to assume responsibility for NAMA development and authorization, too. Note in this respect that the lead partner for UNDP for their LED Project is the Ministry of Economy.

On the procedural level to put its NAMA internationally operational and to access broadest possible funding, Uzbekistan will need to report the NAMA (and all other NAMA it will seek international funding for) to the UNFCCC and the soon-to-be available (August 2012) NAMA Registry.

Finance

There are many ways that Annex I Parties can support developing countries in the implementation of NAMAs, relying first and foremost on the mix of instruments employed in financial and technical development cooperation.

Today's climate finance flows use various channels. A large number of developed country funds exist, some of which are grant-based, others which consist of a mix of concessional and non-concessional loans, and some which consist of a mix of both grant and loan assistance – these can all be counted as "climate finance". However, often the channels and purposes are difficult to define, with some funds working through the carbon market, some as official development assistance (ODA), some dedicated as climate specific loan facilities, and purposes including the provision of project finance, technical assistance, and others include guarantees, philanthropy and so on.

According to the World Bank, 'climate finance' covers those flows from the carbon market, UNFCCC defined and mandated funds (e.g., the GEF Trust Fund or the Least Developed Country Fund), climate-specific concessional funds (e.g., the Climate Investment Fund; CIF), and dedicated domestic sources of finance.[12] The World Bank and other multilateral development banks (MDBs; e.g. the Asian Development Bank, the African Development Bank,

[12] World Bank (2010) *Monitoring Climate Finance and ODA*. Issues Brief #1. May 2010. Huhtala, A., Curto, S. and Ambrosi, P. The World Bank, Washington D.C.

Nordic Environmental Finance Corporation, etc), and bilateral finance institutions (BFIs; e.g. the French Development Agency (AfD); Japan International Cooperation Agency (JICA) and the German Development Bank (KfW)) manage multi- and bilateral climate finance programs.

All mentioned institutions have started scoping NAMA development in various developing countries or providing funds for developing countries and agencies to do so. However, most initiatives are not yet in the state that actual funding for NAMA implementation is offered. When developed countries will commit, they will either negotiate bilaterally the terms of funding on the basis of clearly defined NAMAs or the channel funds through multilateral funds—the recently established Green Climate Fund probably becoming the most important one—or public banking institutions.

The NAMA Registry is meant to facilitate a NAMA/Funding matching exercise. Developed countries, the Green Climate Fund, the Global Environment Facility, and international donors including the private sector are invited to report to the Registry their funding priorities including the amount and type of funding, the source, and the status of delivery.

The matching procedure is thus far only vaguely addressed: "The registry will facilitate the matching of actions seeking international support with support available by providing and directing information to Parties that submitted information on [NAMAs] seeking support, and Parties and entities that have submitted information on support available."[13]

[13] Decision 2 CMP 17, para 51.

Green Climate Fund

Perhaps the centre piece of the post 2012 climate finance regime, the Green Climate Fund (GCF) has been established through the Cancun Agreements in 2010. The Durban Outcome produced the GCF's governing instrument and laid down the conditions for its operationalization. It is given a GCF Board with members and alternative members being nominated by UNFCCC Parties through their regional groups and constituencies. Of the 12 seats for developing countries, three members (and three alternative members) are to come from Asia-Pacific. Nominations must be submitted to the interim secretariat (maintained by the UNFCC C secretariat together with the Global Environment Facility (GEF)) by 31 March 2012.

All developing countries are eligible to receive direct, country-driven funding for both mitigation and adaptation measures, among them project based approaches, national adaptation plans, REDD+ and NAMAs.

Furthermore, the GCF will provide resources for readiness and preparatory activities, and technical assistance. It will also run a private sector facility that enables it to directly and indirectly finance private sector mitigation and adaptation activities at the national, regional and international levels.

The GCF will provide financing in the form of **grants and concessional lending**, and through other modalities, instruments or facilities as may be approved by the Board. Financing will be tailored to cover the identifiable additional costs of the investment necessary to make the project viable. The Fund will seek to catalyse additional public and private finance through its activities at the national and international levels.

On this basis, it will be important for Uzbekistan to position it as early as possible, with an ambitious and robust NAMA proposal, to access the widest possible margin of funding opportunities.

Where crediting is an option—as a function of measurability of action, verification, oversight, legal title, clear allocation and distribution of credits, among others—this option should be explored and a design should be developed from the start. Even in the absence of a crediting mechanism, a bilateral piloting initiative may take this initiative up, and either way, presenting evidence of the capacity for a certain action to provide compliance grade credits is a very potent instrument to prove results based action.

3.5. Actions on Adaptation

For various reasons, the adaptation framework is less advanced than the mitigation framework. In the first place, the Kyoto Protocol focused almost entirely on mitigation, even though it led to the creation of the Adaptation Fund. In the second place, as mitigation comes with the reduction of greenhouse gases, it allows for a metric of measurability (tonnes of CO2) that invites to build targets, uniform mechanisms and a system of tradable units. Adaptation is a much more diverse concept with different sets of metrics that make the design of uniform and replicable mechanisms cumbersome.

Adaptation is nonetheless a priority of post 2012 climate policy making. The Cancun Agreements established the so called Cancun Adaptation Framework and installed the Adaptation Committee. The Durban Outcome specified the tasks of the Adaptation Committee—it is to prepare guidelines, inter alia, for the preparation of **National Adaptation Plans** (**NAPs**), organize workshops and channel information among Parties—and laid down the nomination requirements (the Asia-Pacific countries will have two seats; and two additional seats are given to non-Annex-I countries in general). A special process has been established to enable least developed countries to formulate and implement national adaptation plans.

The Committee has not yet taken up its work, and a methodology for the development of adaptation plans has yet to be developed. However, while there is a priority for least developed country funding, the scope for adaptation funding has become bigger as a consequence of both the Cancun Agreements and the Durban Outcome. The implementation of various adaptation actions and National Adaptation Plans can be funded under the Green Climate Fund, in particular, irrespective of whether the requesting country is a least developed country or not. New criteria for funding may be developed in the years to come, but it can be expected that vulnerability will be a more potent selection criteria than the development grade of the requesting countries in general.

At this stage more concrete is the funding process under the **Adaptation Fund** which gives priority funding to most vulnerable countries including “arid and semi-arid areas or areas liable to floods, drought and desertification” as well as to projects in the area of water management, agriculture and forestry.

Funding is provided on a full adaptation cost basis. National Implementing Entities (NIEs) or multilateral implementing entities (such as UNDP) can apply for funding provided they have been authorized by the Parties’ Designated Authorities. For Uzbekistan this is the General Director of UzHydromet.

The **Special Climate Change Fund**, a fund under the UNFCCC managed by the Global Environment Facility with the World Bank acting as trustee, has a similar adaptation focus as the Adaptation Fund. Water resource management, fragile ecosystems, land management and agriculture activities are all eligible. All developing countries can apply for funding but priority goes to those most vulnerable in Asia, Africa and small island states. Projects need to be “country-driven, cost-effective, and integrated into national sustainable development and poverty-reduction strategies". For larger projects with a volume of more than one million USD, so called full-size projects, the process is triggered with a project identification note (funding to support preparation may be available) that requires the approval from the GEF National Focal Point (for Uzbekistan: UzHydromet) and the GEF. The next step is the development of a Full Project Document.

The GEF, in its fifth financing period running from 2010-2014, also supports more broadly mitigation and adaptation activities, inter alia, to "promote conservation and enhancement of carbon stock through sustainable management of land-use, land-use change and forestry". The Main Department of Forestry of the Ministry of Agriculture and Water Ressources is currently preparing a proposal under this program.

3.6. REDD+

While international policy-makers are slowly proceeding in installing a mechanism to facilitate the reduction of emissions from deforestation and forest degradation (**REDD**) and to promote the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (**REDD+**), several programs are already in place to prepare countries for engaging in REDD+ in the future. It should be noted that REDD+ and its readiness programs are not restricted to rainforest countries. Rather, they aim at offering incentives for developing countries in general to take actions.[14]

It has become the rule to distinguish three REDD phases. Phase 1 covers national REDD strategy development including national dialogue, institutional strengthening and demonstration activities (**'REDD Readiness'**). Phase 2 covers the implementation of policies and measures as proposed in Phase 1, supported by predictable international funding (e.g. from the Green Climate Fund); and Phase 3 covers performance-based payments for actual emission reductions achieved.

Given Uzbekistan's stark figures of deforestation and degradation, participation in existing REDD programs could be an important step toward robust national policy-making, implementation and sustainable forest protection. While the relevance of 'carbonization', i.e. in particular Phase 3, may be less pronounced due to lower carbon value of the forests' biomass than what you would find in a tropical country, REDD readiness activities certainly provide a value of their own. Activities that Uzbekistan could undertake would include improved inventorization and monitoring, strategy and planning, and if designed well and institutionally supported from the Government, the facilitation of (Phase 2) funding.

Relevant programs for Uzbekistan include the **UN-REDD Programme**, the Forest Carbon Partnership Facility and the Forest Investment Programme. The UN-REDD Programme is a UN collaborative initiative bringing together the UN Food and Agriculture Organization (FAO), the UN Development Programme (UNDP) and the UN Environment Programme (UN-

[14] See for a recent REDD activity of Mongolia: http://www.un-redd.org/Newsletter22/Mongolia_REDD_Roadmap_Process/tabid/56283/Default.aspx.

EP). It was launched in 2008 and currently supports 42 countries including non-tropical countries such as Bhutan, Pakistan and Mongolia. Assistance spans all phases of REDD implementation, each phase requiring 2-3 years of work.

To trigger participation (for Uzbekistan or any other developing nation), a country must have installed a REDD+ National Focal Point; the Focal Point's rank is expected to be Minister of Secretary of State level. Once established, the Focal Point needs to submit a simple one-page form to the Head of the UN-REDD Programme. Uzbekistan, if it chooses to affiliate itself with the UN-REDD Programme, may consider for reasons of sectoral and institutional proximity mandating the Minister for Agriculture and Water Ressources, or a sub-ordinate Secretary of State, with the country's REDD program. As the UN-REDD Programme is prima facie not a market-based (private-sector driven) climate finance mechanism, the involvement of the Minister of Economy, at this stage, is not a priority.

The **Forest Partnership Facility** is an initiative that brings 16 financial contributors and to date 37 REDD countries together with the World Bank acting as secretariat and trustee for both the Readiness and the Carbon Fund. Current pledges to the Facility amount to roughly 500 million USD. REDD countries are assisted with developing REDD Readiness Preparation Proposals. The proposals go through due diligence by the Bank, and if successful trigger grant agreements of up to 3.6 million USD for readiness activities. The Carbon Fund may be accessed during and after implementation.

Uzbekistan would not be the only non-tropical country included (Nepal) or aspiring to be included (Bhutan, Pakistan) in the Facility. Affiliation is triggered through an expression of interest. Note, however, that inclusion is not automatic and that the Participants Committee retains discretion as to the expansion of its participation list.

The **Forest Investment Program** is installed under the World Bank's Strategic Climate Fund and targets the support of developing countries with their REDD readiness development and with preparing public and private investments. Several pilot engagements are on-going. While participation is generally open to all developing countries, it is conditioned on continued funding. Uzbekistan apply for funding and assistance but at this stage it is not clear if and to what extent the Forest Investment Program has services or monies available.

4. Conclusion: Recommendations

While the **post 2012 climate finance framework** is still a work-in-progress with many uncertainties, Uzbekistan has a variety of strategic options to continue its successful engagement with the climate finance mechanisms under the Kyoto Protocol Continuation in this sense also means bringing it to another level, in particular regarding LULUCF activities which have widely been shunned by the international climate finance regime so far.

Both mitigation and adaptation instruments are available for Uzbekistan. The most straight forward mitigation instruments may be the **CDM (afforestation)** and engagement under the World Bank's **BioCarbon Fund** whose third tranche, launched in late 2011, has a specific window for the development of **holistic, landscape-based LULUCF carbon finance components**.

More daunting, but probably the most sustainable (in terms of long-term benefits) mitigation instrument can be found in the **emerging NAMA format**. It allows for the development and implementation of country-driven priority actions with international support being operationalized through the Green Climate Fund, bilateral or multilateral donors, and eventually new market mechanisms.

Uzbekistan could focus on the development of a **Regional LULUCF NAMA for Karakalpakstan** while other regions may subsequently replicate certain activities developed. The NAMA could be developed in close cooperation between the national Government, the regional Government, local Governments and stakeholders, and an international donor institution funding the preparation works. The **NAMA proposal** that would be developed should follow the **design guidance** recently adopted by the UNFCCC at the Durban conference end of 2011, i.e. it should **describe the activities** to be taken, identify a **national implementing entity**, calculate **emission reductions** (over a **baseline**) and (incremental) **costs**, lay out fitting **MRV metrics**, and give regard to **co-benefits**. Given the novelty and complexity of the approach, technical support, both international and domestic, will likely be needed. Regional precedence, for other sectors than LULUCF, can be found in the German-funded (ICI) project on integrated NAMA development for four Central Asian countries (mentioned above).

Among the existing **adaptation instruments**, the long-term perspective for Uzbekistan is the development of a **National Adaptation Plan (NAP)**. In the short and mid-term, however, Uzbekistan should seek to receive assistance and funding from the **Adaptation Fund**, on the one hand, and the **Special Climate Change Fund**, on the other.

Combining mitigation and adaptation, **REDD+** offers a procedural engagement process which may prove useful for Uzbekistan to lay out its forestry policy (including mapping stakeholders and drivers of deforestation, and formulating policy solutions to remove deforestation and degradation pressure), provide a methodological basis (forest inventory, soil inventory, emission profile, reference level data, MRV system, etc.), monitoring tools and enforcement mechanisms to prevent further deforestation and degradation and prepare for a more stable ecosystem. Participation in particular in the **UN-REDD Programme** should be considered by

Uzbekistan. In particular, phase 1 and 2 of the institutionalized Programme would provide useful data, information and institutional capacity for sustainable landscape planning focusing on forests. Linking with other policy instruments (e.g. a holistic landscape NAMA) is an obvious option.

The **actions needed from Uzbekistan** at this stage are both **operational** and **institutional**. For its **NAMA building**, Uzbekistan needs to set up a development process which ideally is as robust as today's CDM framework, convincingly managed by the **Ministry of Economy**. While NAMAs can be developed at the sub-national level—a Regional LULUCF NAMA for Karakalpakstan being a case in point—the national Government will provide necessary resources and knowledge, and it is through the national Government that any NAMA seeking international support **needs to be triggered** towards the UNFCCC.

The Government (both at national and regional level) should also assist with identifying a strong and capable **implementing entity (NIE)**. While the international regulatory is not yet clear about whether private entities are acceptable as NIEs, a dedicated agency, or a public-private partnership outfit, of the Government of Karakalpakstan or of the national Government should be designated to support the NAMA development process and ultimately take ownership over the implementation process. Over the course of the development and implementation process, coordination with on-going similar initiative, e.g. UNDP's LED project, is recommended.

For both **adaptation** and **REDD activities**, the most urgent actions again are institutional. The Government of Uzbekistan will have to designate appropriate authorities to oversee adaptation and REDD works. The **UN-REDD Programme** requires involvement at Minister or Secretary of State level, and given the profound Government commitment needed to establish a national REDD framework, **high-level Government involvement** appears indispensable.