



**INDO-GERMAN EXPERT GROUP**

ON GREEN AND INCLUSIVE ECONOMY

POLICY PAPER

# SUSTAINABLE LIFESTYLES

PATHWAYS AND CHOICES FOR INDIA AND GERMANY

---

By Harry Lehmann, Sudhir Chella Rajan

Co-authors: Sneha Annavarapu, Claudia Kabel, Christian Löwe, Astrid Matthey

## IMPRINT

### **PUBLISHED BY**

Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH

Environmental Policy Programme  
Köthener Straße 2  
10963 Berlin, Germany  
T +49 30 33 8424-272  
F +49 30 33 842422-272

E-mail: [detlef.schreiber@giz.de](mailto:detlef.schreiber@giz.de)  
Internet: [www.giz.de](http://www.giz.de)

### **DESIGN AND LAYOUT**

Schumacher. Visuelle Kommunikation  
[www.schumacher-visuell.de](http://www.schumacher-visuell.de)

### **AS OF**

Jan 2015

# ABOUT

## INDO-GERMAN EXPERT GROUP ON GREEN AND INCLUSIVE ECONOMY

Green Economy has been recognized by the Rio+20 Summit as “one of the important tools available for achieving sustainable development”. It is emphasized that Green Economy should “contribute to eradicating poverty as well as sustained economic growth, enhancing social inclusion, improving human welfare and creating opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth’s ecosystems”. Such a transition towards a green and inclusive economy requires major efforts both on a national and international level, and cooperation and exchange of experiences is key to support the process.

India and Germany are major players in this transition. Against this backdrop, an interdisciplinary working group of renowned experts from leading research institutions and political think tanks in India and Germany has been set up in November 2013 to enhance collaborative learning, contribute to informed decision making in both countries and feed into the international debate on a Green and Inclusive Economy.

Five key topics are:

- Frameworks and challenges for a green and inclusive transformation
- Natural resources and decoupling growth from resource consumption
- Sustainable lifestyles
- Green and inclusive cities
- Transformation of the private sector

This policy paper was elaborated based on discussions in the context of the 3rd expert group meeting on 12–14 November 2014 in Berlin.

The group is supported by the German Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and facilitated by the GIZ Environmental Policy Programme in Berlin and the Indo-German Environment Partnership in Delhi.

# MEMBERS

---

Prof. Appukuttan Damodaran, Indian Institute of Management Bangalore

Prof. Ambuj D. Sagar, Indian Institute of Technology Delhi

Prof. Sudhir Chella Rajan, Indian Institute of Technology Madras

Prof. Rathin Roy, National Institute of Public Finance and Policy

Prof. Rita Pandey, National Institute of Public Finance and Policy

Dr. Ashok Khosla, Technology and Action for Rural Advancement, Development Alternatives

Mr. Shrashtant Patara, Technology and Action for Rural Advancement

Dr. Rajendra K. Pachauri, The Energy and Resources Institute

Mrs. Shailly Kedia, The Energy and Resources Institute

Prof. Dirk Messner, German Development Institute

Dr. Tilman Altenburg, German Development Institute

Mr. Frank Treppe, Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.

Mrs. Anandi Iyer, Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V. India

Prof. Miranda Schreurs, Freie Universität Berlin

Dr. Kirsten Jörgensen, Freie Universität Berlin

Prof. Gernot Klepper, Kiel Institute for the World Economy

Prof. Rainer Thiele, Kiel Institute for the World Economy

Dr. Harry Lehmann, Federal Environment Agency

Prof. Peter Hennicke, Wuppertal Institute for Climate, Environment and Energy

Dr. Philipp Schepelmann, Wuppertal Institute for Climate, Environment and Energy

# CONTENTS

ABOUT	1
MEMBERS	2
1 INTRODUCTION	4
1.1 AIMS AND CONCEPTS	5
1.2 SUSTAINABLE LIFESTYLES: A MATTER OF PUBLIC ACTION	6
2 CONSUMPTION TRENDS: STATUS QUO, DRIVERS AND HINDRANCES TO CHANGE	8
2.1 GLOBAL CONSUMPTION TRENDS	8
2.2 GERMAN LIFESTYLE AND DEVELOPMENT AGENDA	10
2.3 INDIAN LIFESTYLE AND DEVELOPMENT AGENDA	12
3 DRIVERS OF SUSTAINABLE LIFESTYLES: BEST PRACTICE EXAMPLES AND OPPORTUNITIES FROM INDIA AND GERMANY	14
3.1 INNOVATIVE BUSINESS MODELS AND SOCIAL INNOVATIONS FOR SUSTAINABLE LIFESTYLES	14
3.2 ECO-DESIGN – RESOURCE EFFICIENCY, LONG LIFE AND RECYCLABILITY	16
3.3 IMPROVING INFORMATION – HELPING CONSUMERS CONSIDER THE CONSEQUENCES OF THEIR CONSUMPTION DECISIONS	17
3.4 ENSURING SOCIAL SUSTAINABILITY OF THE TRANSFORMATION	18
3.5 MOBILIZING AND EMPOWERING CITIZENS – GETTING CITIZENS TO CONTRIBUTE TO A TRANSFORMATION OF LIFESTYLES THROUGH E.G., INCREASING PARTICIPATION OPPORTUNITIES	19
3.6 CHANGING THE REGULATORY AND FISCAL FRAMEWORK TO SUPPORT SUSTAINABLE BUSINESS MODELS AND CONSUMPTION	20
4 OUTLOOK AND DISCUSSION POINTS	22
REFERENCES	24

# 1 INTRODUCTION

---

Since Rio 1992 the international community has recognized that eradicating poverty, promoting sustainable patterns of consumption and production and protecting and managing the natural resource base of economic and social development are essential requirements for sustainable development. Over the past few decades, it has become clear that meeting these objectives requires creating opportunities for providing economic and social development for all, promoting technological innovation towards options that have a low ecological footprint, ensuring good governance and sound institutions, and, eventually, identifying pathways to shift consumption patterns and lifestyles towards more sustainable alternatives<sup>1</sup>.

Attention is increasingly focused on the 'third leg' of sustainability, the social dimension, having to do with preferences and choice sets, but also routines and institutional structures that get built up over time, with forces such as capitalism, technology and urbanization appearing as additional influences on cultures of consumption<sup>2</sup>. Consumption patterns are rapidly changing particularly in Asia, and scholars cite the examples of China and India to show how an emulation of long-established practices in the Global North is impacting consumption patterns and lifestyles in an irreversible manner<sup>3</sup>. A global conversation on sustainable lifestyles is not easy and creates a new challenge for policy-making and communication. At the same time, it also presents an opportunity to think about consumption discourses as generating motivation for building

social solidarity. A people-centred approach towards a Green and Inclusive Economy could thus be seen as "investment" in the creativity, competence and social capital of global humanity for sustainable development<sup>4</sup>.

A cross-national dialogue between Germany and India on sustainable lifestyles and consumption could potentially provide important new knowledge and understanding concerning opportunities in the social dimension, but with the recognition that there are several common features as well as obvious differences between the two countries. Both are robust democracies with growing consumption levels and patterns creating ecological pressures, high levels of social and political disparities and complexity, internationalization of markets, globalization, and strong civil society organisations and initiatives. In terms of contrasts, India's per capita GDP (a rough measure of income or consumption) is US\$ 1,500 in nominal terms compared to about US\$ 45,000 for Germany. India's development indicators are dismal, with over half its population designated as multi-dimensionally poor (as measured by the MPI), and nearly a third considered destitute. At the other end of the scale, about 5 percent of the population (making up about 60 million people) have average incomes that are comparable with those in Central and Eastern Europe, with over one hundred individuals in this group having a net worth of over US\$ 1 billion.

---

1 DEFRA 2005

2 Barr et al. 2011

3 Hubacek et al. 2007

---

4 Jackson 2005, Banuri 2002

## 1.1 AIMS AND CONCEPTS

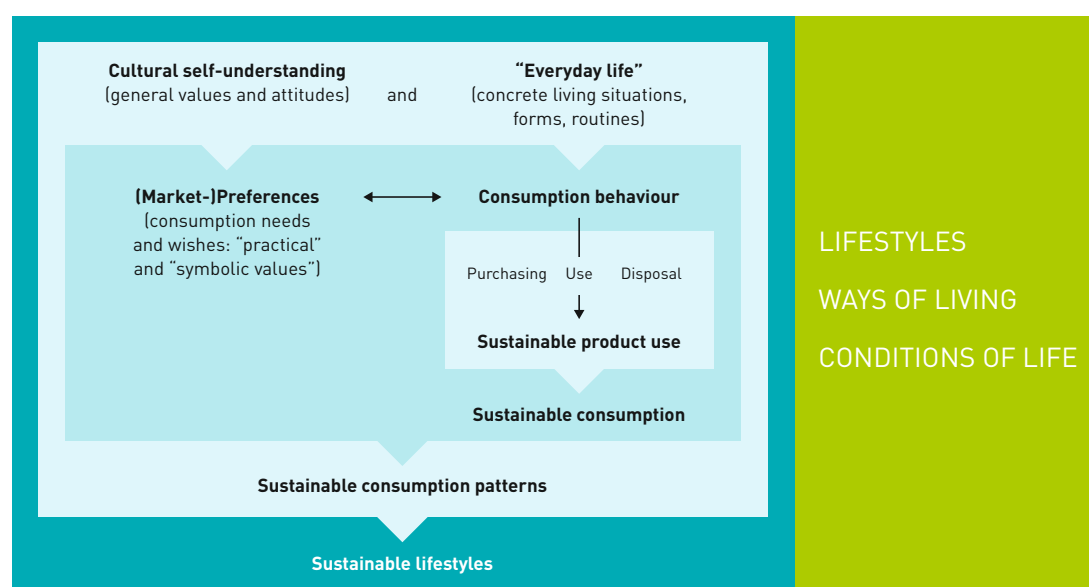
This input paper tries to sketch the broad trends in consumption in both countries, the societal and market responses to them and opportunities and obstacles associated with promoting sustainable modes of consumption. It identifies some of the possible forms of cross-learning that could be available from both contexts, keeping in mind that there may be different approaches, visions, models and tools available to each country, in accordance with corresponding national circumstances and priorities. The discussion will attempt to consider broader 'transformative' possibilities rather than 'instrumental incrementalism'. The former could include capacity building as well as knowledge transfer on sustainable lifestyles; inspiring people to become more aware of and personally engaged with questions of consumption and sustainability;

innovation as it relates to changing lifestyles that imply more sustainable modes of consumption; and cultures and governance models that could promote sustainable lifestyles.

To emphasize the "transformative nature" associated with the promotion of sustainable lifestyles within the strategic framework of a Green and Inclusive Economy we see "Sustainable Lifestyles" as a holistic (analytical and strategic) approach that addresses normative, structural and cultural aspects of

- lifestyles,
- ways of living,
- conditions of life.<sup>5</sup>

With this broader scope we try to overcome the common misperception that the question of sustainable lifestyles is purely a matter of "individualized responsibilities, preferences, decisions and capabilities at the household level" (see figure 1)<sup>6</sup>.



**Figure 1:**  
**Sustainable Lifestyles:**  
**A Multi-dimensional Task for Environmental Policy and Communication**

<sup>5</sup> Umweltbundesamt 2002, Löwe and Lichtl 2004

<sup>6</sup> Adapted from Umweltbundesamt 2002 and Löwe and Lichtl 2004

In our understanding “Sustainable Lifestyles” is a complex multi-level phenomenon which comprises the following integrated (micro-macro) perspectives of social-structural and socio-cultural transformation (including also the institutional dimension) towards sustainability:

- sustainable use of products,
- sustainable consumption (behaviour),
- sustainable consumption patterns,
- sustainable lifestyles.<sup>7</sup>

From an analytical and strategic point of view this broader perspective helps to bridge and or connect our chosen “people-centred” (capability) approach with the societal context in which “lifestyles” are culturally embedded and expressed through routines and practices as social structure. In this perspective our understanding on “Sustainable Lifestyles” anticipates also many elements of the “Sustainable Livelihood Approach”, which is often discussed in the context of poverty reduction strategies in international cooperation policies (e.g. Krantz 2001)<sup>8</sup>.

### 1.2 SUSTAINABLE LIFESTYLES: A MATTER OF PUBLIC ACTION

This paper is especially attentive to the role of governments in ‘nudging’ societies towards sustainable lifestyles. Government action in this regard could vary from regulations banning products that are harmful to ecological and human systems and thereby requiring shifts in consumer behaviour, to informational campaigns, procurement programmes and support to local communities that actively promote shifts in lifestyles towards reduced consumption. In a developing country context such as India, such policies and programmes will have to be especially cognisant of the need for *increasing* consumption among those living in poverty with differential sensitivities towards them, while ensuring that such an increase does not generate technology or institutional lock-ins that are unsustainable. But, as in Germany, the Indian government should also attempt to induce shifts in the lifestyles and consumption patterns of the wealthy towards sustainable modes, largely because these forms of behaviour typically lay the ground for the consumer aspirations of the poor and middle classes.

---

<sup>7</sup> Umweltbundesamt 2002, Löwe and Lichtl 2004

<sup>8</sup> Krantz 2001

---

One of the assumptions in this paper is that marketing and advertising play pivotal roles in shaping societal values and aspirations but that this industry could eventually be an important partner in the effort to understand and transform the culture of consumption. In fact, to become effective, innovation for transformation needs new arrangements and constellations in the relationships among government, the market economy and society to overcome various existing dilemmas and failures. Exploring and experimenting with various governance models and constellations would help to reduce the political costs of transformation, stimulate needed innovations, mobilize commitments and investments, synchronize action and form a framework in which various “conflicting” rationalities could operate in the same direction.

It also helps to create a common sensitivity and differentiated understanding of “responsibility” to overcome the often observed phenomenon of burden-shifting and to create societal confidence. Therefore, promoting sustainable consumption and lifestyles implies the creation of a new “political culture” and identifying and exploring new arrangements and constellations around alternative lifestyles and consumption. But bringing forward the needed change also requires innovation in the institutional design of policy-making around incentive measures, itself an area that requires more research and practice.

In the next section, we describe the current status of consumption practices in Germany and India and also describe some of the obstacles and opportunities associated with introducing sustainable lifestyles in different contexts. In Section 3, some best practices for sustainable consumption in both countries are described, as well as one or two cases that showed promise but ultimately failed. We have a brief discussion on these successes and failures before Section 4, which raises questions for further research and discussion.

## 2 CONSUMPTION TRENDS: STATUS QUO, DRIVERS AND HINDRANCES TO CHANGE

---

### 2.1 GLOBAL CONSUMPTION TRENDS

Consumption is a primary driver of demand for energy and resources. A thorough analysis of consumption patterns and the forces that influences it is therefore important for discovering opportunities to stay within the earth's carrying capacity. This section describes consumption trends in both countries and the factors governing them.

A major driver of resource use is food consumption. Although a significant share of the global population still suffers from scarcity of food, there are several trends in global food consumption patterns – beyond population growth – that lead to increasing resource and land use and rising greenhouse gas emissions. One such trend is the global increase in meat consumption, arising from constantly high consumption levels in developed and rising consumption levels in emerging nations. For example, global meat production increased by 31% between 2000 and 2012<sup>9</sup>, with German average meat consumption stagnating at high levels (88 kg per annum per capita (p.a. p.c.) in 2011<sup>10</sup>). In India, meat consumption is about twenty times lower (at about 4.2 kg per capita per year in 2011, *ibid.*) but with about 5% annual growth in recent years (*ibid.*). Growing meat consumption leads to an increased demand of land and water and rising greenhouse gas (GHG) emissions. For example, meat production currently accounts for up to 25% of global GHG emissions<sup>11</sup>. One calorie derived from beef consumption requires about 87 times more land and 36 times more water

than does a calorie derived from consuming wheat. It also emits about 38 times more GHGs<sup>12</sup>. Meat consumption therefore contributes not only to climate change, but also to loss of biodiversity due to deforestation, and to scarcity of portable water. It thus can indirectly entail conflicts over land, water and resources, with the most vulnerable communities often suffering the most (forest communities, small-scale and subsistence farmers). When considering this global trend, it should be noted that the specific resource use does not only depend on the kind of meat under consideration – with beef at the upper end of the scale and poultry towards the bottom. It also depends on the kind of meat production. For example, mass production of pork based on soy has a different social and environmental impact than does subsistence farming where pigs mainly feed on leftovers from the kitchen and garden.

A second relevant trend is the decreasing share of locally produced goods, and in particular locally grown foods. For example, German food and agro imports almost doubled between 2000 and 2012, rising from 41.5 to 73 billion €, while exports jumped from 28 to 63.4 billion €<sup>13</sup>. India's historic commitment to food security has meant that its imports have been minimal in recent years, except for 2006–2007, when a combination of factors led to the country importing more than 8 million tonnes of wheat in that period. Food prices have been steadily rising in India and increased by more than 50% between 2002 and 2012<sup>14</sup>. Specialisation in the production of certain (food) products may induce efficiency gains and hence less resource consumption. But it also

---

9 FAO 2012  
10 FAO 2011  
11 UNEP 2012

---

12 Derived from U.S. agricultural data. See Eshel et al 2014.  
13 BMELV 2013  
14 FAO 2012

implies an increase in global transport and thus GHG emissions, which may overcompensate the efficiency gains. In addition, it implies social risks. An increasing number of farmers in emerging and developing countries produce crops for the world market rather than for their own consumption. This may increase their income, but it also heightens their dependence on global market trends and prices, and hence their vulnerability. One recent example involves farmers in Rajasthan who started growing guar beans for the US fracking industry when demand was high and production was profitable<sup>15</sup>. When the industry found synthetic substitutes for the beans and prices dropped, many of the farmers' investments did not pay off<sup>16</sup>. Another aspect of a globalized agriculture is the spread of industrialized monocultures in plant production that are based on chemical fertilizers and pesticides. Substituting this technology by ecological methods could increase yields and improve nutrition in the poorest regions, reduce GHG emissions and help preserve ecosystems and biodiversity<sup>17</sup>.

A third trend that increases the pressure on global resources is the overall rise in consumption levels. This is driven in part by the increasing demand of goods to satisfy wants rather than (basic) needs. In particular, growth in automobiles, electronics, garments and consumer plastics is being pushed as much by 'desire' promoted by the advertising industry as by necessity<sup>18</sup>. Role models for this trend are the industrialized societies where consumption does

not only serve practical purposes but also grants status, expresses identity and success, provides social affiliation, etc. Consumption choices driven by these motives may exceed the resources necessary to simply fulfil needs, e.g., regarding passenger transport, housing or personal appliances. The increasing number of sport utility vehicles (SUVs) in both Germany and India is one example<sup>19</sup>. Overall, the share of income spent on durable goods has risen from 2.7 to 6.1% in rural India and from 3.3 to 6.3% in urban India between 1993/94 and 2011/12<sup>20</sup>. The rates of growth in luxury are even faster for those in the middle and upper income fractiles in India. The marketing industry fosters this trend, advertising goods not only for their practical use but also for the identity one supposedly acquires through them, e.g. bottled drinks, cars, watches, and phones. The "selling of dreams" is becoming directly proportional to the "comfort of things", to borrow anthropologist Daniel Miller's term<sup>21</sup>. Unfortunately, given the size and extent of India's market for consumer goods, these ongoing marketing strategies have long-term consequences in terms of lock-in. Already the sale of processed and packaged food has stripped the sale of unprocessed alternatives in many categories. This is reflected in the share of beverages, refreshments and processed food in overall consumption expenses in India, which are at roughly 8% to 9% of total consumer expenditure<sup>22</sup>.

15 Neate 2012

16 See Kumar Jha 2012 and Raja 2014

17 United Nations General Assembly 2010

18 Advertising revenues constitute about 0.5% of global GDP and are growing faster than the overall economy. See Magna Global Advertising Forecasts 2014

19 The share of SUVs among all new registrations in Germany grew by 22.3% from Jan–Sept 2013 to Jan–Sept. 2014 (Kraftfahrtbundesamt 2014). In India, SUV sales have been growing at about twice the rate of the overall economy in recent years. See Crabtree 2013

20 NSS 2011–12

21 Miller 2009

22 NSS 2011–12 and NSS 2009–10

## 2 CONSUMPTION TRENDS: STATUS QUO, DRIVERS AND HINDRANCES TO CHANGE

A fourth trend that is particularly evident in the developing world is the rapid expansion of cities and their peripheral regions, along with the changing character of what can be called 'urban'. In India, the decadal rate of urbanisation in the past half century has been about 37%, with nearly one in three Indians now living in cities, towns or 'urban agglomerations'<sup>23</sup>. Urban areas have many advantages for sustainable lifestyles, in terms of the opportunities they provide for pooling resources, but poor infrastructure and land-use planning can erode many of these benefits as is evident in South Asia and many other emerging economies. The relative shares of consumption expenditure in the top and bottom quintiles of the urban population has almost remained constant in three decades, even while average income has increased more than threefold, implying that although poverty has declined inequality has increased in Indian cities. Urban growth is itself increasingly driven by demand for housing, some of which includes exclusive gated enclaves on the periphery of cities, increasing sprawl and pressure on infrastructure and services.

### 2.2 GERMAN LIFESTYLE AND DEVELOPMENT AGENDA

The average German lifestyle is characterized by a degree of resource and energy consumption among the highest in the world. Part of this consumption is mostly the consequence of individual decisions, e.g. the average meat consumption of 88 kg p.a. p.c., the average living area of 43 m<sup>2</sup> p.c.<sup>24</sup> or the average number of 2.23 air journeys p.a. p.c.<sup>25</sup>. However, a significant share of this consumption is also determined by economic and institutional arrangements, e.g., the average volume of waste of 614 kg p.a. p.c. (municipal waste only)<sup>26</sup>, which is partly due to extensive packaging of most consumption goods, the average paper consumption of 253 kg p.a. p.c.<sup>27</sup>, which is influenced by large amounts of print advertisement, or the 658 cars per 1000 inhabitants<sup>28</sup> that are in part due to the prevailing spatial planning and public transport policy.

Overall, this leads to a global footprint of 4.6<sup>29</sup> an average consumption of primary energy of about 48,000 kWh p.a. p.c.<sup>30</sup>, direct water consumption of 44165 l p.a. p.c.<sup>31</sup> and a total material requirement of 74.5 t p.a. p.c.<sup>32</sup>.

The concept of a "Green Economy" aims at reducing the use of energy and resources by employing more efficient production technologies, reusing and recycling material previously deemed waste, using

---

<sup>23</sup> Bhagat 2011

---

<sup>24</sup> Destatis 2011

<sup>25</sup> WZB and SOEP 2011, Destatis 2013

<sup>26</sup> Destatis 2012

<sup>27</sup> WWF 2006

<sup>28</sup> Kraftfahrtbundesamt 2014

<sup>29</sup> Global Footprint Network 2012

<sup>30</sup> AG Energiebilanzen 2014; eigene Berechnung.

<sup>31</sup> Destatis 2010

<sup>32</sup> Umweltbundesamt 2008

---

renewable sources of energy etc. In addition, the Green Economy requires a change in consumption patterns<sup>33</sup>. On the one hand, this may involve choosing sustainable alternatives of previously consumed goods, like organic rather than conventionally grown food. On the other, it may involve the adoption of a new, resource-light lifestyle. But lifestyle changes are often hindered by psychological hurdles. First, people in many industrialized countries like Germany have gotten used to continuously growing consumption levels. This habituation forms a significant reference point. A second aspect has to do with consumption defining social status and personal success. Deviating from this reference point of habit and status is perceived as a net loss (or sacrifice) by the majority of people<sup>34</sup>. This significantly hinders the adoption of a resource-light lifestyle even if it promises an increase in leisure or improved social relationships. Loss aversion – the effect that “losses loom larger than gains” – aggravates the effect, making consumption reductions even less appealing.

The resulting status quo in Germany does not yet include a general agreement that anything but minor changes in lifestyle are necessary or even imminent. Rather, there is the hope that technological progress will deem major lifestyle changes unnecessary. This view has strong proponents. As most industry profits depend on high consumption levels both in Germany and worldwide, industry targets its marketing and lobbying efforts at an increase rather than decrease in consumption. Similarly, governments at different levels depend on tax revenues, which in turn depend on consumption, industry profits etc. Accordingly, governments would also prefer technological

progress rather than lifestyle changes to solve the problem of climate change and shrinking natural resources. The 2013 report of the Enquete Commission of the German Bundestag on “Growth, Prosperity, Life Quality” reflects this dilemma<sup>35</sup>. It acknowledges many problems arising from the currently prevailing lifestyle, names possible alternatives and even makes proposals how to foster their dissemination. However, the report remains vague when it comes to concrete policy measures aimed at establishing these alternatives.

Despite the opposition from industry and the hesitation of the government, a slow change of lifestyles towards less resource consumption is taking place. This change is supported by the spread of information regarding the consequences of an unsustainable lifestyle, which is provided in a quality and frequency high enough to slowly raise awareness and generate a feeling of urgency. Further, certain aspects of a sustainable lifestyle have become fashionable in some parts of society, e.g. consuming organic food, eating vegetarian or using car sharing services. In addition, despite its hesitation to advocate major lifestyle changes, it is official government opinion that the current degree of resource and energy consumption cannot be sustained. This increases the credibility, for example, of climate change policies in the eyes of the population and also provides arguments for lifestyle changes. Section 3 analyses some of these developments in detail.

---

33 BMUB and BDI 2012

34 Maniates 2010

---

35 Deutscher Bundestag 2013

## 2.3 INDIAN LIFESTYLE AND DEVELOPMENT AGENDA

The broader imperative of India's economic policy is to pursue accelerated growth in order to reduce the incidence of poverty. Since 1991, following a general reform agenda, the government has largely pursued a top-down strategy of fiscal and monetary deregulation and substantially liberalised excise and customs duties for a large number of commodities, streamlined monetary policy, reduced tariffs and free current account and limited capital account convertibility, deregulated industry, allowed private sector participation in infrastructure development and opened up the financial sector. The revenues generated from increased growth are expected to be used partly for direct government investment in social and physical infrastructure programmes for poverty reduction, including education, safety nets, electricity and water provision, sanitation, housing, and so on<sup>36</sup>. To a large extent, this has been successful, with poverty rates declining at a steady rate since the reforms, but inequality has also increased, not only in terms of income but also in terms of morbidity and access to health care and education<sup>37</sup>.

India's relatively low per capita consumption and income levels belie the fact that it has a large population, of whom nearly a tenth enjoy lifestyles that are comparable with those living in most

European countries<sup>38</sup>. It is therefore useful to make a distinction between luxury and survival or basic commodities even though they may both sometimes serve the same function<sup>39</sup>. For instance, large bungalows with sprawling lawns and gardens and modest huts and small houses are both forms of housing, but the former can be classified as luxury, especially if the resident has several other options for housing, whereas the latter are necessities for survival with some reasonable comforts to make them homes. While disaggregated data is hard to obtain for the country as a whole, there is increasing evidence from passenger transport, housing, space cooling and personal appliances that the absolute growth of luxury commodities in each sector is rising at faster rates than the rest of the economy. In each of these, the choice of low or high footprint options is often not primarily driven by cost or even function, but by their symbolic value. For instance, the choice of purchasing fuel-guzzling SUVs in dense Indian cities is less likely driven by either cost or function, yet their sales have been galloping in recent years. Worldwide growth in luxury goods is now at about 10% per year and is led by emerging markets, particularly in Asia. India is at the forefront in this increase, expected to have 86% per year growth during 2013–2015, apparently motivated by the social significance of luxury goods in terms of their symbolic and class status<sup>40</sup>.

36 Mohan 2008  
37 Pal and Ghosh 2007

38 Birdsall 2010., p. 157  
39 This distinction is borrowed from Agarwal et al. 2002  
40 Chandran 2014, Eng and Bogaert 2010

---

In spite of the otherwise galloping consumption patterns in India, there are also signs of discontent. One can find, for instance, growing interest in alternative models of development and on reviving green consciousness drawing on traditional cultures and religious belief systems<sup>41</sup>. The aim of some contemporary sustainability campaigns is to convert this cultural capital into practices of everyday life. At the same time, if expressed primarily in environmental terms, these efforts to promote simple living could be counter-productive given a general perception among middle classes in India that environmental activism is 'anti-growth'. In a country that is strife with extremes of under and over consumption owing to structural inequalities, nevertheless, social justice remains imperative, implying that new directions must be explored for policy and advocacy in this area.

---

41 For instance, R. Pachauri's argument (Randerson 2009) against adopting western lifestyles or Ashish Kothari's at <http://indiatgether.org/consumptn-environment> Accessed October 20, 2014. A longer list of social entrepreneurship towards sustainable lifestyles can be seen in Shrivastava and Kothari 2012. Apart from self-identified environmentalists, a number of spiritual and religious organisations are also demonstrating a turn away from rampant consumption. These are discussed in a separate paper.

### 3 DRIVERS OF SUSTAINABLE LIFESTYLES: BEST PRACTICE EXAMPLES AND OPPORTUNITIES FROM INDIA AND GERMANY

---

Based on the discussion above, it seems clear that government or civil society action to promote sustainable lifestyles and consumption patterns is a significant challenge in both countries. It is therefore important first to understand ways to overcome structural and cultural lock-ins and path-dependencies associated with both over-consumption and under-consumption by examining ongoing experiments and best practices in India and Germany. Enabling frameworks that emerge from this learning will then need to be multi-dimensional and transformative, involving at least the following features:

- Knowledge sharing and capacity building on sustainable lifestyles,
- Actions to energise and mobilise people to assess their own social behaviour,
- Facilitation of technical and social innovations for sustainable lifestyles,
- Designing new governance and institutional settings,
- Creating “cultures of sustainability” as a baseline for experimentation and communication.

Within this understanding the issue of sustainable lifestyles and consumption patterns should be addressed through a “people-centred”-approach to policy design and advocacy, in which ongoing social dynamics within markets and society are identified as the starting point to drive the necessary change towards sustainability. As mentioned in Section II there are a few (though often overlooked) signs of promising developments, both in India and in Germany, which could form a baseline for such

a “people-centred”-approach within the concept of a Green and Inclusive Economy. “Transformative change” with respect to the promotion of sustainable lifestyles within a Green and Inclusive Economy will require that attention is paid to several strategic areas, including those described below.

#### 3.1 INNOVATIVE BUSINESS MODELS AND SOCIAL INNOVATIONS FOR SUSTAINABLE LIFESTYLES

In contrast with theories of “grand design” or revolutionary transformation, a transformative people-centred approach relies on the strengthening of capacities and empowerment of social institutions and people. It also assumes that the government’s role should be less interventionist but more supportive to strengthen institutions and people’s ability to cope with environmental, social and economic challenges in an integral manner. In this respect, innovative business models and social innovations for sustainable lifestyles – though still representing a small niche in the political arena – are becoming increasingly relevant for policy making, because they can open up political room for a broader spectrum of policy solutions. Furthermore, these could constitute a new “motivational background” to better assimilate excluded people in the overall process of transformation and strengthen people’s and society’s resilience<sup>42</sup>.

---

42 Umweltbundesamt 2014, EEA 2014

---

While “innovation for sustainability” is a well-worn phrase within the business community and is reflected in the shifts taking place across the world to innovate for products that have a reduced footprint, less attention has typically been paid to business or social innovations that generate shifts in consumption patterns themselves. That is to say, much innovation has focussed on creating products and services that are less resource-intensive or polluting compared to previous ones, but often having *little or no resulting change in human activity* in relation to the consumption of products and services themselves. Changing the focus towards helping to create a more socially and environmentally aware consumer who changes her or his daily practices towards a smaller footprint and enhanced social solidarity is a completely new approach of social innovation.

As of now, there are only a few analytical studies available on experiences and learning on how government could support social innovation processes, building a kind of new rationale for policy-making and showing interesting new narratives for political communication<sup>43</sup>. What is still missing is a clear analytical framework and methodology to investigate the environmental, macro-economic and social effects of such innovations, and to gather robust data<sup>44</sup>. Good starting points for this are “typologies” that have been developed on “value creation business models for sustainable lifestyles” and “social innovations for sustainable

consumption<sup>45</sup>”. This calls for efforts at the local and micro-level in terms of experimentation with civil society and at macro level in terms of institutional facilitation. These could include social innovations such as the sharing economy (e.g., car sharing and other collaborative consumption models), reviving complementary currencies that generate new and more robust local economies that are protected to some extent from global forces and business cycles, and encouraging spiritual and religious communities that foster tolerant and vibrant social formations while revitalising traditional values of community.

Examples of all these types of innovation can be found in both India and Germany, although their scale and level of penetration across both societies are still relatively low. The so-called sharing economy for mobility, housing and child-care, especially in its informal variants, has been a strong suit of traditional Indian society. Among groups sharing a high degree of social capital, one can still find numerous instances of assets and services being shared by a community. In Europe, new forms of social innovation are emerging, with information technology playing a vital role in facilitating trust among strangers to share homes, vehicles, rides and child and elderly care services.

---

43 *ibid*, Aderhold et al. 2014

44 See current project by Umweltbundesamt: „Nutzen statt besitzen – Neue Ansätze für eine Collaborative Economy“. This project aims to quantify ecological and macro-economic effects of a Collaborative Economy.

---

45 Umweltbundesamt 2014, EEA 2014

## 3.2 ECO-DESIGN – RESOURCE EFFICIENCY, LONG LIFE AND RECYCLABILITY

Promoting eco-design or more generally the overall environmental performance of products and services is key to a Green and Inclusive Economy. Germany and India differ quite a bit in terms of whether and to what extent eco-design is already institutionalized in their economies:

**India:** The boom in online shopping in India and a general boom in consumption of ‘foreign made consumer goods’ has resulted in an issue of waste generation (on the consumer side) and packaging (producer side). Segregation of household waste will be substantially helpful to recycle cardboard, plastics, paper, etc. On the producer side, eco-labelling for packaging could be encouraged and a system of “bonus points” for consumers returning packaging material will incentivize micro-level sharing of responsibility. Some research in this direction also points to how this might benefit corporate goodwill<sup>46</sup>.

There is little or poor formal policy regarding segregation of waste and recycling in India. At the individual level there is little incentive to decrease the use of plastic packaging. Nevertheless, there is a market for recycled metals (primarily iron, steel and copper), paper products and a declining one for glass, which provides incentives to separate out these materials for sale to ‘kabadiwalas’ who collect them from individual households. Ragpickers are an integral part of recycling systems, but apart from their stark and risky means of livelihood, they are not protected

by any form of social security. A policy that can help reduce their exposure to toxics and streamline the process of collection is essential<sup>47</sup>.

Information, institutions and implementation have to be targeted in equal measure for they reinforce each other.

**Germany:** Within the last decade the environmental performance of products has gotten more and more recognized in Germany. Green products in Germany are driven by various factors, like:

- A stronger regulatory framework (Ecodesign Directive, Waste Electrical & Electronical Equipment Directive, Waste policies etc.),
- Additional market potentials for revenues through green product innovation,
- Higher sensibilities and demand of consumers,
- A strong position of public procurement, and
- A wider application of eco-design principles and corporate social responsibility (CSR).

The market trends so far are not homogeneous: there are some areas, like the food sector, in which growth rates of green alternatives are significant, but compared to conventional products the overall market shares are still ranging on a relative low level.<sup>48</sup> A positive factor could be seen in the fact that green products are increasingly demanded on a broader social base: more and more people in Germany are getting first hand experiences with the qualities of green products. Here, the retail sector plays an important role to better positioning green alternatives in the stores and in advertising. But

<sup>46</sup> Saxena and Khandelwal 2010

<sup>47</sup> Note that ‘ragpickers’ are usually women and children and belong to lower social strata than kabadiwalas, who are generally associated with established enterprises that have relatively steady incomes. See, for instance, Boo 2013.

<sup>48</sup> Umweltbundesamt 2014

---

a majority of people still lack access (structural, economic) to green products or have cultural barriers to take up opportunities. In total, companies and consumers are still in a “learning mode” to integrate the environmental and social aspects of products and services into daily business and routines more consequently on a broader base.

To help business and consumers the Federal Government invested in several activities of “environmental product policy” to improve the uptake of green products in Germany, like:

- Modernization of the national environmental labelling scheme “Blue Angel”
- Introduction of a national award scheme “Bundespreis EcoDesign”
- Integration of environmental aspects into product standardization
- Collaborative campaigns with producers, retailers and NGOs on several issues, like CSR, Fairtrade, organic farming, etc.

### 3.3 IMPROVING INFORMATION – HELPING CONSUMERS CONSIDER THE CONSEQUENCES OF THEIR CONSUMPTION DECISIONS

A pre-requisite for sustainable consumption is information on the environmental and social effects of consumption and to create a favourable information infrastructure to help people to make the right choice. Within a knowledge and information society like Germany information became crucial, but also paradoxical: on the one hand, increasing levels of

environmental information are available for more and more people. On the other hand, larger numbers of people get disorientated or overloaded with too much information. There is a danger that a substantial number of people might lose confidence in the provided information, because they cannot distinct the various qualities of information, provided by different sources (media, government, business, E-Commerce, advertisement, NGOs etc.).

Beside single information on various aspects the Federal Government invests more and more in “meta-information systems” to help business and consumers, but also NGOs and media to get a better baseline orientation on environmental information on products and consumption opportunities. Ongoing efforts include:

- Application of life cycle assessment-based methodology
- Quality standards for environmental information
- Harmonization of environmental information
- Guidelines on CSR-Communication in the retail sector
- NGO-based evaluation platform on labels
- ‘Umweltbundesamt’-meta-portal on sustainable living.

For India, the situation on consumer information is quite different in many ways. Other than some sporadic information provided by government and NGOs, the presence of transparent, trustworthy public environmental information on products and consumption opportunities is lacking<sup>49</sup>. In the absence of a clear governmental supported consumer information strategy other forms of information shape

---

49 UNEP, EC and InWEnt 2009

### 3 DRIVERS OF SUSTAINABLE LIFESTYLES: BEST PRACTICE EXAMPLES AND OPPORTUNITIES FROM INDIA AND GERMANY

---

people's mindset, like marketing and advertisement and social media. High communicative pressure through marketing and advertisement gives companies "monopoly on information" with low levels of credible responsibility, resulting not in a "people-centric" but "consumer centric" cultural milieu of material consumption.

Shaping consumer information should be seen as "public investment" in trustful institutions of consumer protection and regulatory frameworks on consumer information in line with the UN Guidelines for Consumer Protection and international standards on environmental information. A good starting point to build-up needed capacities is to identify reliable institutions and to create a kind of governance model on (baseline) consumer information on sustainable consumption opportunities. Here, an integrated approach with the educational sector (Education for Sustainable Consumption) could be helpful to create a long-lasting (critical) knowledge base.

Marketing appears to have a principal role in creating shifts in behaviour. Social psychology research suggests that changes in consumer behaviour are driven by attitudes, habits, access to alternatives, personal capabilities and contexts.<sup>50</sup> Typically, however, these models are criticised as being too predicated on rational choice theory, which assumes autonomous choices that seek to maximise private utility with no reference to interpersonal influence, symbolic meaning, or ethical frameworks of solidarity<sup>51</sup>. Other theories from social sciences are more persuasive in describing how individuals make choices on the basis of their position in a variety of

fields of everyday practices. They develop routines to negotiate through different standardized 'life-worlds', i.e., home, school, work, play, and in so doing create symbolic or cultural value in different forms of consumption<sup>52</sup>. Marketing finds symbolic strategies to accentuate value in certain brands and modes of consumption; hence its importance.

Marketing, of course, carries with it the possibility to induce change in the way commodities are perceived and adopted in society. This, in fact, might have more direct implications than any other facet on the production side in the economy. For instance, a certain typology of consumers is keen on organic produce or bamboo-fibre clothes or paraben-free soaps and shampoos. Lifestyles, as such, are regularized practices and are influenced heavily by discursive material, providing 'wedge' opportunities for introducing change<sup>53</sup>.

## 3.4 ENSURING SOCIAL SUSTAINABILITY OF THE TRANSFORMATION

There is empirical evidence that a large share of the German population cannot participate in the further greening of markets. Due to various structural, social and economic limitations these people are excluded from the positive effects of the ecological modernization of Germany. Based on the recent discussion on energy pricing brought about by the "Energiewende" (the German Energy Transition), environmental policy in Germany is increasingly

---

<sup>50</sup> Stern 2000, Peattie 2010

<sup>51</sup> Axsen and Kurani 2012

<sup>52</sup> Bourdieu 1986, Giddens 2013

<sup>53</sup> Marketing, via online stores, wellness centres, newspapers such as The Speaking Tree, etc. helped this typology take a concrete shape.

---

confronted with social conflicts associated by social injustice. People seem to feel that they are lacking behind or living in unfavourable conditions compared to others. Here, the government together with a broad range of welfare organizations and environmental NGOs explore pilot projects with low-income households to increase environmental (and therefore economical) efficiency through energy and resource savings and to organize social settings to become better involved in environmental activities in their neighbourhoods.<sup>54</sup> A potential could be seen in peer-to-peer arrangements (elderly, youth, migrants) to which low-income households help each other through social innovations (such as urban gardening, sharing and re-use of products and so on) within a stable institutional framework, provided by the local government in collaboration with initiatives or welfare organizations. Here, people become familiar on positive effects of collaboration and competence related to environmental and social activities, and to some extent, this “empowerment” could lead to new job opportunities.

Indian society is at the cusp of many potential changes involving questions of identity, income, patterns of work and living and the eradication of poverty. Identifying the sustainable pathways in these possible transitions is challenging because of existing fault-lines along cultural and political groupings that could generate deep societal fractures and environmental crises in spite of economic prosperity. Raising social policy questions about changing lifestyles and patterns of consumption towards more sustainable modes will need to be framed around a discussion on ‘better living’ and alternative lifestyles

that appear among prominent exemplars in society, such as film and television personalities, sports stars and similar icons. Again the role of local and national governments is important in lending support to austerity campaigns that help people improve their quality of life and also enhance their commitment to social solidarity. This could take a number of forms, including information dissemination on instances and contexts of transformative lifestyles, providing institutional support (e.g., regulatory changes) for facilitating them, and altering government’s own practice to reflect sustainable consumption.

### 3.5 MOBILIZING AND EMPOWERING CITIZENS – GETTING CITIZENS TO CONTRIBUTE TO A TRANSFORMATION OF LIFESTYLES THROUGH E.G., INCREASING PARTICIPATION OPPORTUNITIES

Sustainable lifestyles and consumption patterns require an active role for citizens. There is evidence that only a small part of the German population is actively engaged on a private or political base. A lot of citizens stated that environmental protection is at first a task by governments and business, only a small number of people are willing to contribute substantially through lifestyle changes<sup>55</sup>. The challenge for environmental policy is to develop

---

<sup>54</sup> See as example ‘Deutsche Umwelthilfe’

---

<sup>55</sup> Umweltbundesamt, BMU 2012

### 3 DRIVERS OF SUSTAINABLE LIFESTYLES: BEST PRACTICE EXAMPLES AND OPPORTUNITIES FROM INDIA AND GERMANY

---

a pro-active environmental communication to motivate people to contribute on a personal base and to show the many opportunities that could be created from such engagement. Here, environmental communication should create opportunities and social settings of meaningful participation and to help people to get a feeling that it is important to become a change agent for a better life, personally and collectively. There are positive examples where environmental policy in Germany has contributed to a better mobilization of people in different social settings and for various target groups.

Many of these challenges also exist in India, exacerbated perhaps by social stratification and growing inequality. Nevertheless, there seems to be evidence that the Indian middle class feels a strong sense of responsibility towards the environment (at least as measured by the high levels of guilt expressed in the Greendex surveys) and raising awareness about consumption patterns and alternative lifestyles would likely take root within many sub-cultures in the country<sup>56</sup>. The wellness industry could be an interesting entry-point to understand the ethos behind alternative lifestyles. Some research in this regard points to an individualistic approach to 'care', as espoused by the rise of wellness centres, lifestyle magazines, etc. However, this could provide leverage for more outward and social action as there are currents of community-formation due to converging interests here. The social capital that could be generated in the prevalence of these lifestyle centres could very well contribute to an inclusive narrative of social responsibility in sustainable lifestyles.

Yet another approach could be that of having sustainable lifestyle modules in school, akin to the "disaster management" modules developed successfully by the Central Board for Secondary Education. Sustainable lifestyles practices could be invoked not just in context of environment and protection (as is often done in schools) but one that goes beyond such narrow categorization to include the social and economic dimensions of sustainability. Consumption practices are generally overlooked when it comes to advocating 'sustainable lifestyles' in schools because the focus is always on back-end initiatives like rainwater harvesting, recycling, etc. Consumption is thus largely taken for granted and not viewed as a product of choices that can be changed both at individual and societal levels.

## 3.6 CHANGING THE REGULATORY AND FISCAL FRAMEWORK TO SUPPORT SUSTAINABLE BUSINESS MODELS AND CONSUMPTION

Several policy instruments are conceivable to promote sustainable consumption. These include ecological tax reform, luxury taxation and direct regulation of harmful consumer practices. For instance, in India, public health regulation to curb smoking has been especially important in having an impact on the more visible cultural aspect of smoking as such. Noticeably, there is a reduction in smoking in public spaces and overall shifts in tobacco use due to legislation and a mass media campaign aimed at tobacco control by

---

<sup>56</sup> See National Geographic n.d.

---

the central government<sup>57</sup>. This is also a case of how public investment in information dissemination might have had an effect on the consumption practices of individuals – exemplary for our purposes.

In the Indian context in particular, an important intervention to promote sustainable models is needed especially in terms of packaging material. The online shopping sector has taken on a mammoth presence in consumer practices, especially in urban areas but not restricted to them, and a consequence of this trend is the increase in the use of retail packaging. Retail packaging is also reflected by, and reflects, changing social meanings of hygiene, perishability, quality, etc. Given that it may be difficult for state and local governments to monitor and implement recycling laws effectively, it may be helpful to complement command-and-control type regulation with incentive-based policies that encourage new business models that promote sustainable consumption. For instance, government policies that encourage simpler and recyclable packaging could be tied with building the 'kabbadiwallah'<sup>58</sup> network and will improve conditions for creating a circular economy with multiple points of contact with suppliers, consumers and waste traders. In particular, just as government procurement programmes help to jump-start sustainable products, its active participation in these informal recycling networks could help to enhance their proliferation, signal government attention and interest in maintaining them and, by enhancing local businesses and connections with consumer-citizen networks, help build social solidarity.

---

57 Murukutla et al. 2011

58 Waste pickers

## 4 OUTLOOK AND DISCUSSION POINTS

---

This Section summarises points that require further research and elaboration. They are also intended to serve as a basis for future policy debate.

- There is a need for more research around the drivers of alternative lifestyles around social clusters in India and Germany. What circumstances prompt which social groups to prefer 'simpler living'? What are the prospects for expanding these practices? Are there negative implications of some of these practices or trade-offs between them?
- There is also a need for research on the government's role in providing infrastructure to make the transition to 'consuming down' easier. For instance, if better sidewalks and safer neighbourhoods are provided, would people be less inclined to purchase and use personal vehicles? What does government regulation around packaging do to the social psychology of consumption? Also, what forms of government regulation successfully nudge people towards more sustainable lifestyles and when are they seen as draconian?
- Developing a better understanding of the power of imagination to provide alternative visions of the 'good life' that de-emphasize material consumption. This requires some 'action research' on the creative use of visual imagery, for instance, to motivate shifts towards more leisure and from "consuming more" to "consuming better".
- Exploring questions of identity tied to communities in both countries. In India, for instance, spatial enclaves (such as, gated communities, malls, yoga centres, religious, quasi-religious and spiritual organizations, cultural centres, language schools, "new age" restaurants, cafes, etc.) are associated with status. Where are the opportunities for turning these types of identities towards collective responsibility, social solidarity and environmental stewardship? What are the forces keeping them in place?
- Encouraging research on the economic consequences of an overall decrease (or mere halt) in consumption levels. What are the consequences for employment, how do we have to restructure work? What are the consequences for public budgets? If and how can we continue to finance public services if taxes drop? Is lower consumption a path one country could follow unilaterally (to some extent, e.g., as a leader)? What are the consequences in a globalized economic system?
- Strengthening the research on a people-centred approach on transition towards a Green and Inclusive Economy and to identify core dimensions which empower people to participate in transformative processes.
- Developing a baseline concept on "innovative business models" and "social innovations" in relation to sustainable lifestyles as background for policy support in the field of "Sharing Economy" and "Collaborative Consumption" in different cultural settings as part of the Green Economy Agenda.

- Developing an evidence-based methodology to better quantify environmental, economic and social impacts of phenomena of a Sharing Economy.
- Developing a consumer research agenda for a Green and Inclusive Economy to stimulate global discussion on “good life in a fair world”. Starting point could be a bilateral dialogue between German and Indian people, companies and governments.

Within the expert group’s discussion additional points and requirements for further consideration on research and policy-making towards promoting sustainable lifestyles in the context of a Green and Inclusive Economy in India and Germany were made. These include:

- Strengthening governance models and institutional settings in which sustainable lifestyles and relevant social practices could be experimented and stabilized. Building an “architecture of responsibilities” in the relation of public and private engagement could support such governance approaches towards sustainable lifestyles. Differences between urban and rural contexts should be further pronounced in multi-level governance structures and policy design and implementation.
- Better understand evolution drivers, and enablers for social transition experiments. Support to build up a permanent social monitoring on transition initiatives as part of an overall monitoring and reporting on societal transformation towards sustainability.
- Developing a robust understanding of the concept of “sustainable lifestyles” to be used in the policy arena and for communication. Strengthening the people-centred approach within various “cultures of consumption” and “social settings” as baseline for new narratives and social meanings of consumption, but also for capacity building measurements. Addressing and including social actors and businesses should be seen as key to create public relevance for sustainable lifestyles.
- Experimentation and demonstration on less material intense cultures and promotion of non-commercial public spaces for initiatives on new social practices on consumption. Incentivize institutions and (local) governments to support and implement such experiments on a broader base. Facilitate cross-learnings between various experiments in real-life settings and institutionalize societal learning on transition processes on various levels.
- Re-assess policy instruments in their potential to enable institutions and people to initiate transition processes in “daily life”. Support capability and empowerment approaches and educational programmes on all levels in society to build up relevant competencies for transitions towards sustainable consumption practices in commercial and non-commercial settings.

# REFERENCES

- Aderhold, J. et al. (2014). Soziale Innovationen und förderliche Governanceformen im Transformationsprozess. Umweltbundesamt.
- AG Energiebilanzen (2014). Witterung treibt Energieverbrauch. Pressedienst Nr. 02/2014.
- Agrawal, A. et al. (2002). The global commons and environmental justice – climate change. *Environmental Justice: Discourses in International Political Economy*, Page 171–199.
- Axsen, J. and Kurani, K. S. (2012). Social influence, consumer behavior, and low-carbon energy transitions. *Annual Review of Environment and Resources* 37, Page 311–340.
- Banuri, T. et al. (2002). Great Transition: The Promise and Lure of the Times Ahead. Report of the Global Scenario Group. SEI PoleStar Series Report No. 10, Stockholm Environment Institute. Boston.
- Barr, S., Gilg, A. and Shaw, G. (2011). Helping People Make Better Choices: Exploring the behaviour change agenda for environmental sustainability. *Applied Geography* 31.2, Page 712–720.
- Bhagat, R. B. (2011). Emerging pattern of urbanisation in India. *Economic and Political Weekly* 46, Page 10–12.
- Birdsall, N. (2010). The (indispensable) middle class in developing countries. In: Ravi Kanbur and Michael Spence (eds.) (2010). *Equity in a Globalizing World*. World Bank, Page 157–87.
- BMELV (2013). Deutscher Außenhandel – I. Gesamteinfuhr in Millionen €. Bundesministerium für Landwirtschaft und Ernährung. Available from: <http://berichte.bmelv-statistik.de/AHT-0031020-0000.pdf>
- BMUB und BDI (2012). Memorandum für eine Green Economy. Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (BMU) and Bundesverband der Deutschen Industrie e.V. Available from: [http://www.bmub.bund.de/fileadmin/bmu-import/files/pdfs/allgemein/application/pdf/memorandum\\_green\\_economy\\_bf.pdf](http://www.bmub.bund.de/fileadmin/bmu-import/files/pdfs/allgemein/application/pdf/memorandum_green_economy_bf.pdf)
- Boo, K. (2013). *Behind the Beautiful Forever*. Penguin, UK.
- Bourdieu, P. (1986). The forms of capital. In: Richardson, J. (1986). *Handbook of Theory and Research for the Sociology of Education*. Westport, CT: Greenwood, Page 241–58.
- Chandran, N. (2014). Forget China, this is the next big luxury market. CNBC, 24 September 2014. Available from: <http://www.cnbc.com/id/102027722#>.
- Crabtree, J. (2013). India witnesses SUV boom. *Financial Times*, 2013 March 7.
- DEFRA (2005). *Securing the future*. Department of the Environment, Food and Rural Affairs (DEFRA), London.
- DEFRA (2008). *Framework for environmental behaviours*. Department of the Environment, Food and Rural Affairs (DEFRA), London.
- Destatis (2010). *Nutzung von Umweltressourcen durch private Haushalte*. Available from: [https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Umwelt/\\_Doorpage/AktuellMeldung.html](https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Umwelt/_Doorpage/AktuellMeldung.html)
- Destatis (2011). *Durchschnittliche Wohnfläche pro Person nach Haushaltstyp*. Statistisches Bundesamt. Available from: [https://www.destatis.de/DE/Methoden/Zensus/\\_Tabellen/Wohnsituation\\_HH\\_Zensus11\\_Wohnflaeche.html](https://www.destatis.de/DE/Methoden/Zensus/_Tabellen/Wohnsituation_HH_Zensus11_Wohnflaeche.html)
- Destatis (2012). *Abfallbilanz 2012*.
- Destatis (2013). *Datenreport 2013: Ein Sozialbericht für die Bundesrepublik Deutschland*. Published by Statistischen Bundesamt (Destatis) and Wissenschaftszentrum Berlin für Sozialforschung (WZB), Zentrales Datenmanagement. Bonn.
- Deutsche Umwelthilfe (n.d.). *Umweltgerechtigkeit*. Available from: <http://www.duh.de/umweltgerechtigkeit.html>
- Deutscher Bundestag (2013). *Schlussbericht der Enquete-Kommission "Wachstum, Wohlstand, Lebensqualität – Wege zum nachhaltigen Wirtschaften und gesellschaftlichem Fortschritt in einer Sozialen Marktwirtschaft"*. Bundeszentrale für politische Bildung Bd. 1419. Bonn.
- EEA (2014). *Reflections and Lessons Learnt from EEA's Work on Innovative Business Models for Sustainable Lifestyles*. European Topic Centre on Waste and Materials in a Green Economy (ETC SCP & ETC WGME) Working Paper. Copenhagen.
- Eng, T. and Bogaert J. (2010). Psychological and cultural insights into consumption of luxury western brands in India. *Journal of Customer Behaviour*, no. 1, Page 55–75.
- Eshel et al. (2014). Land, irrigation water, greenhouse gas, and reactive nitrogen burdens of meat, eggs, and dairy production in the United States. *Proceedings of the National Academy of Sciences* 111, no. 33, Page 11996–12001.
- FAO (2011). FAOSTAT. Food and Agriculture Organization of the United Nations. Available from: <http://faostat.fao.org>
- FAO (2012). FAOSTAT. Food and Agriculture Organization of the United Nations. Available from: <http://faostat.fao.org>
- Giddens, A. (2013). *The constitution of society: Outline of the theory of structuration*. John Wiley & Sons.
- Global Footprint Network 2012
- Hubacek, K., Guan D. and Barua A. (2007). Changing lifestyles and consumption patterns in developing countries: A scenario analysis for China and India. *Futures*, Volume 39 (9), Page 1084–1096.
- Jackson, T. (2005). Live Better by Consuming Less?: Is there a "double dividend" in sustainable consumption?. *Journal of Industrial Ecology* 9, no. 1–2, Page 19–36.
- Kothari, A. (2013). Have you overstepped the Sustainable Consumption Line?. India together. Available from: <http://indiatogether.org/consumptn-environment>
- Kraftfahrtbundesamt (2014). *Jahresbilanz des Fahrzeugbestandes am 1. Januar 2014*. Available from: [http://www.kba.de/DE/Statistik/Fahrzeuge/Bestand/bestand\\_node.html](http://www.kba.de/DE/Statistik/Fahrzeuge/Bestand/bestand_node.html)
- Krantz, L. (2001). *The Sustainable Livelihood Approach to Poverty Reduction*. An Introduction. Swedish International Development Cooperation Agency (SIDA). Division for Policy and Socio-Economic Analysis. Stockholm.
- Kumar Jha, D. (2012). *Guar price crashes on export drop fears*. Business Standard. Available from: [http://www.business-standard.com/article/markets/guar-price-crashes-on-export-drop-fears-112100200090\\_1.html](http://www.business-standard.com/article/markets/guar-price-crashes-on-export-drop-fears-112100200090_1.html).
- Löwe, C. and Lichtl, M. (2004). *Overcoming the Communication Gap: Public-Private Partnership for Sustainable Lifestyles*. ESOMAR Excellence of Research.
- Magna Global Advertising Forecasts (2014). Available from: <http://tinyurl.com/kpe397c>
- Maniates, M. (2010). *The environmental politics of sacrifice*. MIT Press.
- Miller, D. (2009). *The Comfort of Things*. The Polity Press. London.
- Mohan, R. (2008). Growth record of the Indian economy, 1950–2008: a story of sustained savings and investment. *Economic and Political Weekly*, Page 61–71.

Murukutla, N. et al. (2011). Results of a national mass media campaign in India to warn against the dangers of smokeless tobacco consumption. Available from: <http://tobaccocontrol.bmj.com/content/early/2011/04/20/tc.2010.039438.short>

National Geographic (n.d.). Greendex. Available from: <http://environment.nationalgeographic.com/environment/greendex/>

Neate, R. (2012). Beans mean high profits for guar farmers of Rajasthan. The Guardian. Available from: <http://www.theguardian.com/environment/2012/dec/18/fracking-guar-beans-profit-rajasthan-india>

NSS (2001–2012). Level and Pattern of Consumer Expenditure. National Sample Survey Office, Government of India. Report No. 555

NSS (2009–2010). Level and Pattern of Consumer Expenditure. National Sample Survey Office, Government of India. Report No. 538

Pal, P. and Ghosh J. (2007). Inequality in India: A survey of recent trends. Economic and Social Affairs Working, Paper 45.

Peattie K. (2010). Green consumption: behavior and norms. Annual Reviews. Environment and Resources 35, Page 195–228.

Raja, J. (2014). America's shale gas boom brought Rajasthan farmers a fortune, but now it is being taken away. QUARTZ. Available from: <http://qz.com/258292/how-americas-shale-gas-boom-brought-rajasthan-farmers-a-fortune-and-why-it-is-being-taken-away/>

Randerson, J. (2009). Western lifestyle unsustainable, says climate expert Rajendra Pachauri. The Guardian. Available from: <http://www.theguardian.com/environment/2009/nov/29/rajendra-pachauri-climate-warning-copenhagen>

Saxena, R., & Khandelwal, P. K. (2010). Can Green Marketing be used as a tool for Sustainable Growth?: A Study Performed on Consumers in India-An Emerging Economy. The International Journal of Environmental, Cultural, Economic and Social Sustainability, vol. 6, no. 2, Page 277–291.

Shrivastava, A. and Kothari A. (2012). Churning the earth: The making of global India. Penguin.

Stern, P.C. (2000). Toward a coherent theory of environmentally significant behavior. Journal of Social Issues 56 (3), Page 407–424.

Umweltbundesamt (2002). Nachhaltige Konsummuster als Herausforderung für die Umweltkommunikation.

Umweltbundesamt (2008). Gesamter Materialaufwand Deutschlands. Available from: <http://www.umweltbundesamt.de/daten/rohstoffe-als-ressource/gesamter-materialaufwand-deutschlands>

Umweltbundesamt und BMU (2012). Umweltbewusstsein in Deutschland, Dessau-Rosslau.

Umweltbundesamt (2014). Green Products in Germany. Dessau-Rosslau.

Umweltbundesamt (2014). Soziale Innovationen im Aufwind – Ein Leitfadens zur Förderung sozialer Innovationen für nachhaltigen Konsum. Dessau-Rosslau

UNEP (2012). Growing Greenhouse Gas Emissions Due to Meat Production. United Nations Environment. Available from: [http://www.unep.net/geas/getUNEPPageWithArticleIDScript.php?article\\_id=92Programme](http://www.unep.net/geas/getUNEPPageWithArticleIDScript.php?article_id=92Programme).

UNEP/EC/InWent (2009). Enabling developing countries to seize eco-label opportunities – Capacity building and technical assistance for industries and governments in developing economies. Training Material for Train-the-Trainer Workshop 14 to 18 September 2009 in Bonn. United Nations Environmental Programme, European Commission and InWent.

United Nations General Assembly (2010). Report submitted by the Special Rapporteur on the right to food, Olivier De Schutter. A/HRC/16/49 (20 December 2010). Available from: [http://www.srfood.org/images/stories/pdf/officialreports/20110308\\_a-hrc-16-49\\_agroecology\\_en.pdf](http://www.srfood.org/images/stories/pdf/officialreports/20110308_a-hrc-16-49_agroecology_en.pdf)

WWF (2006). Aus Wäldern wird Papier. World Wide Fund For Nature. Available from: <http://www.wwf.de/themen-projekte/waelder/papierverbrauch/zahlen-und-fakten/>

WZB and SOEP (2011). Datenreport 2011: Ein Sozialbericht für die Bundesrepublik Deutschland. Wissenschaftszentrum Berlin für Sozialforschung (WZB), Zentrales Datenmanagement and 'Das Sozio-ökonomische Panel' (SOEP).

