Proportion of People Living below Poverty Line as One Indicator of Sustainable Social Development in India

Amelie Schmidt, 2014

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Bachelor Thesis for the Course of International Business Administration to Achieve the Academic Degree "Bachelor of Science in International Business Administration"

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BPL	Below (the) Poverty Line
BJP	Bharatiya Janata Party
CSD	Commission on Sustainable Development
etc.	Et Cetera
GDP	Gross Domestic Product
HCR	Head Count Ratio
i.e.	Id EST
INR	Indian Rupee
IRDP	Integrated Development Program
MISH	Market Information Survey of Households
MP	Madhya Pradesh
NDA	No Data Available
NIN	National Institute of Nutrition
NSS	National Sample Survey
NSSO	National Sample Survey Organisation
NAS	National Account Statistics
NFSA	National Food Security Act
OECD	Organisation for Economic Co-operation and Development
PL	Poverty Line
PPP	Purchasing Power Parity
PPLBP	Proportion of People Living below the Poverty Line
SD	Sustainable Development
SHG	Self Help Group
SGSY	Swarnajayanti Gram Swarozgar Yojana
SSD	Sustainable Social Development
UN	United Nations
WCED	World Commission on Environment and Development

1. Introduction

In 1991, India implemented liberalisation reforms in all parts of its economy and established a significant change (Ramakrishna, 2011: 4). The country has made a huge step from being a developing country to becoming one of the world's leading economies (Shah and Ramamoorthy, 2014: 14), constantly showing a GDP growth rate above six per cent throughout the Indian "post-reform period" (Siggel, 2010: 248). Prosperity – measured through per capita income – increased, fulfilling the supposed substantial goal of economic development (Shah and Ramamoorthy, 2014: 14). Simultaneously, symptoms of social crises in the form of social inequality, poverty, illiteracy and health issues remained (Hauff and Kleine, 2009: viiii). A common expectation of economic growth inevitably leading to an increase in social well-being and a reduction of poverty (Khan et al., 2014: 2637; Parayil, 1996: 949; Siggel, 2010: 240) at first seems to be indeterminate in India (Tendulkar, 1995: 1373). High poverty rates and rather low ambitions of the Indian government to perform actions on reducing poverty contested an overall success of the liberalisation policies (Deaton and Kozel, 2005: 186; Fernandez, 2010: 415; Lanjouw and Murgai, 2009: 244).

First reservations and discussions on whether economic growth incorporates an improvement in the social, as well as in the environmental dimension, evoked after The Club of Rome published "The Limits of Growth". It indicated inevitable economic damage to environmental and social systems (Meadows, 1972: 183, 185), stating that humanity follows a "boom-and-bust" path (Hauff and Kleine, 2009: 5). The earliest approaches to sustainable development most of all concentrated on economic growth that perseveres a fully operative ecosystem (Hauff and Kleine, 2009: 5). Aspects concerning a sustainable development of society and an independent social dimension have been left unrecognised until 1987. A dramatic increase of social problems – especially perceived in developing and third world countries (OECD, 2001: 23) – draw attention to a new approach, leading the WCED to publish the Brundtland Report in 1987 that intended a lasting fulfilment of the basic human needs, additionally considering the bearing capacity of the natural environment (WCED, 1987: 7). The report aimed at crossing the lines between environmental protection, the fight against poverty, the strive for economic growth, and gave way to the now commonly used "Three-Pillar-Concept" that comprises all three dimensions of society, economy and environment (Hauff and Kleine, 2009: 9; Strange and Bayley, 2008: 27). In order to be sustainable, all

three dimensions have to exist in a relative balance to maintain a balanced correlation and to be sustainable (Strange and Bayley, 2008: 16). Attention on sustainable social development (SSD) in India has faded into the background due to a high emphasis on economic and environmental issues after the implementation of the liberalisation policies, followed by conspicuous low reduction in poverty rates, creating an unsustainable imbalance of the dimensions (Das and Barua, 1996: 366).

The aim of this thesis is to investigate how the social dimension in India has developed since 1991, analysing whether the following economic growth phase has incorporated an improvement in social conditions. SSD in India will be accessed through the development of poverty during the last two decades. The leading questions that will be answered and studied in detail within this paper: How can be measured and monitored whether a country develops sustainable and how is the outcome relevant to policies? How has India approached sustainable social development and how did poverty developed throughout the economic boom in India? Are there factors that have encouraged an improvement in poverty rates or obstacles that made sustainable social development impossible in India?

This thesis is structured in the following parts: In the second section, the methodological background of sustainable social development will be defined, followed by the third section, with the introduction of methods to measure general sustainable development. In the fourth part, the topic of poverty will be scrutinized and an indicator to measure the development of poverty will be introduced. Within the fifth chapter, different sets of data that have been proposed for development of poverty in India will be explored and will give an insight into how complex poverty actually is. In the sixth chapter, a general overview of factors that influence sustainable social development in India are investigated. Additionally, an anti-poverty programme released in the late 90s will be introduced and its impacts on poverty and efficient poverty reduction will be examined. Finally, chapter seven concludes the thesis.

2. Terms and Definitions

In the forthcoming chapter, the focus is placed on essential terminology used in this thesis, with the purpose of clarifying the methodological organisation of used terms and definitions and to determine the basis of this study. It will therefore analyse different approaches to the terms of development and sustainable development.

Evaluating sustainable development basically involves two contrary approaches. The oldest and most commonly used concept centres on the environmental system that acts as the foundation of human life and economy. The concepts based on this approach only consider the social and economic dimensions during the implementation of environmental protection (Hauff and Kleine, 2009: 11, 15-24).

A newer approach, the "Three-Pillar-Concept" (Hauff and Kleine, 2009: 9), considers the three dimensions environment, economy and society to an equal share. The OECD states that economic, environmental and social systems need to remain in a relative equilibrium and to keep a balanced relation in order to be sustainable (OECD, 2001: 27). The main critique on the "Three-Pillar-Concept" is that possible conflicts and "trade-offs" between the dimensions cannot be solved (Gibson, 2006: 263; Hauff and Kleine, 2009: 9, 12-24). Nevertheless, the "Three-Pillar-Concept" is predominantly accepted by literature, as it represents an integrated approach to sustainable development that has significantly improved the measurement and control of overall sustainable development (Banerjee, 2013: 401; Bossel, 1997: 193-195; Chai, 2009: 124; Gibson, 2006: 259; UNECE et al., 2008: 30). Supporting the "Three-Pillar-Concept" and equal importance of each dimension, Bossel (1997: 207) states that "if all interests of the system are adequately cared for", one is able to declare a system as "viable, healthy, or sustainable".

The realisation of a required social justice and the involved social responsibility demands the inclusion of all three dimensions, since social well-being is dependent on environmental and economic well-being, as further investigated in the preceding chapters. The securing of human being – with regard to future generations and the avoidance of risk – requires the maintenance of economic, environmental and social resources as a base to satisfy needs (Dias-de-Avila-Pires et al., 2000: 264; Hauff and Kleine, 2009: 10). The main concern of this paper lies on the social dimension of sustainable development. The interdependency of all three pillars however, will be demonstrated in chapter 6.

This thesis will consider sustainable social development from a perspective of all India. A regional approach would give a more detailed and accurate insight into the progress that has taken place in India's social dimension. However, given the continental size of the country, each Indian state faces different environmental and economic issues and different social structures. Therefore, an analysis of India's state of development does not necessarily reflect the development stage of an individual territory. A regional approach covering all Indian states would exceed the frame of this work by far and highlight only one state, hence the question of this thesis would not adequately be answered. A national approach will give a first insight into sustainable social development in India.

2.1. Development

Before defining the terms of sustainable development, the definition of development is perceived as essential for this work.

2.1.1. Definition of Development

A first definition of development concentrated on economic growth, using a quantitative approach by defining development as the ability of an economy to "generate and sustain the growth" of its gross domestic product (GDP) (Idowu et al., 2013: 787). Considering the earlier mentioned importance of all three dimensions, this approach is seen as insufficient to fully enclose the complex nature of development. Development can be defined as "change, growth, or improvement over a period of time" (Macmillan Dictionary, 2014). The three terms are commonly used in literature when referring to development (Desai et al., 2010: 21, 30, 76; Meier and Rauch, 2000: 5; UNECE et al., 2008: 8-9). It is moreover recognised that "improvement" is mainly allocated to the social dimension. The most important elements that are perceived to evoke an improvement in the social dimension have been named as equal income distribution and low levels of proportion of population living in poverty (Gibson, 2006: 261; Krapivin et al.: 2007: 2, 3; United Nations, 2007a: 10, 15; WCED, 1987: 5). When concentrating on the aspect of improvement in the social dimension, a first definition of development is retrieved as the progressive long-term growth of an economy with a simultaneous improvement in social conditions, comprising a decrease of poverty and income inequality (Dias-de-Avila-Pires et al., 2000: 263; Idowu et al., 2013: 787; Meier and Rauch, 2000: 5; Zarzosang Varte and Neitham, 2013: 47).

2.1.2. Definition of Well-being

The term "well-being" is frequently mentioned in context with development and an improvement of social conditions (Dalal-Clayton and Kriekhaar, 2007: 41, 45; Desai et al., 2010: xvi; Dempsey et al., 2011: 291; UNECE et al., 2008: 19).

Well-being can be defined as a state of satisfaction that an individual should be in, whereas satisfaction involves several - to some extent subjective - aspects, but also a general satisfaction of the basic human needs (Gorobets et al., 2007: 127, 130; Kirch, 2008: 1457). Basic human needs are defined as sufficient "shelter" (OECD, 2008: 2), nutrition and clothes. These are referred to as basic, as they occur naturally and the non-satisfaction normally leads to death or functional disorder (Dias-de-Avila-Pires et al., 2000: 263; Gough et al., 2006: 4-6; McKenzie and Tullock, 2012: 44-45; Tendulkar et al., 2009: 2-3).

Placing well-being in relation to development, literature differentiates two approaches: The first and one-dimensional approach is based on economic growth and the interdependence of well-being, income and consumption. Consequently, it is assumed that increased income – due to economic growth – initiates an increase in well-being (UNECE et al., 2008: 5). However, this approach has to face several criticisms. Firstly, income will have to be used efficiently in order to achieve an enhanced state of well-being (Engelbrecht, 2013: 3). Therefore, an increased income does not inevitably lead to improvement of well-being. Secondly, satisfaction is not just perceived through consumption of economic goods, but also through non-material goods, for example, social inclusion. For this matter, a second approach that proposes several perspectives and comprises a subjective view on the satisfaction of needs seems more realistic. In this context, needs are distinguished in physical (consumption of economic goods) and non-physical needs (health, education, security, human rights, etc.) that need to be satisfied in order to achieve well-being (Rojas, 2009: 184; UNECE et al., 2008: 3). Furthermore, it is assumed that an individual's well-being reflects social, economic and environmental processes that have an impact on it.

Discussing these issues, a new definition of development can be derived, stating that (social) development is perceived as a process that is organised to pursuit overall human well-being (Gough et al., 2006: 3; Rojas, 2009: 184). Based on this definition and further extending it, sustainable development will now be defined.

2.2. Sustainable Development

The purpose of this chapter is to define the terms of sustainable development with specific attention to sustainable social development.

2.2.1. Definition

The Brundtland Commission was the first to define sustainable development with the following statement:

"Sustainable development is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (WCED, 1987: 41).

The principle of this definition pervades literature that addresses sustainable development (Barkemeyer et al., 2011: 15-16; Dias-de-Avila-Pires et al., 2000: 261-262; Gorobets et al., 2007: 127-128; Hauff and Kleine, 2009: 9-10; Hametner and Steurer, 2007: 2; Krapivin et al., 2007: 20-21; Strange and Bayley, 2008: 11, 23; UNECE et al., 2008: 43; Wamsley, 2002: 195). The definition proposed by the Brundtland Commission will therefore be used as the underlying definition for this thesis. Nevertheless, additional comments are recognised as valuable for further applicability. Firstly, categorizing sustainable development as a "dynamic" scheme (UNECE et al., 2008: 20), a time aspect needs to be added; sustainable development can only be distinguished as itself, when the - as sustainable development perceived state - can be retained over a long-term period. There have been debates on the importance of generations and whether to prioritize the current or the upcoming generations (Barkemeyer et al., 2011: 16; Gibson, 2006: 270; Murphy, 2012: 21). Gorobets et al. (2007: 130) however, propose the most adequate approach as they stress the importance of basing sustainable development on both generations, in order to reach a maximum human well-being and global justice in all dimensions.

2.2.2. Critique

Grosskurth and Rotmans (2005) have been questioning the definition of the Brundtland Report, arguing that this definition faces more problems than opposing a solution for scientific application. They have criticised the definition with "normativeness, subjectivity, ambiguity and complexity" (Grosskurth and Rotmans, 2005: 136). In the next section, it will be analysed, whether this criticism is fundamental.

Grosskurth and Rotmans (2005: 137) state that one of the obstacles to applicability is "normativeness". Derived from the definition of the term "norm", they criticise that the Brundtland Report creates a standard of prioritising future generations. Grosskurth and Rotmans rate the Brundtland Report's definition as arbitrary as – according to them – it only places importance on intergenerational sustainability, leaving out the needs of the current generation (Grosskurth and Rotmans, 2005: 137). However, this critique does not seem to be fundamental as a definition of a term can highlight different characteristics and is more or less subjective, therefore, ambiguous in itself. As earlier accentuated in this thesis, literature does offer an approach to include both, inter- and intragenerational sustainable development, thus this argument is spurious.

The case of "subjectivity" is more reasonable. Grosskurth and Rotmans argue that the state of satisfaction of current or future generations depends on each individual's perception. Therefore, any point of reference to measure this state of sustainable development is arbitrary, hence another obstacle to applicability (Grosskurth and Rotmans, 2005: 137). This in fact, can be seen as a sustainable advantage for the concept of sustainable development. Subjectivity requires in-depth assessment, thorough governance and prohibits mistakes of carelessness, as each derivation of the expected state will have to be clearly justified (Kemp and Martens, 2007: 7). In addition, with hindsight to social well-being, this also offers a possibility for each nation to define its own minimum standard of well-being conform to the nation's individual framework. This aspect will be elaborated in-depth in chapter 4.2 (p. 21).

The critique of "ambiguity" refers to the definition of sustainable development as pursuing the achievement of contradictive goals and the difficulty of balancing all three dimensions. Grosskurth and Rotmans (2005: 137-138) state the impossibility of achieving development in all three dimensions to an equal share and without interfering one dimension in its development. This further relates to the critique on trade-offs earlier mentioned in this thesis (compare p.3). The approach of Bossel to a feasible and sustainable system refutes this argument, as he highlights that the measurement of sustainable development objects to identify the underdevelopment or even failure in respective dimensions and moreover enables reference points to set off the underdevelopment (Bossel, 1997: 215). This means that one should not get lost in trying to reach a utopian state, but to concentrate on and work against the alarm signals - parts of the system that are not sustainable - and

to establish an overall improved situation (Bossel, 1997: 215; Dias-de-Avila-Pires et al., 2000: 264). Yet again, the observed problem by Grosskurt and Rotmans can be seen as an advantage of sustainable development.

The "complexity" of sustainable development is criticised as not being taken into account by the Brundtland Report, which appears to be true to a certain extent. However, given the fact that it was the first approach to defining sustainable development and ever since the complexity of sustainable development has been accelerated through vast research and in-depth insight in the terms of development that can be applied upon the used definition, this critique does not take effect.

The criticism by (Grosskurth and Rotmans, 2005: 136-138) is justified and reasonable and the aspects of ambiguity and complexity will be adapted to the terms of sustainable social development in the upcoming chapters, the critique on normativeness and subjectivity however cannot withstand and the definition used is justified and appropriate.

2.2.3. Sustainable Social Development

In terms of economic growth, overall increased well-being and higher expectations on living standard, the remaining widespread and severe poverty can no longer be ignored. An underdeveloped society, discernible by poverty and income inequality, will always lead to an increased pressure on and crises of the environment and economy (Murphy, 2012: 15; UNECE et al., 2008: 28; WCED, 1987: 32). According to literature, development starts with the social component and should therefore be of prime importance for development policies (Mayor, 1994: 3). The next step towards SSD is to define the social pillar in the concept of sustainable development. As already mentioned, the social aspect of sustainable development has been neglected, thus literature covering SSD is limited. However, there are several approaches to access sustainable social development, as defined hereinafter (Mayor, 1994: 3; Zarzosang Varte and Neitham, 2013: 47).

2.2.3.1. Social Equity

Social equity is understood in terms of basic needs and the ability to access these (Hauff and Kleine, 2009: 20-21). It relates to social justice and is based on the distribution of resources and equal opportunities in an inter- and intragenerational context (Murphy, 2012: 20; Dempsey et al., 2011: 292). It is therefore a derived

concept from the definition of sustainable development used in this thesis. Dempsey et al. (2011: 292, 293) and Murphy (2012: 19) also agree that the extent of social equity is mainly measured upon access to essential services that guarantee equitable chances for all.

2.2.3.2. Social Capital

The term of social capital is based on the assumption that all products consumed in an economy are produced with capital. Social capital evolved from a micro perspective – comprising capital in monetary terms - towards a macro perspective that now distinguishes between financial, produced, human, natural and social capital. Social capital comprises existing, valuable social networks and institutions that enable people to act efficiently (Dempsey et al., 2011: 289, 290; Hauff and Kleine, 2009: 20; UNECE et al., 2008: 5, 52)

2.2.3.3. Poverty

Poverty seems to be difficult to allocate to one pillar, as it is closely connected with the social and the economic dimensions and also highly dependent on environmental systems (Bossel, 1997: 209-211). Poverty, identified upon income, i.e. consumption and expenditure abilities would justify a classification to the economic dimension. However, referring to the definition of well-being in 2.1.2 (compare p.5), poverty is multi-dimensional and not just dependent on material property. An allocation to the environmental dimension is excluded, as there is no approach to measure poverty upon environmental elements. Poverty is therefore perceived to be embedded in the social dimension (Dasgupta and Serageldin, 1999: 47; Murphy, 2012: 18). As poverty covers both, social equity and social capital (compare 4.1, p.18-19), it is rated as the most adequate term to access sustainable social development and as a result will be the focus of this thesis.

2.3. Policy Relevance of Sustainable Development

Realizing that a growing economy does not necessarily provide a solution to occurring issues in society and the environment, while simultaneously acknowledging the interconnection of environment, society and economy to an equal share, the concept of sustainable development has become inevitable for policy. The topic of sustainable development obtains increasing presence and urgency in research and discussions especially from international organisations. With increas-

ing pressure from the global community, nations are expected to comply with international goals that are set in official agendas (United Nations, 1992; WCED, 1987) and to take sustainable actions. This pressure has led governments to aim at sustainable development strategies to reach these goals (Dayal, 1993: 12; Government of India, 1997). Agenda 21 has been a guideline for many nations and organisations to establish sustainable development goals and sustainable policies and practices (Barkemeyer et al., 2011: 18). India has been a rather negative example on fulfilling international goals, following a strategy of unsustainable imbalance with achieving economic growth without being able to improve its social conditions sustainably (Gorobets et al., 2007: 127, 128, 130; Idowu et al., 2013: 788). A more detailed insight into specific policy relevance in India will be examined in chapter 4.2.3 (p.24).

Once a strategy is developed, a path of sustainable development is given and measurement tools are required in order to assess whether the direction is towards efficient sustainability (Stutz, 2010: 58). With the intention of controlling policy and the efficiency of a sustainable development strategy, sustainable development needs to be measured. In the following chapter, approaches to measure sustainable development will be evaluated.

Figure 2-1: Approach to sustainable social development

Economy

Sustainable Development

Environment   **Society**

Social Equity   Social Capital

Access to Essential Services ◄► **Poverty (HCR)** ◄► Income Inequality

Social Inclusion
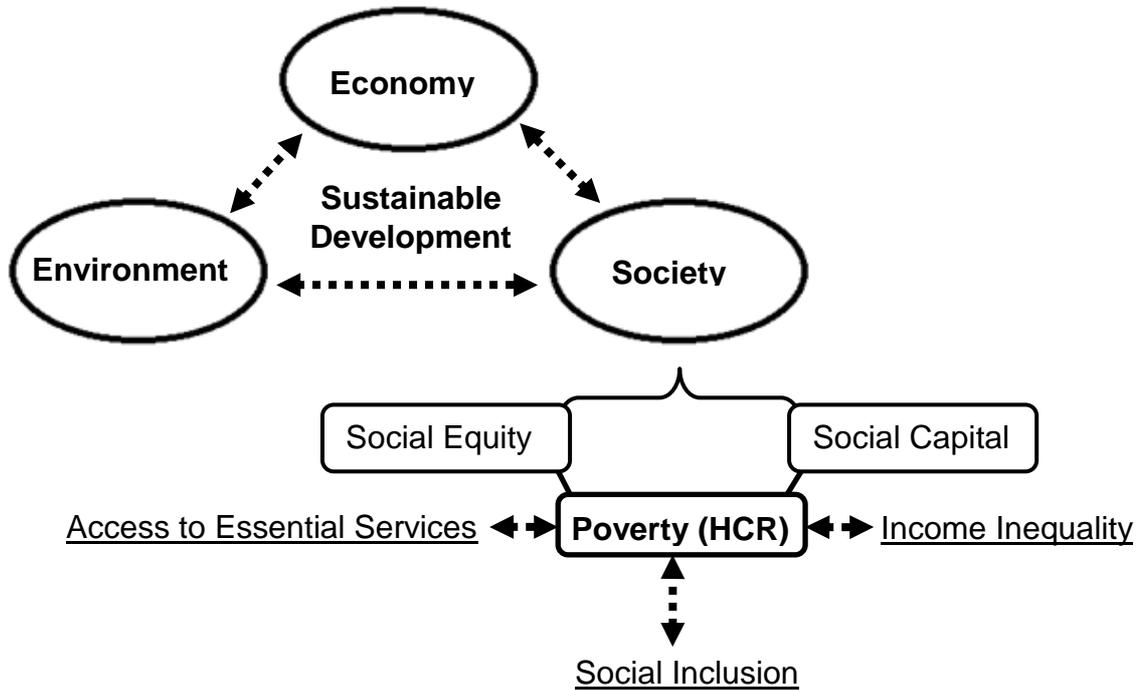
Reference: Own representation

The figure above represents a facilitated breakdown on how the matter of sustainable social development is approached in this paper and how the individual sections are connected. It demonstrates the interdependency of the three main dimensions of sustainable development and how poverty is centred and influenced in the social dimension.

3. Measuring Sustainable Development

Regarding its complexity and the many influencing factors on sustainable development, its measurement appears to be almost impossible. The interdependence of the three dimensions makes the measurement especially difficult, as each of it develops in its own rhythm and all three elements still need to be considered to an equal share. Additionally, efficient sustainable development has to relate inter- and intragenerational development (Strange and Bayley, 2008: 4). It will now be scrutinized how sustainable development can be measured, and further, a method of measuring development will be identified, determined and applied on in this thesis. In order to evaluate the state of development and to conclude whether it is sustainable or not, information on the issue is needed. Information can be "qualitative" or "quantitative" (Bossel, 1997: 194), whereas quantitative information on sustainable development has to be communicated in a qualitative context, to enable an identification of how viable the contribution of the information to the system actually is. Literature agrees that this kind of quantitative information can be supplied by indicators (Bossel, 1997:194; Chai, 2009: 119; Mccool and Stankey, 2004: 294-295; Pülzl et al., 2012: 36; Wamsley, 2002: 195; United Nations, 2007a: 3). Indicators and ratios represent general tools of measurement and are a substantial part when implicating a strategy. As mentioned earlier, sustainable development is a dynamic concept and cannot be adequately measured with ratios, as they rather demonstrate a static picture (Hauff and Kleine, 2009: 132-133) and are for that matter not further explored in this dissertation

3.1. Definition of the Term Indicator

The OECD offers a suitable definition for the term "indicator" in relation to sustainable development:

"An indicator can be defined as a parameter or a value derived from parameters, which points to, provides information about, describes the phenomenon/environment/area, with significance extending beyond that directly associated with a parameter value" (OECD 2003: 5) and therefore offers a substantial instrument to base political decisions on, for all three dimensions of sustainable development (United Nations, 1992: 70).

Pülzl et al. (2012: 44) and Wamsley (2002: 197) likewise support this definition, as both identify indicators as a commonly accepted tool to assess, control and summarize modification towards sustainable development. An indicator is expected to

provide fundamental information on the viability of a system and whether it develops towards the planned direction. It therefore acts as a warning signal to development setbacks (Bossel, 1997: 215; United Nations, 2007a: 3). According to literature, indicators are expected to fulfil three main aspects that qualify them as being important for policies (compare 3.4, p.16):

1) Indicators understandably describe a system in its complexity and interdependence.

2) Indicators help to communicate the performance of a system to the affected parties, i.e. community, government and politicians.

3) Indicators trigger reactions and provide a guideline for policy making actions (Bossel, 1997: 207-208; Chai, 2009: 120; Hametner and Steurer, 2007: 3; OECD, 2001: 4; Pülzl et al., 2012: 44; United Nations, 2007a: 3).

3.2. Indicator and Indices

Indicators represent the condition of a system and provide information adequately to their operators' objectives and interests that allows them to intervene successfully in development processes (Bossel, 1997: 208). Furthermore, indicators identify the position of a system in relation to a set goal of sustainable development (Bossel, 1997: 212). This implicates relevance to policy and the importance of indicators as a monitoring tool. An indicator of sustainable development should consider the development of a system and whether the state of the system has improved between the first and latest measurement (Böhringer and Lange, 2005: 2). The approach to developing sustainable development indicators is extensively discussed in literature and it has been recognised that GDP – the first indicator used to measure sustainable development – does not meet the requirements to depict sustainable development efficiently (WCED, 1987: 10). In an attempt to replace the criticised concept of sustainable development based on the GDP and to develop a unique index that measures overall sustainable development, several indices have evoked. Some of the most commonly used indices are the Human Development Index (HDI), the Ecological Footprint (EF), Sustainable Economic Welfare (ISEW) and Environmental Sustainability Index (ESI) (Chai, 2009: 121; Engelbrecht, 2013: 9; Hauff and Kleine, 2009: 140-150). There are several more indices, important here, however, is the identification of the main approach that is to create a unique index that refers to one issue and comprises several selected elements that are combined to one index (Chai, 2009: 121). The selection of an

index that quantifies and monitors the development of an aspect of the system will inevitably lead to ambiguity and arbitrariness in terms of quality (Chai, 2009: 124, 136; Grosskurth and Rotmans, 2005: 140). The HDI is here exemplary used to demonstrate two general flaws indices have. The HDI comprises life expectancy at birth, literacy rate, school enrollment rate, GDP and was developed in order to measure human well-being (Hauff and Kleine, 2009: 147). First of all, the quantification of human well-being along with the assumption that "more is better" is criticised (compare 2.1.2, p.5) (Gorobets et al., 2007: 130). More striking is the issue of reducing an element of human well-being to one indicator. Here for example, human health is represented by life expectancy. The scope of the named flaws represents flaws applicable to almost all sustainable development indices, as the selected components of the indices are subjective, limited and therefore bypasses the complexity of sustainable development. In general, individual indicators or indices are presumed to not capture all important aspects of sustainable development. Using only one indicator or one index to implement and monitor a sustainable development strategy will lead to arbitrary and ambiguous results (Mayor, 1994: 1). Literature therefore proposes the implementation of "indicator sets" (Bossel, 1997: 208; Chai, 2009: 126; Murphy, 2012: 19; OECD, 2001: 59; Pülzl et al., 2012: 225; Shmelev, 2012; Wamsley, 2002: 196, 205).

3.3.   Indicator Set and Frameworks

A more appropriate approach is the implementation of a set of indicators that comprises several individual indicators organised around one topic. An indicator set published by the UN for example, encloses 120 indicators on 14 topics, covering all three dimensions (United Nations, 2007a: 9). This offers an opportunity to address all relevant parts of sustainable development and to adequately approach its complexity. Additionally, and in contrary to an index, it is possible to develop a sufficient set of indicators for each nation that opposes the individual needs of the respective country, what is especially stressed in Agenda 21 (United Nations, 1992: 1, 3, 15). The emphasis on an individual indicator set for each nation is important, as sustainability will only be possible to discuss when it is related to a region and the respective "carrying capacity" (Barkemeyer et al., 2011: 18; Dias-de-Avila-Pires et al., 2000: 264; OECD, 2001: 8).

A meaningful set of indicators is more complex to establish, as indicators are mainly not measured in one unit. Some are demonstrated in monetary terms (GDP

per capita), in percentage (proportion of people living below poverty line) or other units (an indicator of energy or water consumption) (United Nations, 2007a: 11-12). Equally important, each dimension – society, economy and environment – should be separated within an indicator set to be monitored and controlled individually, as for example a low CO_2-emission cannot compensate the lack of access to drinking water (Bossel, 1997: 193). Defining a set of sustainable social development indicators draws up the problem of interest. The selection is often rather based on power priorities and political influence than on policy relevance (Murphy, 2012: 15). Therefore, it should be highlighted, that indicator sets on sustainable development published by nations reflect an "ethical choice" (Bossel, 1997: 194), identified through compositions and weighting of indicators and therefore need to be critically reviewed. Three main approaches on developing an indicator set have been identified and will be explained in the forthcoming.

3.3.1. Driving Force – State – Response – Framework

This approach is based on the pressure-state-response (PSR) framework, established by the OECD. Here, each indicator is supposed to represent a driving force that impacts on the system, followed by a state or condition of the system that evokes due to the driving force. The process concludes with a response of the system. For example, too high CO_2-emmission (pressure), results in climate change (state) that is followed by the implementation of laws on reducing CO_2-emmission (response) (OECD, 2001: 19-20; Wamsley, 2002: 197). Indicators derived from this framework could further be categorised into the three pillars, however, the PSR is mainly applied to environmental issues and therefore fails to comprise the complexity of sustainable development (Dalal-Clayton and Kriekhaar, 2007: 106). This approach is moreover criticised to be ambiguous, as especially the part of defining the condition of the system is perceived as to be subjective (Bossel, 1997: 139; Hametner and Steurer, 2007: 4; United Nations, 2007a: 39-40). The PSR framework cannot be applied onto the social dimension, but serves to enclose the concept of indicators of sustainable development.

3.3.2. Capital Based Approach

The capital based framework strives to evaluate national well-being upon five different types of capital: financial, produced, natural, human, social and institutional capital. All five types of capital are represented in monetary terms (UNECE et al.,

2008: 5; United Nations, 2007a: 40-41). This framework is encouraged throughout literature. Nonetheless, it struggles with the problem of data availability and of proposing an approach in solely monetary terms.

3.3.3. Policy Based Approach

The policy based approach focuses on establishing indicators or indicator sets that comply with the national sustainable development strategy of a country. Indicator sets based on this approach are not based on a clear, conceptual framework, but are used as an instrument to promote the established, sustainable development strategy of a nation and are strongly involved with policy. The policy based approach has the advantage of allowing a country to define sustainability goals upon its policy, its concerns and available data. Nevertheless, a change in policy or in the governmental structure leads to a change in the established indicator set. Consequently, the UK, which is an example for the policy based approach, has changed its sustainable development strategy three times during the last four decades. This approach is furthermore difficult to compare with indicator sets on an international level, a drawback for issues of global relevance. (UNECE et al., 2008: 30). The indicator chosen in this thesis can be categorised towards a policy based approach, as it is normally defined individually by each nation. An in-depth analysis of the indicator and policy relation is provided in the 4th chapter. Other approaches identified in literature will not be mentioned here as they do not provide any relevance for this thesis.

3.4. Policy Relevance

In order to be able to cope and accomplish the challenges of achieving sustainable development, governmental goals, strategies, instruments and the governance itself have to be sustainable (Strange and Bayley, 2008: 5). The political relevance of sustainable development indicators is mainly observed in national or international sustainable development strategies. They represent a guideline to policy making, as well as a monitoring system to control governmental actions on the efficiency of sustainable development. The indicators chosen by a government demand to be closely related to policy objectives to make a monitoring and promotion of governmental performance possible (Hametner and Steurer, 2007: 5, 12, 16). Several documents have highlighted the orientation of sustainable development indicators along structured and feasible objectives. Hametner

and Steurer (2007: 3) state that objectives on indicators should be "specific" and based on a clear definition of what is anticipated and point out the focus of a strategy. Objectives need to be "measurable" and quantifiable as they demand a clear monitoring and control. In addition, Hametner and Steurer (2007: 3) expect objectives to be "achievable", as they ought to be possible to achieve with an affordable and tolerable amount of capital. Objectives should be "relevant" (Hametner and Steurer, 2007: 3), as they are required to be pertinent to those who are expected to implement them and are in charge of the necessary resources respectively. At last, an objective has to be stated with a time frame; otherwise it is perceived to be impossible to measure the development of the objective (Hametner and Steurer, 2007: 3).

The aspects of reachability and relevance are contested, as being achievable, can be interpreted in terms of being less challenging or easy to establish. Relating this to sustainable development, this can be understood as unsustainable with a trend to inefficiency, as sustainable development goals are deemed to be complex and hard to achieve. There are no binding rules or guidelines to derive a sustainable development strategy from, which leaves governments with two options of either implementing short-term strategies that are easy to achieve, or to pursue integrating, long-term goals along with the willingness to put more effort in development in all kinds of sectors and levels. The latter would obviously be preferable (Kemp and Martens, 2007: 7). Objectives, dependent on the relevance to politicians, can lead politicians to stress their own interests and to neglect the efficiency of sustainable development policies (Dryburgh, 2011: 14). McCool and Stankey (2004: 295) phrase this problem as "what can be measured" and "what should be measured", arguing that politics prefer to concentrate on the former, while they should be guided by the latter. This gives way to the assumption that an indicator's quality as an instrument of communication and guidance is dependent on the willingness of politicians to enhance the policies that are represented by evidencing data (Hametner and Steurer, 2007: 3). Interdependency is recognised, as sustainable development indicators are dependent on policy and politicians and the other way round, the acceptance of policies and politicians by the community depends on sustainable development indicators and what they communicate.

4. Measuring Poverty in India

The indicator of "proportion of population living below poverty line" (United Nations, 2007a: 9) will be evaluated within this chapter. Based on the findings and criteria established in the previous chapter, the indicator's relevance and applicability will be studied in detail. Within this thesis the named indicator is used exemplary for sustainable social development in India. It is important to emphasise that it does not reflect SSD in India as a whole; it only gives a first insight into the topic, by using the proportion of population living below poverty line as an attempt to access the social dimension. Additionally, it needs to be mentioned that this indicator only represents one pillar of sustainable development and cannot be used to evaluate the overall process of sustainable development in India. As already mentioned, to get an in-depth and adequate insight in a country's sustainable development progress, each country needs to develop its own set of indicators - adapted to its economic, social and environmental frameworks - that complies with the sustainable development strategy. As justified in 2.2.3.3 (p.9), poverty is perceived to be the most appropriate social classification to first access SSD and an indicator of poverty development is therefore elaborated in this thesis. It gives a first insight on whether a human being's available consumption capacity can meet its basic consumption needs. It is mainly a monetary view on poverty and a first step to examine poverty and sustainable social development in India (Haughton et al., 2008: 2-3). Before determining the named indicator, the term poverty needs to be defined. In this part of the chapter, different aspects of poverty will be further appraised.

4.1. Definition of Poverty

Poverty and the state of human well-being are closely related and a first approach to define poverty was based on the amount of income a person receives. Yet again, poverty is more complex and a one dimensional, solely material approach has proven to be insufficient (Coromaldi and Zoli, 2012: 39; Tendulkar et al., 2009: 3-4). As emphasised in chapter 2.1.2, the amount of income an individual earns cannot define whether a person is well as income also has to be spent efficiently (Engelbrecht, 2013: 4). Concerning the efficiency of income spending, a first assumption on poverty evokes, as a person will be poor, if he or she lacks "knowledge, skill and capabilities", respectively social capital, to use income efficiently (Kundu, 2011: 41).

To enclose the complexity of poverty, a more common approach in literature has been found; a definition based on "deprivation", that includes both, material and non-material aspects and defines a poor person as someone who suffers from deprivation (Bennett and Mitra, 2013: 78; Callan et al., 1993: 144; Coromaldi and Zoli, 2012: 39; GRADÍN et al., 2012: 334; Kirch, 2008: 1124; Tendulkar et al., 2009: 7; The World Bank Group, 2000: 1). The object of deprivation is the well-being of a human being and can be explored in relation to the satisfaction of human needs, whether they are material or non-material. To extend the definition of basic needs and well-being used in 2.1.2 (p.5), towards a definition of poverty, it is additionally emphasised that education, health, security (from natural hazard or human violation), a certain standard of mobility and the ability to access essential services (social equity) – that guarantee and support the satisfaction of the former named – are also recognised as essential needs that have to be satisfied (Bossel, 1997: 210; Guruswamy and Abraham, 2006: 191-198; Haughton et al., 2008: 2, 4; The World Bank Group, 2000: 1). Another aspect of poverty mentioned in literature, that sums up the previous mentioned basic needs, is to live with dignity, and defines poverty as a life below dignity (Guruswamy and Abraham, 2006: 198; Shah and Ramamoorthy, 2014: 170; The World Bank Group, 2000: 73; United Nations, 1995: 8-9). Important for this thesis however, is the term of well-being and expanding its definition upon poverty, it can be defined as deprivation of human well-being (The World Bank Group, 2000: 1; United Nations, 1995: 8-9). When it comes to poverty, several terms have to be distinguished as the following will show.

4.1.1.   Absolute Poverty

Absolute poverty is predominantly perceived as a state of extreme deprivation of human well-being (United Nations, 1995a: 6-7; The World Bank Group, 2000: v). Tendulkar et al. further draw a connection to what was defined as basic human needs earlier and elaborates that a human being, who is not able to "afford a socially perceived normative minimal basket of basic human needs" (Tendulkar et al., 2009: 4), is perceived to live in absolute poverty. National poverty lines normally refer to absolute poverty, so do the official poverty line and the independent developed poverty lines established for India (Datt et al., 2003: 360; Government of India, 2013: 3; Lal et al., 2001: 4; Sen and Himanshu, 2004: 19, 22). As the poverty lines established for India have brought up the most attention in literature

(compare chapter 5), the term of absolute poverty will be the leading definition in this thesis.

4.1.2. Relative Poverty

Relative poverty is rather subjective and either relates to a level of poverty compared to other sections of the society - "social inclusion" within a society - (Bradshaw et al., 2012: 1), or whether opportunities in a society are perceived as equal for each individual. Based on this, relative poverty can also be seen as what is mainly defined as poverty in developed countries. The subjectivity of this term of poverty makes it hard to be measured and assessed (Bradshaw et al., 2012: 24; Callan et al., 1993: 142-143; Friedman, 1965: 11, 21-30), thus, the term of relative poverty is not further studied in detail in this thesis.

4.1.3. Chronic Poverty

The term of chronic poverty addresses the importance of duration of poverty, thus poverty in a time frame, and refers to the state of well-being of an individual who is - with regard to health - restricted (illness, disability, physical weakness) and therefore cannot take part in productive employment. As a result, chronic poverty is independent of and not affected by economic growth. Being exposed to poverty on a long-term basis can increase the negative impacts of malnutrition and other health-issues on a human life (Chakravarty, 2009: 79; Dutta, 2014: 4; Gaiha and Kularni, 1998: 154-155). To resume the first approached definition of poverty, chronic poverty would be a human being, who is not able to escape deprivation of well-being due to health-related restriction. Chronic poverty is important due to its impacts on society and its development. However, due to lack of reliable data and research, this topic will not be further examined in this thesis.

4.1.4. Rural and Urban Poverty

The distinction between urban and rural poverty is highly important, as especially in India the rural population tends to be poorer (Dayal, 1993: 168; Government of India et al., 2013: 27, 28; Mitra and Schmid, 2008: 1068). The difference between sustainable social development in rural and urban areas will be continued in this thesis. Nevertheless, as stated in the beginning and regarding the measurement of the later elaborated indicator, this thesis will mainly focus on a national, therefore overall Indian approach.

4.2. Indicator: Proportion of Population Living below Poverty Line

Measuring poverty adequately is perceived as difficult to establish. Some who have researched the measurement of poverty, offer multidimensional as well as single-dimensional approaches. To base the measurement of poverty on a monetary indicator, generally using income or expenditure on consumption, to define the extent of deprivation is the most straightforward approach (Meyer and Sullivan, 2012: 111). Nonetheless, it ignores the fact of the multi-dimensional aspect of poverty (Coromaldi and Zoli, 2012: 38-39). Meyer and Sullivan (2012: 116-117) have analysed several approaches on measuring poverty, distinguishing between income based measurement and an approach based on consumption. Due to "conceptual limitations", that doubt reliability and adequacy of income as an indicator of poverty, Meyer and Sullivan, as well as various authors (compare chapter 5, p.29), prefer a consumption based approach to measuring poverty. Desai et al. (2010: 4-5) highlight a specific difficulty of measuring poverty based on income in India, as income – especially in rural areas and the agricultural sector - tends to be variable and dependent on seasonal differences and external catastrophes. Almost 30 per cent of the Indian population is employed in the agricultural sector and therefore face instable income. For that matter, this thesis will concentrate on poverty measured upon consumption levels. Basing the estimation on consumption has some advantages compared to an income based approach (Meyer and Sullivan, 2012: 133). It offers a more stable prediction of deprived well-being, additionally, data on consumption is – especially in India – substantially reported and available (Desai et al., 2010: 4, 19). In order to measure poverty upon consumption, a consumption basket has to be defined, including components that lead to a deprivation in well-being if lacking or insufficient available (Callan et al., 1993: 147).

As earlier emphasised, the use and analysis of individual indicators often lead to an arbitrary conclusion and therefore, it would be recommendable to use a specific set of indicators on poverty (Tendulkar, 1995: 1373; Chakravarty, 2009: 62, 67-68). It is demonstrated in chapter 5 (p.29), how measuring only one indicator faces various complications due to changing techniques or questionnaires over time, different sample sizes, different areas "of coverage of a survey", different reference periods, changes in the political environment, etc. (Khan et al., 2014: 2637). Each indicator will have to face the same or a similar, complicated set of problems.

Within the limited frame of this thesis, considering all indicators related to poverty and sustainable social development adequately would not be possible.

The adequacy of the chosen indicator for this paper, to get a first insight into SSD is justified in the forthcoming. Before determining the indicator in depth however, the methodological background needs to be defined.

4.2.1. The Poverty Line

A poverty line aims at defining a "threshold" of well-being – mostly based on physical aspects – to distinguish between the poor and the non-poor (Chakravarty, 2009: 49; Kirch, 2008: 1124). Only with defining a poverty line and efficiently identifying poor people, the extent of poverty can be measured. Furthermore, the definition of a poverty line is necessary to establish an efficient policy to work against poverty (Chakravarty, 2009: 49; Siggel, 2010: 258).

There is a common understanding of a poverty line being the lowest level of income that is recognised as acceptable. Consistent with this, people living below poverty line face a limitation of purchasing power (The World Bank Group, 2011; Kirch, 2008: 1124). The approach of establishing a poverty line offers each nation the opportunity to examine individually how to define poverty, depending on a country's specific standard, as obviously the living standard in Germany is a different standard than in India (Chakravarty, 2009: 182-183; Rojas, 2009: 49-50). This aspect justifies the adequacy of the policy approach, as despite the mentioned criticism of this approach in 3.3.3 (p.16), poverty is too complex to find an appropriate, international definition.

At this point it is important to accentuate again that poverty is subjective and it is recommended to measure it upon non-capital based indicators. However, poor people tend to adapt to low standards and are prone to accept the state of deprivation. Especially in India, a high percentage of people, who are identified as poor, accept poverty and inequality due to their cultural background and religion (Bennett and Mitra, 2013: 58). Setting a certain standard from a governmental objective, gives the opportunity to define a minimum standard of well-being and to identify people that live below dignity, to take measures against poverty and to lift people above the poverty line. For this reason, the indicator of proportion of population living below poverty line (PPLBPL) with an underlying capital and policy approach is assumed as adequate here.

4.2.2. Indicator Profile: Proportion of Population Living below Poverty Line

The indicator PPLBPL is also referred to as "the national poverty rate" or head count ratio (HCR) (Haughton et al., 2008: 4, United Nations, 2007a: 47, 2007b: 1). It defines the proportion of population living below the threshold of poverty, defined on a national level. It is measured in percentage that allows a limited comparison on an international level (United Nations, 2007b: 1). The proportion of population living below poverty line is part of the indicator set published by the Commission of Sustainable Development (CSD) (United Nations, 2007a: 11), the indicator set published by the World Bank (The World Bank Group, 2011) and stressed by Bossel (1997: 210). In the set of the CSD, population living below poverty line is defined as a "core indicator" (United Nations, 2007a: 9). Core indicators comprise topics of sustainable development that are important to most nations, so is poverty relevant for each nation. Core indicators further supply critical information that is not covered from other core indicators, as each core indicator relates to one topic of an indicator theme. Another example of a core indicator would be "carbon dioxide emission", of the topic "atmosphere" (United Nations, 2007a: 12). Moreover, data on core indicators is expected to be available, or be made available, for each nation at an affordable matter of money and time. PPLBP is the core indicator of the sustainable development theme "poverty" that also includes other core indicators related to income, sanitation, drinking water, energy access and living conditions (United Nations, 2007a: 9, 11, 16). The theme of poverty is supposed to relate to core indicators of health, education, demographics and economic development (Bossel, 1997: 213).

4.2.3. Policy Relevance of the Indicator in India

Poverty is the most significant indicator for social underdevelopment and a particular base for policy processes referring to society (United Nations, 2007b: 1). Referring to the question how economic growth has influenced poverty development in India, the difficulty for politicians is to establish policies that foster economic growth and simultaneously secure – respectively enhance – social well-being, further, to enable the poor to participate in society and to contribute to economy (Khan et al., 2014: 2632). Especially to enable the poor to contribute to economy highlights the interdependency of economy and poverty, additionally stressed by Khan et al. (2014: 2632) stating that if one system is not viable, the other will suffer.

The indicator of PPLBPL has a significant relevance to policy, as in India defining a poverty line means identifying the people who live in poverty in order to distribute subvention to the poorest. The identification of people living below the poverty line is an important part of the anti-poverty schemes in India and the redistribution of national resources. People in India who live in poverty are assigned to the status of living below the poverty line and receive a "below poverty line" (BPL) card that makes them eligible to get access to redistributive anti-poverty programs (Fernandez, 2010: 416). How policy particularly influences anti-poverty programmes in India is studied in detail in 6.3 (p.59). The specific interest in defining the poverty line in India has been controversial as the government was accused of presenting a lower poverty rate to satisfy the public and the international community. On the other hand, it has been criticised of representing a too high poverty rate in order to attract more subventions from international organisations (Deaton and Kozel, 2005: 179). This issue led to increasing attention to official estimates, demonstrated in chapter 5 (p.29).

4.2.4. Relevance to Sustainable Development in India

Reducing poverty is one of the main goals of sustainable development on an international level. It is related to the sustainable development of economy and environment, as the aspects of education, health and demographic – components of sustainable social development - strongly influence the opportunity for sustainable development of the other pillars (United Nations, 2007a: 1-2). Most nations started to prioritize the eradication of poverty in their national sustainable development strategy, recognizing its importance to the overall efficiency of development. So has India extended its part of sustainable social development in its sustainable development strategy, however, the part of SSD is still rather neglected, significantly shorter and less detailed than the other parts of the Indian sustainable development strategy (Government of India, 1997). It is moreover conspicuous that the economic aspect of the social strategy is mentioned frequently. It is therefore assumed that SSD in the Indian sustainable development strategy has not yet reached an equalized priority. Thus, the recognition of SSD to an equal share, compared with the other two dimensions and hence its relevance for India is questioned.

4.2.5.   Potential and Efficiency of the Indicator

An Indicator and the underlying objective are expected to fulfil certain requirements as mentioned earlier. In the forthcoming section, it will be assessed, whether the previous stated requirements in chapter 3.4 (p.16) for a political objective are achieved in India. Additionally, Wamsley (2002: 196) has proposed several points to examine the potential of an indicator on which the indicator of PPLBP will be measured against. At first, the underlying objective of the indicator and how it is approached by the Indian government will be examined. The underlying objective is to identify the proportion of population that lives below the poverty line.

The objective is *specific* (compare chapter 3.4, p.16) and in India based on a clear definition of poverty and a poverty line (compare chapter 5.2.2, p.37) with the anticipation to identify people living BPL. This ensures relevance for policy, as in India the status of living below the poverty line ensures access to anti-poverty programmes that are provided by the Indian government and target people living in poverty (Fernandez, 2010: 416).

The objective is *measurable* through the indicator of PPLBPL, hence, methods of measurement are given and data availability is provided either through unofficial consumption surveys or official data that is yearly identified by the Planning Commission and has been recently updated by an expert group to improve appropriateness of the poverty line. The proportion of people living below the poverty line is normally measured for a period of 12 months and extensive surveys are carried out every five years in India. An objective of reducing poverty within a *timed* frame is currently not exactly formulated by the Indian government. The Eleventh Five Year Plan (2007-2012) of the Indian government had set the target of reducing poverty by two per cent each year. This goal could not be achieved, as the average reduction of poverty was significantly below two per cent. The current Twelfth Five Year Plan only states that the Indian government is confident to reach the Millennium Goal of reducing poverty by 50 per cent till 2015 since 1990 (Government of India, 2011: 3). The aspect of *relevance* has been demonstrated in the preceding chapter and is fulfilled, as well as the criteria of being *specific*, *measureable* and *timed* are accomplished.

According to Wamsley (2002: 196), an indicator's potential can be analysed upon the following aspects. First, an indicator should "monitor and assess" tendency and circumstances on "a national, regional and global" level, propose a base for

comparison, and supply timely notification in case of unsustainable development (Wamsley, 2002: 196). The indicator of PPLBPL fulfils the named criteria and enables a national and international – limited – comparison of poverty development. Additionally, it provides a warning function, in case poverty rates suddenly increase. Wamsley (2002: 196) demands that an indicator should evaluate the efficiency of political practices. The indicator is actually designed to assess political effectiveness on poverty reduction, however, as further elaborated in chapter 4.2.3. (p.23), it is contested whether the policies in India have really shown a positive result. Further, an indicator should monitor changes in communal behavior. Relating this to a broader context, communal behavior can be defined as consumption patterns that are reflected in the poverty line of India, a threshold on which the "social progress" or public behavior is monitored against. The investigated indicator also offers a forthright understanding and has in that sense a high "communication value" (Wamsley, 2002: 196). The above stated requirements for an indicator are equally encouraged by the UN (United Nations, 2007a: 29-31).

The indicator fulfils the requirements on objectives and potential and can be rated as an efficient measuring tool. However, as stressed before, it is important to critically review each indicator, as will be done in the upcoming section.

4.2.6. Critique and Limitations of the Chosen Indicator

Setting a minimum standard of living from a governmental objective to identify people that live below dignity has been justified before, as most of the people in India are likely to accept their destiny of living in poverty (compare 4.2.1, p.22). However, poverty is a matter of subjectivity, defining a poverty line and therefore a living standard at a tolerable minimum, does inevitably lead to arbitrariness (compare chapter 5) (Deaton and Kozel, 2005: 178). The most criticised aspect of poverty being defined by governments or other institutions, is the fact that people who actually live in poverty are never eligible to contribute to define this standard (Fernandez, 2010: 418). Moreover, the indicator does not point out reasons or causes for poverty, nor does it state impacting factors on or duration of poverty. Additionally, it does not offer a solution to eradicate deprivation of well-being (Banerjee, 2013: 421; Tendulkar, 1995: 1373). Another problem is the generalization of poverty: who is poor, poorer or the poorest and who actually would need the most attention from policy programmes? Why this especially is a problem or rather a facilitated way out for policies in India will be presented in chapter 6. Also, there has

been found only one approach in literature that differentiates in age when measuring the head count ratio, that is a report on investigating child poverty published by UNICEF (Bradshaw et al., 2012: 1). Most other approaches do not distinguish between characteristics like sex and age and therefore include non-consumers, mainly children. In India, over 30 per cent of the population is below the age of 14 (India Country Profile, 2010: 73), this clearly distorts the picture of poverty and sustainable social development. The difficulty to compare this indicator on a global scale has already been explained and is mentioned here again, though with the statement, that the difficulty only relates to the underlying, nation-wise poverty line. The established indicator represented in percentage, as proportion of population, enables a limited comparison.

A major argument and drawback of the indicator has already been named – the insufficiency of a single indicator to indicate the complex state of sustainable social development. Relating to literature, most adequate and appropriate to get an insight that comprises the complexity of poverty and SSD, the assessment of PPLBPL should be completed with indicators on income inequality (Chakravarty, 2009: 47; United Nations, 2007a: 10-11), access to essential services and social inclusion (Böhringer and Lange, 2005: 25; Bossel, 1997: 210-211). Income inequality can be measured with several indicators and measuring it in combination with poverty, is substantial as a high income inequality has been proven to be an obstacle to reduction in poverty rates (Khan et al., 2014: 2631). Surveys have shown that the reduction of poverty due to economic growth is stronger, when income inequality is lower (United Nations, 2007c: 1). Inequality can also refer to the ability of accessing opportunities that is represented by social inclusion and the opportunity to take part in the society and its "political, economic and societal processes" (Atkinson and Marlier, 2010: 1). It is recognised, that people living in poverty have less opportunity to take part in society and economy (United Nations, 2007c: 1). There is no general indicator that comprises access to all essential services, but individual indicators that measure access to sanitation, water, electricity, health care and education facilities (United Nations, 2007a: 11-12). The combination of the named indicators on inequality, social inclusion and access to essential services with PPLBPL, offers a possibility to get a complex and sufficient insight in poverty development.

The indicator shows several flaws that could rate it as being inefficient. However, arbitrariness and ambiguity are always a risk, when using an indicator. The major

critique has been addressed earlier (compare p. 19) and evaluating all named indicators on poverty is not possible due to the limited frame of this work. Efficiency and potential of the indicator have been proven and the indicator directs the leading question of this thesis. Therefore, the indicator of PPLBPL will now be examined.

5. Assessment of Available Data for Poverty Development in India

In this chapter, available data on poverty estimates in India will be evaluated to derive a trend of poverty development since the liberalisation of the economy. It further demonstrates the complexity of the indicator, respectively justifies the decision for selecting only one indicator, as the outcomes of the researches presented in this chapter, vary significantly from each other. There are several approaches available for measuring poverty in India, for that matter, two official statistics – the World Bank and the Planning Commission of India – followed by five unofficial statistics published from independent sources, will be presented and determined. Besides deriving trends of poverty development in India, it will also scrutinize one independent and one official source that have defined an Indian poverty line.

Naturally, time elapses between executing economic policy decisions and shown impact on affected dimensions (Welfens, 2008: 605). The liberalisation policies, implemented in 1991, are not When evaluating the poverty development since 1991, it is expected that the liberalisation policies not immediately impacted on poverty due to possible "time lags" (Welfens, 2008: 605). As the GDP growth rate has its first peak of six per cent in the measuring period 93/94 (The World Bank Group, 2014a), it will be assumed in this dissertation that a possible reduction in poverty should show from this point on. To simplify the presentation and evaluation of data, the figures have been rounded.

5.1.   Poverty Development: Official Estimates

Within this section, two official sources of estimations on poverty development in India will be presented. The first is the World Bank, the second is the official statistic from the Planning Commission that researches and publishes estimates of poverty development on behalf of the Indian Government. Due to strong criticism of the data provided by the Planning Commission, the content of chapter 5.1 will particularly concentrate on this area of study.

5.1.1.   Poverty Development Derived from World Bank

The World Bank is an international organisation with the main concern on eliminating poverty. It provides extensive data on the development of every country, so does it provide data concerning poverty development in India. The World Bank

bases its approach to define a poverty line on "per capita personal disposable income" (The World Bank Group, 2011) and proposes a general poverty line - applicable to every nation - to identify the individual poverty development. The World Bank differentiates between an absolute poverty line at $1.25 per day and a relative poverty line at $2.50 per day (The World Bank Group, 2000: 17, 19, 97). Since 1990 the World Bank has been collecting data on income and consumption from household surveys of 96 countries. The international organisation regularly publishes estimations of poverty, based on consumption and prices, and based on income where data on consumption is not available. The estimation of consumption is based on the multiplication of all incomes "by the share of aggregate private consumption in national income based on national accounts data" (The World Bank Group, 2000: 17). To allow a comparison of consumption on a global level, an estimation of price levels is needed. For this matter, the World Bank uses its estimates on purchasing power parity (PPP) established by the International Comparison Programme, which based its data on 110 countries. The first poverty line has been calculated upon the evaluation of converting 33 poverty lines into PPP prices and a general poverty line was created on the average of the 10 lowest poverty lines (The World Bank Group, 2000: 17-18). The current poverty line set at $1.25, respectively $2.25, facilitates the comparison of poverty development on a global level; however, due to critique on income based poverty lines and complexity of poverty, emphasised in 4.2 (p.21), it is neither useful to evaluate a development on a national or regional level nor to give an adequate base for policy decisions (The World Bank Group, 2000: 18). Nevertheless, to derive a general trend and an extensive impression of poverty development in India and to enable a comparison with other poverty lines, the data provided by the World Bank is evaluated. As defined in 4.1.1 (p.19), only absolute poverty and therefore a poverty line at $1.25 is investigated below. On the authority of the World Bank, the proportion of population living below poverty line has developed according to the table provided below. For the year 2000 no data is available (NDA) or proposed by the World Bank.

Table 5-1: Poverty development in India, according to the World Bank

Year	1988	1995	2000	2005	2010
HCR	54%	49%	NDA	42%	33%
Number of poor in million people	447	464	NDA	469	394

Reference: Own representation based on the World Bank (2014b).

The vast database of the World Bank provides the according number of people to the HCR and enables a more in detail analysis. The HCR, provided by the World Bank, shows a steady decrease in poverty since 1988, while the absolute number of people in poverty has gone up during the 90s. This is due to accelerating population growth at a growth rate of over two per cent per year during the two measurement periods (1988-1994) (The World Bank Group, 2014b). Looking at the data measured during the last decade, poverty rates have been sinking steadily with an average reduction of 5.5 points between each measuring period. The data will be compared in relation to other data in chapter 5.4 (p.47). Mentioned here, shall be the fact that, one of the Millennium Goals proposed by the UN is to reduce poverty between 1990 and 2015 by 50 per cent and according to the data provided by the World Bank, India seems to be able to reach this goal till 2015 (Government of India, 2011: 3; The World Bank Group, 2014b). Rating the data according to the leading question, the table shows, that between 1995 and 2005 the poverty rate has declined by seven points, an average decline below four points during each five year period. Compared to the period before the liberalisation, the reduction in poverty lines has significantly declined and only increased again after 2005. As the economic growth rate remained strong during 2005-210 (The World Bank Group, 2014a), a positive correlation of economic growth and poverty reduction could be derived but only for a quarter of the assessed period.

5.1.2. Poverty Development Derived from the Planning Commission

Data on poverty development provided by the official source that is proposed by the Indian government – The Planning Commission – will be considered in this chapter.

The national poverty line in India used to evoke from several sources; the Planning Commission and the National Account Statistics (NAS). The Planning Commission establishes its estimations of the poverty line and poverty ratio upon surveys on

"Household Consumer Expenditure" conducted by the National Sample Survey (NSS). Extensive surveys[1] on consumer expenditure, that demand an accurate estimation of poverty, are conducted on five years turns, as the data is used for each Five Year Plan that is published by the Indian government (Government of India, 2013; Deaton and Kozel, 2005: 178). The Planning Commission has implemented several changes on the methodology of estimating poverty in India, followed by critique and discussions on the reliability of the evoked data. For further understanding, it is stressed that the object of criticism was not the data established from the NSS, but the Planning Commission's methodology of measuring poverty.

5.1.2.1. Controversy between National Sample Survey and National Account Statistics

The NSS provides the number of people with a monthly per capita total expenditure below a defined poverty line, differentiating state-wise urban and rural areas. Each poverty line distinct to a state is based on state specific price indices that are collected individually for urban and rural households. A poverty line for all India is established upon the aggregation of all urban and rural poverty lines that sums up to a total number of poor people comprising all India (Deaton and Kozel, 2005: 179-181). The NAS of India also collects data on mean consumption through periodical surveys that are based on whole India, but do not distinguish between states, rural and urban areas. These numbers have been used by the Planning Commission to compare the two estimates and approve the figures of total expenditure, individual commodities or commodity sets of food or garment. In fact, before 1990, the data provided by the NAS was used as a control instrument by the Planning Commission for its own estimates and put the two figures in relation with each other. In case the ratio of NAS to NSS data was above one, the Planning Commission would multiply the total expenditure of each household by that ratio before estimating the poverty line (Deaton and Kozel, 2005: 179). This is a common practice of scaling up data and used in most countries; when the Planning Commission stopped scaling up after 1990, many controversies arose (Datt and Ravallion, 2002: 355; Deaton and Kozel, 2005: 179-181). The increasing divergence between the mean consumption generated by the NSS and by the NAS

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[1] The extensive surveys in India – conducted by the NSS on a quinquennial period as a base for the poverty reports – are referred to as the "big rounds (Deaton and Kozel (2005): 178).

since the 1990s has drawn up attention. The estimated mean consumption measured by the NAS grew at a higher rate than the NSS figures (Datt and Ravallion, 2002: 355; Deaton and Kozel, 2005: 179). Proponents of the economic reforms in the 90s have sided with the NAS data, as a scaling up would have evidenced a faster reduction of poverty along with the accelerating economic growth. Thus, opponents of the reforms, who support the view that economic growth has not contributed to a reduction of poverty and moreover assume that it has worsened the overall situation, argue for the reliability of the NSS data (Deaton and Kozel, 2005: 179).

However, the importance of NAS data is controversial. On one side it is believed, that data estimated by the national accounts are more reliable than data provided by the NSS and are vitally important for adjustment (Bhalla, 2003: 342; Deaton and Kozel, 2005: 179-180; McNicoll, 2003: 342). On the other side it is questioned, whether the national accounts should be automatically rated as more convincing than data provided by the NSS, because it ignores individual data of states or rural, respectively urban areas. The national account should actually provide information on whether the growth measured in the national account has been passed on to the poor or not, by scaling up both figures this debate cannot be assessed anymore (Deaton and Kozel, 2005: 180). Taking a closer look at the composition of the consumption expenditure estimated by the NAS, the divergence becomes more reasonable. The national account includes expenditure by non-profit organisations and "financial services and imputed rents" (Datt and Ravallion, 2002: 4) in its private consumption, numbers that are not considered in the NSS and that significantly increase the consumption estimates of the NAS (Datt and Ravallion, 2002: 20). The approach of the NSS to derive a poverty line from state-wise urban and rural areas seems more adequate and reasonable, referring to the differences of consumption within states mentioned earlier. A separate investigation of both data therefore seems more reasonable.

The World Bank provides poverty estimations based on NAS data, and the Planning Commission, respectively the expert group named later, base their data on the NSS data. The numbers provided in 5.4 (p. 47) will demonstrate the differences and similarities.

5.1.2.2.   Change of Methodology of the Poverty Estimations

The first approach to measuring poverty was "based on a minimum consumption expenditure anchored in a nutritional norm of 2400 calories per person per day in

rural areas and 2100 calories per person per day in urban areas" (Inoue and Hamori, 2012: 398). It linked the consumption expenditure to a consumption basket, based on an amount of calories that was defined as the amount of essential consumption of a human being. This poverty line was the benchmark to measure how many people in India live below this standard according to the household consumption survey. A poverty line based on calorie consumption has been criticised for not considering nutritional standards and appropriateness (Fernandez, 2010: 418), neither does it adequately meet the multidimensional character of poverty, as it only accounts for the "satiation of hunger", but not for expenditure on other basic needs (health care, education, shelter etc.) (Prusty, 2009: 57). The World Bank (2005: xvi) and Dasgupta (1998: 5, 6, 7) support this criticism and highlight the problem of malnutrition in India that cannot be eradicated with only concerning calories. Guruswamy and Abraham (2006: 193) emphasise another insufficiency, as neither gender and age differences have been considered, nor that the majority of people living in rural areas, carry out heavy labour work and would therefore need more than 2400 calories. It has been argued that this approach failed to comprise the actual development of poverty in India (Dayal, 1993: 168-169; Deaton and Kozel, 2005: 178; Fernandez, 2010: 422; Guruswamy and Abraham, 2006: 191-194). After strong criticism of a poverty line based on nutrition and various conceptual changes that had been applied during the 50th (1994), 55th (1999) and 61st (2004) round, the Indian government assigned an expert group around Mr. Suresh D. Tendulkar, to develop a new methodology to approach poverty measures. The expert group reviewed the named NSS rounds on comparability due to the various changes that have been made, and came to the conclusion that the 55th round could not be compared with any of the previous rounds (Tendulkar et al., 2009: 1-2). This is due to the fact that the 55th round used several measurement periods. The reporting period for non-food was a 365-day period and concerning food, households were asked to report consumption for 7 days and additionally for 30 days, which made it an unreliable source for comparison (Deaton and Kozel, 2005: 183-186, 191). Using two reference periods for food – that normally accounts for around 60 per cent of mean consumption (Datt et al., 2003: 355) – would require a scaling up of the data and could bypass the mean question of actual consumption. The perceived problem was opaqueness on how the Planning Commission had scaled up the data and which period was referred to as superior for the process of scaling up. As the poverty rate released on the 55th

round then showed a drop of 10 points, from 36 per cent in 1993/94 to 26 per cent in 1999/2000, it was believed that the poverty rate 93/94 was too low. Several researchers have established estimations on poverty in India based on individual assumptions and adjustments on the model used by the Planning Commission. They have all been released after, or even before the 55th round as the announced changes had already created massive stir in advance (Deaton and Kozel, 2005: 184). Besides implementing a new reference period for food, other changes were introduced. The most significant changes of data estimation within the Planning Commission since 1990 were to base the estimation of poverty "on private household consumer expenditure of Indian households as collected by the National Sample Survey (NSS) Organisation (NSSO)", therefore, a shift away from a calorie based poverty line and to use different reference periods for consumption measurement with 365-days for "low frequency items" (clothing, footwear, durables, education and institutional health) and 30-days for all "the remaining items" (Tendulkar et al., 2009: 1-2).

The changes made by the Planning Commission have brought up other critique. Fernandez (2010: 419) accuses the Indian Government of changing the methodology of the poverty estimations in order to show a stronger increase in poverty ratios compared to independent studies. She compares the NSS data with studies that showed either a smaller decrease of poverty or even an increase in poverty for certain groups in rural areas. Controversially, other sources have raised the issue that the government has kept the poverty ratios unnaturally high in order to receive more funding from international organisations (Guruswamy and Abraham, 2006: 192). Another critical point recognised by Deaton and Dreze (2002: 10) is the difference in state-specific rural and urban poverty lines. They demonstrate this argument upon the state Karnataka with an urban poverty rate of almost 70 per cent higher than its rural poverty line, according to the data provide by the Planning Commission. Several other states (Andra Pradesh, Haryana, Gujarat, Madhya Pradesh, Punjab, Rajasthan and Uttar Pradesh (Lal et al., 2001), also show an urban poverty rate that is significantly higher than the rural poverty rate that could not be retraced (Deaton and Drèze, 2002: 10; Reddy and Minoui, 2007: 191).

The debates and criticisms published have rather been subjective than based on a consistent range of facts, therefore vary and present quite different perspectives. However, literature has come to consent on the critique concerning the methodol-

ogy used by the Planning Commission and the arbitrariness of using several reference periods for food. As a result, the poverty line provided by the Planning Commission is now rated as invalid and gives reason, to later compare the data of the Planning Commission with several independent sources that have also established a poverty line for India. To further address the issue, the data of the appointed expert group will now be analysed.

5.1.2.3. Report of the Expert Group: Review of the Methodology

The expert group has been set up to investigate the critique against the poverty lines proposed by the Planning Commission and to determine a new poverty line and estimates of poverty. For that matter, it has implemented three significant changes.

Firstly, the expert group decided to move away from a poverty line based on a "calorie intake norm" (Tendulkar et al., 2009: 1), due to contestation earlier explained. Addressing an expanded scope of poverty, the new poverty line relates figurative expenditure to actual consumption expenditure on food, education, health and other commodities (Tendulkar et al., 2009: 2).

Secondly, the expert group has decided to use an urban poverty line consumption basket based on multiple reference periods – 365-day consumption estimation for low frequency commodities and 30-days for food – for all India, as former rural poverty lines have been accused of being too low (Tendulkar et al., 2009: 1, 19). Hence, an as consistent and valid rated poverty line consumption basket, adjusted "within-state urban-relative-to-rural and rural and urban state-relative-to-all-India price differentials" (Tendulkar et al., 2009: 2) has been established.

Thirdly, the group around Tendulkar has proposed an adjustment of prices, to update the poverty line consumption basket. Detailed data retrieved from the 61st household survey has been used to estimate expenditure on food, fuel and light, clothing and footwear, education and health, that enabled the expert group to individual, more accurate prices for commodities consumed in urban and rural areas (Tendulkar et al., 2009: 4-5). The price indices used, are weighted upon state-level and all-India consumption expenditure – weighted with the Fisher Index (year of review over base year). Estimations on rent and conveyance expenditure are based on respective expenditure share and are adjusted on the state-wise poverty line. This change addresses former critique on an outdated poverty line consumption basket (Tendulkar et al., 2009: 8-9).

Due to the implemented changes on used reference data, the established poverty line and poverty estimates cannot be compared with the publications on poverty from earlier rounds. Therefore, the expert group revised the poverty lines since 1990 and revealed that - even though changing the underlying methodology – the reduction of poverty in points has been almost similar.

5.2. Development of the Indian Poverty Line

Within this chapter, it is aimed at distinguishing between available data and re-searches. Based on the evoking data, a trend of poverty development in India since 87/88 will be derived. Examining the development of poverty in India since already 87/88 is recognised as appropriate, as a possible difference through eco-nomic growth can be detected in particular while comparing data before and after the liberalisation of the economy. The independent sources have not provided re-spective absolute numbers of people living in poverty and have not indicated the number of people the research was based on, as for example the expert group has. The author refrains from deriving absolute numbers of poverty due to possible arbitrariness. A similar tendency as the World Bank proposed is assumed and the topic will become important in chapter 6 (p.54).

5.2.1. Comparison of Available Poverty Lines

How a poverty line is defined will be appraised in particular in the section of 5.2.1. The main purpose here is to differentiate between the poverty line derived from the expert group based on the NSS data, and the research proposed by Guruswamy and Abraham, who have defined a poverty line on independent sources. As a re-sult of previous investigated critique on data provided by the NSS, this part aims at determining whether independent data on consumption could be more adequate.

5.2.2. Official Source: Expert Group

The methodological change of the reference period and price indices the expert group implemented has been explained in the previous chapter. In the forthcoming section, details on specific commodities will be added on.

Food

The poverty line consumption basket used for former poverty estimations, has been the consumption basket from 1973-74 and was clearly outdated considering

food consumption patterns and share of food within the basket. The expert group derives the food expenditure per capita from data provided by the 61st round of the NSS and additional aggregate nutrition outcome indicator from the "National Family Health Survey III." (Tendulkar et al., 2009: 8).

Education and Health

Per capita expenditure on education is based on money spent per school-attending child, derived from the 61st round of the NSS. Per capita expenditure on health is based on "non-institutional household expenditure on health incurred per treatment not requiring hospitalization and institutional expenditure per reported case of hospitalization from the 60th round (January-June 2004) of NSS on Morbidity and Health Care" (Tendulkar et al., 2009: 9).

The following chart provides the minimum per capita expenditure per month per category calculated by the expert group in Indian Rupee (INR). As explained in the prior chapter, prices and expenditure estimates on food, fuel and light, clothing and footwear, education and health, rent and conveyance have been updated and adjusted (Tendulkar et al., 2009: 8-9, 11). The following table represents the estimates of expenditure on individual commodities and the aggregate poverty line per person in India.

Table 5-2: Poverty line derived by the expert group: Minimum capital expenditure per Capita per month in INR

Commodity	Expenditure
Food including intoxicants	356.8
Fuel	70.4
Clothing and footwear	44.3
Education	18.5
Institutional and non-institutional health expenditure	24.8
Rent and conveyance	30.68
Entertainment and personal items	24.6
Other goods and services	32.2
Poverty Line	578.8

Reference: Own representation based on Tendulkar et al. (Tendulkar et al., 2009: 32).

According to the expert group, the Indian poverty line lies at INR579 per person per month. Based on this poverty line consumption basket Tendulkar et al. derive the proportion of people in India living below the poverty line at 37 per cent in 04/05 based on 1.1 billion people (Tendulkar et al., 2009: 18, 19, 38). Recalculations on previous rounds will be considered later.

5.2.3.   Independent Source: Guruswamy and Abraham

Due to the controversy about the poverty line published in 99/00, several researchers have established redefinitions of the poverty line in India. The following will show a definition, elaborated by Guruswamy and Abraham that was published in 2006. It will be used as a comparison to the revised poverty line by the expert group published in 2009. The article by Guruswamy and Abraham has not been named as one of the important, independent poverty lines established in research and further reveals several inconsistencies. However, the article of Guruswamy and Abraham has been selected above other articles (Bhalla, 2003; Datt et al., 2003; Deaton and Drèze, 2002; Lal et al., 2001), as it is the only research not based on NSS data (Guruswamy and Abraham, 2006). In the published academic article, Guruswamy and Abraham try to redefine the Indian poverty line for 04/05 while estimating the expenditure on basic needs. They moreover emphasise

needs that cannot be quantified but are equally important and should be include in future estimations. They add, that an individual is poor when it lives beneath the poverty line or is not able to fulfil non-quantifiable needs, i.e. has not the ability to access "drinking water, proper shelter, sanitation, quality secondary education or an all-weather road with public transport" (Guruswamy and Abraham, 2006: 193-194).

Food

Guruswamy and Abraham calculate the per capita expenditure on food based on what is believed to be a "nutritious diet for healthy living" (Guruswamy and Abraham, 2006: 194), provided by the National Institute of Nutrition (NIN) combined with data on prices for the given food items. In addition, they consider age and sex distribution to establish an average Indian consumer (Guruswamy and Abraham, 2006: 194).

Education and Health

Guruswamy and Abraham base the per capita expenditure for health care on the usual prices, i.e. the possibility of needing medical treatment multiplied with its actual costs. This practice has been derived from an approach that is used to calculate health insurance schemes (Guruswamy and Abraham, 2006: 194-195). As for expenditure on education, Guruswamy and Abraham only consider the matter on education availability and proportion of people attending school, however, they give no indication on how much is spent on education per capita and do not include education expenditure in their estimates of a poverty line (Guruswamy and Abraham, 2006: 196).

The Cost of Energy

Guruswamy and Abraham also provide a calculation on per capita expenditure on energy. They assume an average Indian household to "need" (Guruswamy and Abraham, 2006: 195, 196) at least four light bulbs and two fans for a house with two bedrooms, one kitchen and one bathroom. Moreover, they present the fact that 57 per cent of Indian households lack access to electricity (Guruswamy and Abraham, 2006: 196). If more than half of the Indian population does not have access to electricity, Guruswamy and Abraham's assumption of a basic household appears distorted. It is not apparent why they have chosen to derive estimates on

kerosene (a specific fuel) and not derived estimates of fuel as a generic term. Moreover, if a basic household comprises four rooms, how are people living in slums considered in this estimation? Based on the author's experience, an average household in, for example, Dharavi[2] consists of one room and no sanitation facilities. To assume a "basic" (Guruswamy and Abraham, 2006: 196), i.e. an average Indian household to consist of two rooms, a kitchen and a bathroom is more than optimistic, if taken into consideration that 65 million people in India live in a slum (Prasso, 2014: 14).

Clothing Requirement

The per capita expenditure on clothes is perceived as difficult by Guruswamy and Abraham, as they highlight that "region, gender, age and culture" need to be considered to establish estimates (Guruswamy and Abraham, 2006: 196). Therefore, they calculate the lowest amount of clothes needed per person per age to be included in the poverty line (Guruswamy and Abraham, 2006: 196), a strong contrast to the confident estimates on energy and food.

Miscellaneous Expenditures

Guruswamy and Abraham assess "miscellaneous expenditure" as costs "incurred while trying to obtain one's basic needs" (Guruswamy and Abraham, 2006: 197), for example cost of transportation that is spent while trying to access food, education or health care. Further, Guruswamy and Abraham include tobacco and intoxicants additionally to non-food expenditure.

The chart provided below presents the minimum per capita expenditure per month per category calculated by Guruswamy and Abraham in INR.

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[2]Dharavi is the biggest slum in India and South-East Asia.

Table 5-3: Poverty line derived by Guruswamy and Abraham: Minimum capital expenditure per Capita per month in INR

Commodity	Expenditure
Food	573
Health	30
Electricity and kerosene	35 + 20 = 55
Clothes	17
Miscellaneous expenditures	164
Total expenditure	839

Reference: Own representation based on Guruswamy and Abraham (Guruswamy and Abraham, 2006).

Based on this calculation, Guruswamy and Abraham define the Indian poverty line for 04/05 at INR840 expenditure per capita per month. This is INR260 more than the Planning Commission has estimated. According to this poverty line the head count ratio in India for 04/05 would have been 69 per cent. They have not provided an explicit number of population on which the HCR was measured upon. The HCR of 69 per cent is almost double of the PPLBPL provided by the expert group and the other sources, presented later in the dissertation, and therefore rated as outstandingly high. As a poverty line is supposed to distinguish the poor from the non-poor, Guruswamy and Abraham have provided a fairly subjective approach, excluding expenditure for education and rent, but including inconclusive estimations on other expenditure and therefore demonstrated, that a poverty line based on individual sources, independent of the NSS data, does not necessarily offer a more efficient approach.

In fact, the surveys conducted by the NSS have been named to be a positive example around the world (Deaton and Kozel, 2005: 178). Due to inconsistence in the presented, independent approach, common acceptance of data provided by the NSS (Bhalla, 2003; Datt et al., 2003; Deaton and Drèze, 2002; Deaton and Kozel, 2005; Lal et al., 2001; Tendulkar, 1995) and the absence of critique on the validity of data presented by the NSS (Sen and Himanshu, 2004: 4), it seems to be adequate to rely a poverty line upon data from the NSS rounds. How this data has lead to different poverty estimates is demonstrated hereafter.

5.3.   Poverty Development: Independent Estimates

The following will compare several approaches on measuring poverty development in India, researches that evoked after the 55th round. The thesis will investigate the original data from the Planning Commission (2006), the revised version by the expert group (Tendulkar et al., 2009) and following independent sources: Sen and Himanshu (2004), Deaton and Drèze (2002), Lal et al. (2001), Datt et al. (2003) and Bhalla (2003). This is only a selection of approaches, as for example Bhalla and Tendulkar have published several documents on poverty lines in India, the ones presented here, are the latest publications (Sen and Himanshu, 2004: 3; Siggel, 2010: 257) and therefore seen as most adequate for a comparison.

Here, available approaches will be demonstrated and distinguished from the approach provided by the expert group. The investigation is followed by a comparison of data and a derivation of trends in poverty development in India. To avoid confusion, the revised data from the Planning Commission will be referred to as data from the expert group and the original data will be referred to as data from the Planning Commission (PC).

The leading aspects within this chapter are, firstly, the difference between the data of the PC and the independent sources and a possible conclusion on whether the PCs data shows a great difference. Secondly, it aims at deriving a trend and offering a statement on poverty development in India since the liberalisation policies.

5.3.1.   Sen and Himanshu

In 2004, Sen and Himanshu published a revised poverty line and poverty estimation for the previous years. They chose to investigate both, original data from NSS rounds – 43rd, 50th and 55th – and several independent papers inter alia publications from Deaton, Deaton and Drèze, Tendulkar and Datt et al. (Sen and Himanshu, 2004: 3, 34). Sen and Himanshu mainly concentrate on the readjustment of the NSS data with different reference periods used in the big rounds. Moreover, they criticise the neglecting of the thin rounds, which they hence include in their estimation. Sen and Himanshu apply the multiple reference periods – 365/30 – on the 43rd and 50th round and eliminated the 7-day reference period on food from the 55th round. For the evoking estimations of poverty and poverty line, they also enclose data from thin rounds, trends and data on income inequality and rectify each approach weighted against former miscalculations from the considered independ-

ent papers (Sen and Himanshu, 2004: 27, 32, 73). Sen and Himanshu (2004) propose a rather cumulated data set without anticipating own data. It is noticed that they do not explicitly address the issue of the outdated poverty line consumption basket.

Table 5-4: Development of poverty in India, according to Sen and Himanshu

	87/88	93/94	99/00
Sen and Himanshu	35%	30%	28%

Reference: Own representation based on Sen and Himanshu (2004: 5).

The head count ratio after Sen and Himanshu significantly decreased by five points between 87/88 and 93/94 and continued to fall slowly till 99/00. According to Sen and Himanshu, poverty in India does not seem to have been positively affected by the economic growth. This approach would therefore not indicate an overall success of the liberalisation politics in the 90s, as the reduction of poverty even slowed down after the liberalisation. As mentioned in 4.2.5, high income inequality can limit poverty reduction and Sen and Himanshu have included trends in inequality, thus, the particular influence of the liberalisation policy on the HCR development here is ambiguous.

5.3.2. Deaton and Drèze

Deaton and Drèze adjust the data from the 55th round to enable a comparison with former estimations on poverty. For this matter, they propose a similar concept as later used in the paper by Tendulkar et al. For this purpose they update the price indices to establish an overall Indian poverty line and to further deduce state-wise poverty lines. They estimate price indices based on household expenditure surveys that enable Deaton and Drèze to use the Törnqvist index (indices without reference to a base year) for the 43rd and the 50th round and to update data from the 55th round. Several commodities that were not covered by the surveys could be derived through respective inflation rates (Deaton and Drèze, 2002: 6-12). Additionally, to the HCR estimation, Deaton and Drèze use a second indicator, the poverty-gap index (Deaton and Drèze, 2002: 12-13). In order to prove their research, Deaton and Drèze evaluate data from the NAS, employment surveys from the NSS and agricultural wages that have shown consistency with established estimates provided in their paper (Deaton and Drèze, 2002: 22-24). The explained

concept used by Deaton and Drèze represents a high similarity to the concept proposed by Tendulkar et al. (Tendulkar et al., 2009).

Table 5-5: Development of poverty in India, according to Deaton and Drèze

	87/88	93/94	99/00
Deaton and Drèze	35%	29%	22%

Reference: Own representation based on Deaton and Drèze (2002: 52).

Deaton and Drèze present a constant decline in poverty rates since 87/88, as the head count ratio dropped by six to seven points between each measuring period. However, there is no accelerating decrease noticeable after the liberalisation of the economy.

5.3.3.   Lal et al.

Lal et al. decided to not solely rely on data from NSS rounds, but to derive estimation on poverty from income distribution trends in India provided by the Market Information Survey of Households (MISH)[3] (Lal et al., 2001: 3). Using a different set of data, respectively data source, Lal et al. try to compare the development of poverty derived from expenditure surveys of the NSS rounds with a trend of poverty based on income distribution provided by the MISH (Lal et al., 2001: 4). Relating consumption patterns to income distribution reveals to some extent reasons for poverty, as for example in 87/88 Lal et al. identify that the expenditure on consumption of the poor exceeded their income. This induced the authors to decrease the poverty line (Lal et al., 2001: 4). Differences in development of the compared data have been investigated and adjusted to establish a poverty line and a poverty ratio (Lal et al., 2001: 5). The MISH does not provide consumption patterns on food, clothing or services and invalidates a direct derivation of a poverty line. This flaw has not been fully alleviated by the authors (Lal et al., 2001: 3, 13).

Table 5-6: Development of poverty in India, according to Lal et al.

	87/88	93/94	99/00
Lal, Kozel and Ravallion	39%	29%	17%

Reference: Own representation based on Lal et al. (2001: 1019).

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[3]Surveys by the MISH have been conducted once a year since 1985/86 and aim at estimating the market size of goods consumed and consumer profiles. The size and design of the sample surveys have been consistent since its first publication (Lal et al. 2001: 3).

Lal et al. present a sharp fall by ten points between 87/88 and 93/94 and an even more dramatic drop between 93/94 and 99/00 by twelve points. According to the data provided by Lal et al. the reduction of poverty has increased after the liberalisation policy.

5.3.4. Datt, Kozel and Ravallion

Datt et al. accept the data provide by the NSS rounds and further base their estimation of poverty on an "econometric model" (Datt et al., 2003: 355), particularly concentrating on state-level data with deriving "state specific trends and elasticity", inflation development and income distribution in each state (Datt et al., 2003: 360). They evaluate the individual development of "agricultural yields" and "non-farm sector" as influencing elements (Datt et al., 2003: 360). Datt et al. base their assumptions on future estimations on state specific data and the latest available data on its explanatory variables. The aim of this method is not to substitute previous surveys, but to offer a direction of development in poverty (Datt et al., 2003: 360). They also adjust the survey data from the 55th round to a 30/365-days approach (Datt et al., 2003: 355).

Table 5-7: Development of poverty in India, according to Datt et al.

	87/88	93/94	99/00
Datt et al.	NDA	39%	34%

Reference: Own representation based on Datt et al. (2003: 359).

Datt et al. have not provided data for the measuring period 87/88. Data offered for the period between 93/94 and 99/00 shows a significant decline of five points; a reduction of poverty comparable to the data Deaton and Drèze presented.

5.3.5. Bhalla

The approach Bhalla has chosen can be shortly explained, as he continues the debate on NAS and NSS data and scales up the data of NSS with the NAS data as explained in 5.2 (Bhalla, 2003). He also adjusts the reference period of the 55th round in accordance with the previous named approaches.

Table 5-8: Development of poverty in India, according to Bhalla

	87/88	93/94	99/00
Bhalla	44%	24%	14%

Reference: Own representation based on Bhalla (2003: 340).

Bhalla provides the sharpest decline of almost twenty points between 87/88 and 93/94 and another drop of twenty points to the lowest HCR provided among the distinguished researches of 14 per cent. According to Reddy and Minoui (2007: 491) the estimation of Bhalla is seen as rather "optimistic".

Before evaluating the different data sets, it should be mentioned, that all the approaches named above, have more or less neglected the impact of price differences and inflation, as the focus has been placed on the reference periods for consumption expenditure. Mishra and Ray (2011: 428) examined the correlation of "prices, inequality, and poverty" based on the example of India and have proven a significant impact on rural and urban development in poverty and inequality – as noticed in 5.2 (p.37) – due to for example inflation and a rise in relative prices that increase pressure and vulnerability of poor people (MISHRA and RAY, 2011: 428). As the shown HCRs noticeable differ, the individual weighting of prices could have been an influencing factor.

5.4.　　Evaluation and Comparison of Evaluated Data

At first, the independent surveys will be evaluated and an average will be derived to represent the independent sources by one figure and to enable a facilitated and clearer comparison with the official estimates. The independent sources will be cumulated, as they all represent a critique on the estimates provided by the government and is used to demonstrate a direct comparison to assess individually how the criticised data differs from the data that evoked out of the critique. The data provided by the Planning Commission will not be included in the later used average, as all used sources in this work have agreed on its invalidity.

The chart below provides all independent sources and the data from the Planning Commission. Guruswamy and Abraham are represented in the chart, however, not included in the derived average due to two reasons. Firstly, they only provide data

for one year and do not offer a comparison to other years. Secondly, as examined in 5.2.3, the calculation of Guruswamy and Abraham appears to be inadequate and can be rated as rather wrong, due to the figure showing almost the triple of the calculated average.

Table 5-9: Summarize of Development of poverty in India, according to various authors

	87/88	93/94	99/00
Guruswamy and Abraham			69%
Sen and Himanshu	35%	30%	28%
Deaton and Dreze	35%	29%	22%
Lal, Kozel and Ravallion	39%	29%	17%
Bhalla	44%	24%	14%
Datt et al.	NDA	39%	34%
Average	**38%**	**30%**	**23%**
Planning Commission	**39%**	**36%**	**26%**

Reference: Own representation based on various authors (Bhalla, 2003: 340; Datt et al., 2003: 359; Deaton and Drèze, 2002: 52; Guruswamy and Abraham, 2006: 193-197; Lal et al., 2001: 1019; Sen and Himanshu, 2004: 5).

At first the data of the Planning Commission will be evaluated. The Planning Commission shows a reduction of only three points in the first measuring period and 10 points in the second measuring period. It shows that the reduction of poverty rates after the liberalisation policy accelerated and more than doubled.

Before analysing the derived average with the Planning Commission, differences and similarities between the independent sources will be highlighted. Most striking are Bhalla and Datt et al. Bhalla represents the highest HCR in 87/88, followed by the sharpest reduction and the lowest poverty rate in 99/00. Datt et al. on the other side, notably show the highest poverty rates in 93/94 and in 99/00, with rather modest reduction rates. Sen and Himanshu, Deaton and Drèze, Lal et al. show comparable poverty rates, however, Lal et al. and Deaton and Drèze present a stronger poverty reduction and a much lower poverty rate in 99/00. The calculated average of the independent sources shows a poverty reduction of eight, respectively, seven points between the measuring periods.

Comparing the derived average with the poverty rates of the Planning Commission, the independent sources show a throughout lower poverty rate, as well as a stronger reduction than the official data. The poverty rates of the PC in 99/00 had been criticised for being too low. Interestingly, the cumulated poverty rate is three points below the data from the Planning Commission.

The data of the Planning Commission has been criticised for only being an instrument to justify the liberalisation policy (Deaton and Drèze, 2002: 186). The data evoking from independent sources to improve and refute the estimates shown by the Planning Commission, are averagely beneath the official HCR and show approximately the same average annual reduction. The provided data can be rated from two perspectives. First, looking at the numbers, the reduction of the recalculations does overall differ in actual HCRs, but scarcely in reduction rates and therefore seem not all too conflicting. Nevertheless, given the dimension of the Indian population of 1.2 billion people, already a small change does make a huge difference. Even a reduction or increase of 0.5 points in poverty rates involves over 60 million people. As a result, the differences in poverty rates might seem small; the dimension behind it however is major.

After presenting the critique on the methodological base used by the PC, especially for 99/00, it has now been expanded with hard facts. The comparison showed that the estimates from the PC was higher than the average and this would meet the reproach of showing a higher poverty rate to access subventions from international organisations.

Comparing the data above with the data presented by the World Bank and the expert group another perspective occurs. The following table provides an overview of the named sources.

Table 5-10: Development of poverty in India, according to the expert group and World Bank

|	87/88	93/94	99/00	04/05	10/11
Expert Group	39%	45%	41%	37%	30%
World Bank	54%	49%	NDA	42%	33%

Own representation based on Tendulkar et al. (2009: 17, 18, 29) and the World Bank (2014b).

At first the HCR development proposed by the expert group and the World Bank will be compared. A parallel trend in reduction rates between 93/94 to 04/05 is observable, as both rates decreased by around seven to eight points and present a sharp fall of poverty rates between 04/05 and 10/11. The most striking aspect recognised, is the fact that both poverty rates are noticeably above the average evaluated before.

Further, the expert group is the only source that shows a strong increase in poverty rates between 87/88 and 93/94 and proposes that only in 04/05 and onward the HCR went lower than the level of 87/88. This would indicate a strong negative effect of economic growth on poverty in India and further propose that it took over a decade for the liberalisation policies to positively affect the poor respectively the social dimension (Deaton and Drèze, 2002: 179).

The chart below presents an overview of poverty development in India and facilitates the observation of a possible trend.

Figure 5-1: Poverty development in India since 1987
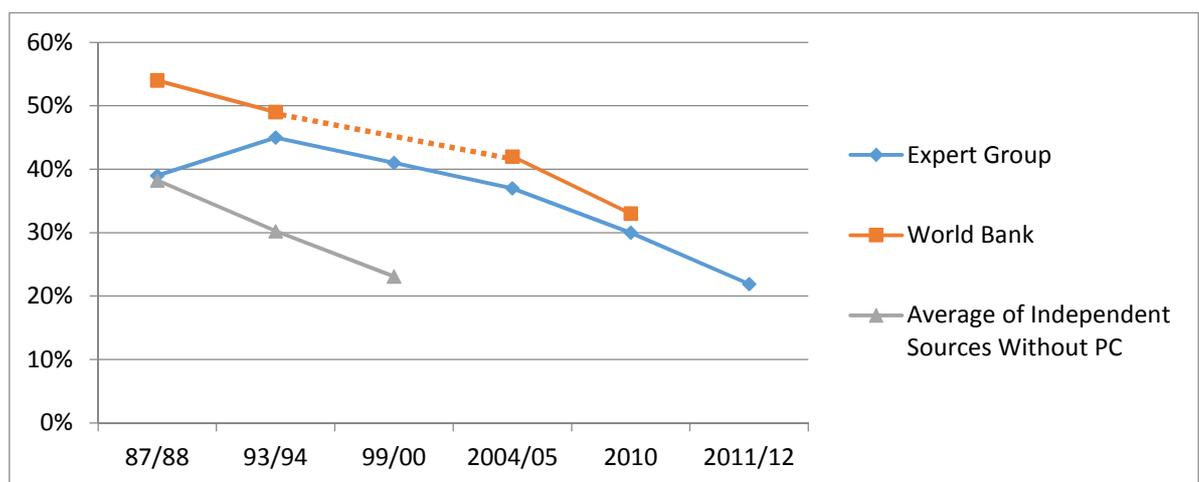
Reference: Own representation based on various authors (Bhalla, 2003: 340; Datt et al., 2003: 359; Deaton and Drèze, 2002: 52; Lal et al., 2001: 1019; Sen and Himanshu, 2004: 5; Tendulkar et al., 2009: 17, 18, 29; The World Bank Group, 2014b).

The dotted line is used to continue the assumed trend provided by the World Bank between 93/94 and 04/05.

The chart shows that the trend of poverty reduction is clearly going down. Rating to which extent the reduction took place, is difficult, as there is no proof of who is right and who is wrong, who established the most adequate approach and who

addressed an Indian poverty line most meticulous. It demonstrates the complexity of poverty and the complication to measure it. However, that the poverty line has significantly decreased since the implementation of the liberalisation policy can be confirmed, since none of the sources indicated a continuous increase of the HCR after 93/94. Due to constant and economic growth rates during 1991-2010 (The World Bank Group, 2014b) a correlation to reduction in poverty rates is now un-disputable.

Considering the poverty development derived from the expert group that indicated an extreme time lag of over 10 years, new questions come up: Did the Indian government miss the chance to effectively instrument economic growth to reduce poverty? Are there external factors that have restricted economic growth to positively affect poverty rates, respectively restricted a stronger reduction in poverty rates than achieved? In chapter 6, these questions will be answered.

In July 2014 another report on redefining the poverty line and poverty rate in India has been published by a new appointed expert group. This report has not been included in the thesis due to several reasons. First, it is not clearly justified why a new expert group has been appointed. Second, the approach proposed by Tendulkar et al. has not been criticised in literature. Third, the suggested poverty line is three times higher than the poverty line derived in 2009. Fourth, the new expert group includes a scaling up with the NAS data (Government of India, 2014). It has been justified why a refrain from scaling up is more appropriate (compare 5.1.2.1, p.32).

6. Factors that Impact on Poverty Development in India

The chapter on impacting factors of poverty in India will give an insight into factors that impact SSD in India. First, influencing factors on poverty in general will be evaluated and in the second part, an anti-poverty programme implemented in India will be introduced and its efficiency assessed dependent on specific influencing factors.

6.1. General Impacting Factors on Poverty

Literature has identified several factors that had a rather negative impact on sustainable social development in India. Overall, there is a general problem of neglecting the social pillar and of paying less attention to social issues. This represents a great obstacle to an efficient and successful pursuit of SSD. Approaching the topic in more detail, Bossel (1997: 193) has developed a set of reference points ("sector systems") that are related to the viability of a system. Bossel (1997: 206-208) used these "orientors" [sic!] to specify indicators, whereas in this dissertation they will be used to categorize influencing factors on poverty in India. The reference points identified by Bossel (1997: 207) are "infrastructure", "social system", "economy", "government" and the "environment". The named reference points represent the three dimensions, whereas infrastructure here relates to the social dimension and government to the economic dimension (Bossel, 1997: 211). While providing a general, more exemplary overview on how poverty can be influenced by the three dimensions, the next section will clearly demonstrate how the dimensions are interdependent. A detailed insight into factors that particularly influence poverty development is demonstrated on an example in 6.3.

6.1.1. Economy

As demonstrate in chapter 5, the influence of economy on poverty is contested on whether it has been positive or negative. In its first published sustainable development strategy in 1997, the Indian government set itself the goal to fully eradicate poverty till 2002 and aimed at reducing poverty through enhancing economic growth (Government of India, 1997). As earlier emphasised in this study, the clear focus on economic growth alone did not help to significantly reduce poverty in India. Tony Blair, former Prime Minister (UK), has once put the general issue in a nutshell, when he said that "politically, no country wants to sacrifice its economy to resolve the problem [referring to global warming and social underdevelopment;

remark of the author] (Krapivin et al., 2007: 236)" of social underdevelopment and poverty. Therefore, paths of sustainable development that would not restrict a growing economy, but would enable an improvement in living standards needed to be found (Krapivin et al., 2007: 236). Through the liberalisation policies, India was enforced to take part in globalisation and to accelerate economic growth with increasing levels of income, consumption and employment. However, while globalisation means fortune to some countries, it also means exhaustion to others. Especially countries like India that had been under colonial reign for a long time are struggling with low domestic economic capacity and a weak social infrastructure to efficiently withstand global requirements (Krapivin et al., 2007: 2). Fact is, economy does strongly correlate with development in poverty and SSD, nonetheless, as phrased in 4.2.3 (p.23), the combination of policies on both systems decides whether the correlation is efficient or not.

6.1.2. Government

The government of a country can impact on the development of poverty through different channels, for example, through poverty programmes. The Indian government has significantly raised its attention towards the implementation of anti-poverty programmes and towards social development. These programmes have been criticised for being inefficient and an instrument to satisfy the public, but not a serious approach to fight poverty (Ravallion, 2011: 89). The latest example of an attempt by the government to eradicate poverty – specifically hunger – has been the National Food Security Act (NFSA), released in 2013, that was strongly contested and criticised. The programme directly addresses the consumer, as it guarantees cheaper food for the poor and free meals for children and pregnant women (Kumar and Ayyappan, 2014: 271-272). A first critique says that the expenditure – 1.35 per cent of GDP (The Economist, 2014) – on food offered to the poor within this programme is too high, as already over $14 billion has been spent on grains bought from local farmers to be distributed to the poor. However, large amounts of the grains bought by the government got stolen or – due to wrong storage – got bad and could not be used anymore. It is anticipated that the NFSA will have to face the same problems of carelessness. Moreover, the programme seems to bypass the target group, as according to a survey, two per cent of Indian households report to be hungry, whereas around 40 per cent of the Indian population is malnourished. A report on economic and social development by the UN once again

stresses, that the problem is not the pure amount of calorie, but the "low quality and low diversity" (United Nations, 2013: xi) of food and the according malnutrition that leads to vulnerability for other diseases, respectively chronic poverty (The World Bank Group, 2005: xvi). The main problem, malnutrition, is clearly not addressed the programme rather unsustainable. The programme seems unbalanced without clear goals of achievement and it is assumed, that the NFSA was merely an instrument to promote the BJP before elections in 2014, rather than aiming on eradicating poverty efficiently (The Economist, 2014). It is a negative example on how India has failed on combining policies efficiently.

6.1.3.   Social System

The social system struggles with a fast growing population and inequality in social structures. Even though birth rates in India have decreased steadily, so has life expectancy significantly risen. A strong and fast growing population restricts the chance of enhancing living standards and even though India could establish a significant reduction of poverty, the rapid growth rate of its population made it difficult to decrease the absolute number of poor people (compare chapter 5.1.1, p.29) (The World Bank Group, 1997). With a population growth rate of around 1.5 per cent, India is one of the fastest growing nations and is expected to overtake China's population by 2050 (The World Bank Group, 2000: 44). A rising pressure on resources made an overall increase in living standards difficult. The problem does not just lie in the pure number of people, but in how people are linked to the "carrying capacity" (Shah and Ramamoorthy, 2014: 334) of a country (UNECE et al., 2008: 56). A current problem in developed countries is an excessive consumption of resources. This leads to the conclusion, that as population in developing countries is growing at a high rate and pressure on resources is already noticed, education is an important instrument to avoid unsustainable consumption of present and future generations (Shah and Ramamoorthy, 2014: 12-13). Hence, the issue of population growth needs to be accessed by relating the elimination of "mass poverty" to the opportunity of accessing resources and education, that gives people the ability to handle the available resources sustainably (WCED, 1987: 81). Even though economic growth could increase levels of income, it has also led to a strong increase in inequality (Prusty, 2009: 59) and increasing differences within "social structures" considering age, sex and caste (The World Bank Group,

1997: 15). How gender, age and social inclusion can be a particular obstacle to poverty reduction shall be demonstrated in 6.3.1 (p.59).

With reference to economy as an influencing factor, the impact of globalization on social structures in India will be continued, as one part of the Indian society – tribal and indigenous people –have been run over by the force of economic growth and struggle to adapt to the progress of development. Unsustainable economic growth further endangers the environment, the source of their survival (The World Bank Group, 2000: 49, 97; WCED, 1987: 28). As development has been defined as an improvement of human well-being, and as economic growth was expected to support this improvement, it has been clearly offset, as economic development seems to have increased the deprivation of well-being for tribal and indigenous people in India (Zarzosang Varte and Neitham, 2013: 47).

Crettaz and Suter (2013: 140) additionally explore the problematic of "downward adaptation" (compare 4.2.1, p.22), describing people who are comparing themselves with others, who are more or less in a similar or even worse vulnerable situation and therefore expect less of living standards and lower their perception of what is materially or financially needed. A similar problem in India is the acceptance of being born in a lower caste and the associated, inevitable deprivation of well-being, especially perceived in the lowest caste, the "untouchables" (Dalits). With the religious background and belief of reincarnation, the poorest of the poor (Desai et al., 2010: 15) accept their state of extreme deprivation, with the expectation that the next life will be better than the current life (Bennett and Mitra, 2013: 75). As a result, there is no incentive to work against their state of extreme deprivation, thus restrict progress in sustainable social development (Crettaz and Suter, 2013: 140-141).

6.1.4. Infrastructure

The Indian infrastructure has considerably improved within the last two decades. Compared to the growth of the economy and population, however, India's infrastructure is still insufficient. Especially in rural areas, where access to education, essential services, clean water and sanitation hardly exists (Parthasarathi and Aryasri, 2014: 40-41), it is a widely recognised fact that the missing opportunity and restricted ability to participate in economic activities, are an obstacle to overcome poverty (Shah and Ramamoorthy, 2014: 5). Urban areas tend to show a better infrastructure, but face an increasing trend of urbanisation and overpopulation

in the cities that overstrain the given capacities and lead to a deterioration of infra-structure (WCED, 1987: 22). Access to education, essential services, clean water and sanitation are vital to exit a deprivation in well-being and particularly access to financial services is perceived as an opportunity to escape poverty sustainably (Dasgupta, 1998: 3). The efficiency and accessibility of infrastructure are therefore major influencing factors on sustainable social development (Bhandari and Kundu, 2014: 49; Desai et al., 2010: 14).

6.1.5.   Resources and Environment

While the economic and social dimension rather influence absolute poverty, the environmental dimension strongly impacts on and increases chronic poverty. A degrading environment can negatively influence productivity and increase levels of poverty. The other way around, low productivity comprises low income, a depriva-tion in resources and as a result, low investment in for example education. Insuffi-cient education can lead to mismanagement of resources and extensive environ-mental degradation. Striking impact on poverty in India, evoking directly from the environment, is natural hazard in form of floods and drought, dependent on sea-sonal monsoon that increase chronic poverty (Ikefuji and Horii, 2009: 1041-1042). Another problem, strongly increasing deprivation in health related well-being and leading to chronic poverty, is air pollution in urban areas due to immense traffic that increases the risk of cancer, stroke and heart disease (Akolkar, 2014: 23, 24). Deriving another issue from the lack of education, India is sitting on a "plastic time bomb", as over 40 per cent of plastic in India does not get recycled and puts fur-ther pressure on the environment and natural resources (Singhiv and Joseph, 2013: 24, 25). India's waste problem mainly affects rivers – as waste gets thrown into the rivers that flow through the cities – and the air – as waste thrown onto the street is regularly set on fire instead of being recycled, due to lack of public bins and recycling systems.[4] Natural hazard and the environment being treated unsus-tainable most of all influence a sustainable social development – especially re-garding health issues – negatively.

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[4] Based on the author's experience.

The influencing factors evoking from the different sector systems have demonstrated how sustainability in one dimension can strongly affect the progress of sustainable development in one of the other dimensions.

6.2. Introduction of an Indian Anti-Poverty Programme

The Indian Government has released several programmes to reduce poverty throughout the last decades with the purpose of direct intervention in poverty. It is questioned, whether they have actually reached the target group of people identified to live below the poverty line and intervened sustainably. An anti-poverty programme will now be introduced and specific influencing factors will be examined.

6.2.1. Swarnajayanti Gram Swarozgar Yojana

The most popular anti-poverty programme implemented by the Indian government, is the Swarnajayanti Gram Swarozgar Yojana (SGSY) – former Integrated Development Programme (IRDP) (Government of India and Ministry of Rural Development, 2011: 1) – that will be analysed within this chapter. This programme has been chosen, as it is a program that targets at sustainable development through microfinancing, in contrary to for example food supply programs, that are supposed to relieve acute poverty, but do not affect well-being on a longer scope and therefore are not sustainable. Efficiently implemented, a programme of microfinancing can actually help to reduce poverty sustainably and lift people above the poverty line. (Batra and Sumanjeet, 2012: 69; Peeters, 2003: 204). At first the programme framework will be defined, followed by factors that have specifically impacted the efficiency of the program in India.

6.2.2. Programme Framework

The following extract defines the objective of the program:

> "The objective of the Swarnjayanti Gram Swarozgar Yojana (SGSY) is to bring the assisted poor families (Swarozgaries) above the Poverty Line by ensuring appreciable sustained level of income over a period of time. The purpose of the SHG is to build the functional capacity of the poor and the marginalized in the field of employment and income generating activities." (Government of India and Ministry of Rural Development, 2011: 1).

A microcredit is a financial service that aims at increasing material well-being and is a widely used approach to fighting poverty in developing countries (Bhandari and Kundu, 2014: x, xvi).

The demand for consumption and investment can only be satisfied when taking financial credits. Nevertheless, people who live below the poverty line face a financial exclusion, as they are not able to access financial services – due to low credibility – to fulfil that demand. Additionally, high interest rates on normal credits restrict poor people to participate in economic activities. The idea behind the concept of microfinance is financial inclusion through provision of affordable credits to the poor (Biswas and Kumar Saha, 2014: 1). In order to achieve this objective, the poor population has been organised into development self-help groups (SHG). Self-help promoting institutions – in most cases non-governmental organisations – initiate the formation of SHGs that will start small economic activities based on their savings. After fulfilling several steps, a group becomes eligible to receive loans from banks with low interest rates and is therefore enabled to further extent its economic activities (Banerjee, 2013: 418-419; Panda et al., 2012: 235).

6.2.3. Self Help Groups

Based on a method efficiently used in Bangladesh, the Indian Government has started to organise people living in poverty into groups to enable self-help. Each SHG accumulates savings in a self-established financial institution. The collected money is now accessible to each member of the SHG to borrow money from on a small rate of interest. These groups do not need a formal registration (Government of India, 2010: 1). The Indian microcredit model stands out against current models used in other countries, as in India they fully rely on joint (group) liability, whereas in other developing countries the concept is based on individual liability (Banerjee, 2013: 419; Government of India, 2010: 1).

This method enables people to overcome individual obstacles to poverty reduction like illiteracy, deficient knowledge and physical restrictions, through group effort. This highlights a positive aspect of this approach, as the "guiding principles" (Government of India, 2010: 1) within SHGs strongly underscore collectivism and give poor people an incentive to take responsibility for their future. It also aims at creating social capital through the creation of a social network – the SHG – and members, who are prone to help each other (Banerjee, 2013: 418).

Each group has consists of 10 – 20 male and/or female members who are all based in the same village. The memberships are supposed to be based on affinity. Points of discussion, before forming a group, should be the composition and management of the SHG, the basic idea and economic activity it is focused on and the

amount of money contributed by each member. Further, each SHG has to be made identifiable through a name or a number, containing the name of the village and a respective number (for example, Melapattu village SHG-1) (Government of India, 2010: 2).

SHGs all have to comply with underlying management formalities, for example, the election of a chairman and secretary, regular meetings and maintenance of records (various registers). Members can be disqualified from a SHG when he or she does not participate in three meetings in a row, violates the underlying principles, the written constitution or the management of the group (Government of India, 2010: 2).

6.3.   Factors that Impact the Anti-Poverty Programme

The model of microfinancing has been enthusiastically implemented all over the world during the last decades, being rated as one of the most efficient instruments to combat poverty sustainably (Suda and Bantilan, 2014: 87). The programme is used here, to inspect in particular, how an anti-poverty programme that should relieve poverty can be negatively influenced. Several factors that have a negative impact on the efficiency of this programme have been identified and will be presented in the following chapters. It is important to be aware that all named influencing factors below are mainly defined on a national level in consistence with the former approach in this dissertation and can again vary in each Indian state or even village, mostly dependent on the ethical composition and the informal political intervention (Suda and Bantilan, 2014: 88). In the upcoming section it will be explained, how gender, social exclusion, moral hazard, educational level, lack of interest in the program, consumption patterns and policies addressing the programme can influence the efficiency of the SGSY.

6.3.1.   Gender

The gender is one of the most influencing factors on the social system in India. Women in India have significantly less rights than men in society and are also restricted on accessing microfinance. In fact, women are preferred by lenders in India, as women are expected to be more likely to repay loans and are perceived as more cautious when it comes to investment, whereas men tend to invest in risky business and to misuse loans. Further, women are expected to share the gained material improvement with family members (Bhandari and Kundu, 2014: xiii).

However, as the participation rate in SGSY has been lower than expected, a survey was conducted to investigate the reasons behind non-participation. It revealed that men had been resistant to let their wives participate in the programme and women did not participate as they lacked the permission of their husbands. Another problem is, that some women, who would like to join a SHG, are already too old, as the membership is limited to the age of 60. So even if women want to participate, they are either not allowed to or not eligible for the programme (Suda and Bantilan, 2014: 99). Moreover, women's eligibility is rated based on whether male family members are defaulters. Thus, a woman is not able to join a SHG, if any of the male family members have defaulted money before. Gender discrimination is further perceived considering loans above INR50.000, which require a land mortgage and women are not entitled to have deeds on their own name, but only on a man's name. These aspects mean a one sided improvement of well-being and increased financial exclusion for women, hence a strong restriction to women enforcement (Fernandez, 2010: 425). Agenda 21 (United Nations, 1992: 18) suggested to increase the concentration of identifying the targeted groups for anti-poverty programs in order to meet the needs of the poor and additionally facilitate anti-poverty activities. Additionally, it is stressed in Agenda 21 to evaluate these programs on a gender-specific base to empower women. India seems to have by-passed both of these recommendations.

6.3.2.   Financial Exclusion

The principle of SHGs is to first save money and after the saving a loan can be granted. For people living below the poverty line, saving is difficult, if not impossible to establish, due to lack of capacity. The framework of the programme does not stipulate a minimum amount of saving, to enable participation to even the poorest. Nevertheless, for example in Dhar (Madhya Pradesh), one of the district agencies set a required saving amount of INR50 per member, to demonstrate strong progress of the program. This created a barrier for the majority of poor people to enter the program, hence increased financial exclusion (Fernandez, 2010: 425). As the SGSY is a programme to reduce poverty and especially financial exclusion, it contradictory excludes a large part of the targeted group of poor people (Suda and Bantilan, 2014: 99-100).

6.3.3.   Moral Hazard

A former obstacle to financial inclusion was the difficulty for defaulters – no matter whether they were defaulting on purpose or not – to receive another credit. A higher interest rate charged on former defaulters led to financial exclusion. The method of microfinancing was supposed to circumvent this problem with joint liability in order to avoid financial exclusion of defaulters, who had defaulted due to impacts beyond their control (Fernandez, 2010: 425). This mainly concerns people with activities in the agricultural sector where people are especially dependent on the monsoon. Joint liability is supposed to help compulsory defaulters by securing them within the SHG. This theoretical approach, however, is not perceived in practice, proven by the fact that, as defaulters recognised people, struggle to form or participate in SHGs. The main reason is the strong traditional background in India that outlaws defaulters, as accepting a membership of a defaulter would cause the whole group to be degraded. A positive effect of this consideration of social pressure is a high rate on repayments of microcredits (Banerjee, 2013: 413), still it is another factor that has not been covered or taken into account by the programme framework and limits its efficiency.

6.3.4.   Educational Level

A great obstacle that still influences the underdeveloped financial inclusion especially in rural areas of India is the high illiteracy rate. One prerequisite, to rise in the SHG stage and to receive a loan from a bank in the end, is the maintenance of records, which is already an obstacle to even form a SHG if people are not able to read or write. This issue is supposed to be diminished by the principle of collectivism, however, if none of the group members is literate, who will teach them? It is further stated that people living in poverty are not expected to have the knowledge and skills to cope with the complexity and difficulties of leading a business efficiently, no matter the size of the business (Kundu, 2011: 41). A clear drawback is the lack of on-programme education and vocational training that could significantly increase the efficiency participating groups (Panda et al., 2012: 246). Also, extreme illiteracy in rural areas combined with a bad marketing is the reason for lacking awareness, i.e. far too many people are not even aware of the opportunity of microfinancing and the SGSY (Lenka and Samantaraya, 2010: 22). Thus, increasing the level of literacy and skills that are required to lead a business could intensify the efficiency of the programme (Panda et al., 2012: 245).

6.3.5. No Interest in Programme

Referring to the survey mentioned earlier, it has been established, that the programme is perceived rather negatively by some people. To avoid exclusion from the program, members have to attend monthly meetings that take place during the day (Government of India and Ministry of Rural Development, 2011: 1). Especially for people working in the agricultural sector, SHGs are perceived as too time consuming, exacting and a hold-back from work. Due to several collapses of SHGs during past years, because of non-repayment issues, the lack of savings and dispute with the management of the groups, the SGSY in India face strong mistrust (Gaiha et al., 2001: 318; Suda and Bantilan, 2014: 100). Another factor is the borrowing behavior in India, as it is preferred to borrow from family members or friends who normally do not ask for repayment on a fixed date or interest. Furthermore, contracts are made oral and without written agreements. A SHG represents a too high responsibility that deters people from participating (Takashino et al., 2014: 35-36). The programme is clearly lacking a positive and effective communication of opportunities from the government to the targeted group.

6.3.6. Consumption Patterns

Banerjee (2013: 420) reveals that microfinancing is too often used for current consumption expenditure rather than for productive activities. It is estimated, that almost two-third of microcredits is spent on other purposes than on income generating activities. Even though a positive effect on poverty through increased consumption and a gained net benefit for the poor has been researched, a pure consumption spending obviously was not the indented outcome. People were expected to escape their life in poverty and not to merely cope with it and to stay below the poverty line. Exploiting the programme for consumption spending, the aspect of sustainability is offset (Banerjee, 2013: 420) and can be equated with programs to relieve acute poverty.

6.3.7. Policy of Electing People Living below the Poverty Line

Fernandez (2010: 415-430) has identified several influencing factors based on informal political processes that led to questioning of the efficiency of the SGSY. When the SGSY came out in 1999, it included a clause that demanded the coverage of 30 per cent of population living BPL within the first five years, to lift this part

of the population above the poverty line. However, India managed to only cover five per cent of the targeted group. For this matter and due to obvious under-performance, the clause got deleted by the government. The reason is the fear of showing under-performance, as the efficiency of this programme is measured upon people who got lifted above the poverty line through the program. The reasons for the under-performance are contested, it is assumed, however that the flow of funds from the central government to a state level had been contradictory. Moreover, the SGSY is a restored version of the IRDP, which had its focus on the poorest of the poor. With the implementation of the SGSY, a change took place, as it prioritized financial assistance with a reverse priority: the priority now, are BPL families with land, followed by people occupied in the middle class, and finally the poorest people, who are "asset-less and skill-less" and who are expected to only require "small doses of multiple credit" (Government of India and Ministry of Rural Development, 2011: 2). The focus therefore lies on people that live closely beneath the poverty line, as they are expected to cross the line with a rather small effort. To reprocess the issue of who is poor, poorer the poorest (compare 4.2.6, p.26) and who needs the most attention from the government, Deaton and Drèze have addressed the issue of a possible high concentration of poor households near the poverty line. In case this "density effect" (Deaton and Drèze, 2002: 22) occurs, slight changes in per capita income can distort the development in poverty rates and the interpretation of data. A small effort will show a fast reduction in HCR, but the most vulnerable people will remain in extreme deprivation. With reference to chapter 3.4 (p.16), this proves that reachability should not necessarily be a characteristic of a policy objective, as being achievable in this case is only to a very limited extent efficient and sustainable. Purposely addressing people that live closely beneath the poverty line allows the government to adulterate the development of poverty. The Indian government does purposely restrict the poorest people from taking the opportunity of financial inclusion (Fernandez, 2010: 423). The policy process of identifying people living below the poverty line in India is another debated issue. The approach to identify a family that lives below the poverty line and is therefore assigned to a BPL card, is assumed to discriminate women in particular, as the male head of the family is used as "normative policy subject", i.e. single or unmarried women with children are not considered as "family" and are restricted to benefit from anti-poverty programs (Fernandez, 2010: 422-423). Another proof, that the government willfully excludes the proposed target group.

The last chapter has demonstrated how poverty itself is vulnerable to various influencing factors, again illustrating the vast complexity of poverty. It has demonstrated that the Indian government has approached the issue of poverty with an increasing intensity and implemented a programme that could significantly and sustainably reduce poverty. This effect has been offset, since its implementation, by a still high remaining carelessness on the part of the government. As all influencing factors that restrict the efficiency of the SGSY on poverty reduction could be regulated through policies and efficient communication, it has once again expressed that economic growth alone is not enough to reduce poverty, but economic growth combined with efficient policy implementation and foresighted, sustainable thinking would be.

7. Conclusion

The introduction stated that economic growth did not seem to have positively influenced poverty reduction in India and the content of this thesis has proven that economic growth alone is not enough to eradicate poverty sustainably. It has further demonstrated the complexity of poverty that has its effects on the delineation of defining the concept of poverty, the measurement of poverty development and the factors that can impact sustainable social development. The dissertation has responded to the leading questions named in the beginning. It has defined an indicator to measure and monitor poverty, assessed its development throughout the economic growth phase and investigated the factors that have influenced this development. The analysed data confirmed that poverty in India has clearly reduced in the post-reform period. Considering the findings within this thesis, the more appropriate question now seems: Has the Indian government managed to convert economic growth into improvement in sustainable social development and poverty reduction? The thesis has more than once demonstrated that the government of a country and its policies are decisive on which dimension receives the most attention, which direction development takes and whether development in a country is sustainable. It has further proven that the Indian government, especially with realised anticipated economic growth during the past years, missed the chance to instrument economic growth to reduce poverty. The attempts by the government to approach poverty have mainly been offset by its own inability to overcome obstacles within its system. To quote Albert Einstein: "The problems that exist in the world today cannot be solved by the level of thinking that created them" (Strange and Bayley, 2008: 23). Transferring this to India, significant changes have to take place in the thinking of the government: consider the social dimension to an equal share, establish efficient anti-poverty programs that include the poorest of the poor and all parts of society to an equal share. Additionally, approach all dimensions of poverty: social and income inequality, exclusion from access to opportunities and essential services. Moreover, the government has to start communicating the importance of equality, a safe environment and self-empowerment, as they are inevitable to diminish obstacles to poverty reduction considering consumption habits and downward adaptation. Given the recent change of government in India, it is yet open, whether the government will change its way of thinking or continue the path of unsustainable social development.

References

Akolkar, A. B. (2014) 'India Rejects WHO Report Saying New Delhi Has Worst Air Pollution', *Chemical Business*, Vol. 28, No. 5, pp. 23-24. 2p. [Online]. (Accessed 28 August 2014).

Atkinson, A. B. and Marlier, E. (2010) *Analysing and Measuring Social Inclusion in a Global Context* [Online], United Nations. Available at http://www.un.org/esa/socdev/publications/measuring-social-inclusion.pdf (Accessed 5 September 2014).

Banerjee, S. (2013) *Development and Sustainability: India in a Global Perspective* [Online], India, Springer India. Available at http://download.springer.com/static/pdf/893/bok%253A978-81-322-1124-2.pdf?auth66=1412258008_a31a0468c1d6665873612772488ed965&ext=.pdf.

Barkemeyer, R., Holt, D., Preuss, L. and Tsang, S. (2011) 'What Happened to the 'Development' in Sustainable Development? Business Guidelines Two Decades After Brundtland', *Sustainable Development*, Vol. 22, pp. 15–32 [Online]. Available at http://onlinelibrary.wiley.com/doi/10.1002/sd.521/pdf (Accessed 5 August 2014).

Batra, V. and Sumanjeet (2012) 'The State of Microfinance in India: Emergence, Delivery Models and Issues', *Journal of International Economics*, Vol. 3, No. 1, pp. 69–92 [Online]. (Accessed 30 July 2014).

Bennett, C. J. and Mitra, S. (2013) 'Multidimensional Poverty: Measurement, Estimation, and Inference', *Econometric Reviews*, Vol. 32, No. 1, pp. 57–83 [Online]. (Accessed 23 July 2014).

Bhalla, S. (2003) 'Recounting the Poor: Poverty in India, 1983-99', *Economic and Political Weekly*, Vol. 38, No. 4, pp. 338–349 [Online]. (Accessed 21 August 2014).

Bhandari, A. K. and Kundu, A., eds. (2014) *Microfinance, Risk-taking, Behaviour and Rural Livelihood* [Online]. Available at http://download.springer.com/static/pdf/625/bok%253A978-81-322-1284-3.pdf?auth66=1406923516_963d3ddb3a648b300f7aa78476177908&ext=.pdf (Accessed 30 July 2014).

Biswas, S. and Kumar Saha, A. (2014) 'Structural Transformation of Rural Finance in India: A Critical Review', in Bhandari, A. K. and Kundu, A. (eds) *Microfinance, Risk-taking, Behaviour and Rural Livelihood* [Online]. Available at http://download.springer.com/static/pdf/625/bok%253A978-81-322-1284-3.pdf?auth66=1406923516_963d3ddb3a648b300f7aa78476177908&ext=.pdf (Accessed 30 July 2014).

Böhringer, C. and Lange, A. (2005) *Applied Research in Environmental Economics // Applied research in environmental economics* [Online], Heidelberg, Physica-Verl. Available at http://download.springer.com/static/pdf/48/bok%253A978-3-7908-1645-7.pdf?auth66=1406231693_23679fd3a5e699f0fd10bc8d4f70e545&ext=.pdf (Accessed 25 July 2014).

Bossel, H. (1997) 'Deriving Indicators of Sustainable Development', *Environmental Modeling and Assessment*, Vol. 1, pp. 193–218 [Online]. (Accessed 23 July 2014).

Bradshaw, J., Chzhen, Y., Main, G., Martorano, B. and Menchini, L. (2012) *Simulating the Impact of the Global Economic Crisis and Policy Responses on Children in West and Central Africa* [Online]. Available at http://www.unicef-irc.org/publications/pdf/iwp_2012_01.pdf (Accessed 7 August 2014).

Callan, T., Nolan, B. and Whelan, C. T. (1993) 'Resources, Deprivation and the Measurement of Poverty', *Journal of Social Policy*, Vol. 22, No. 02, p. 141 [Online]. (Accessed 7 August 2014).

Chai, N. (2009) *Sustainability Performance Evaluation System in Government: A Balanced Scorecard Approach Towards Sustainable Development*, Dordrecht, Springer.

Chakravarty, S. R. (2009) *Inequality, Polarization and Poverty: Advances in Distributional Analysis* [Online], New York, NY, Springer New York; Springer. Available at http://download.springer.com/static/pdf/895/chp%253A10.1007%252F978-0-387-79253-8_2.pdf?auth66=1406904412_d42ffc7120daca6ab2ebc75d320108a8&ext=.pdf (Accessed 30 July 2014).

Coromaldi, M. and Zoli, M. (2012) 'Deriving Multidimensional Poverty Indicators: Methodological Issues and an Empirical Analysis for Italy', *Social Indicators Research*, Vol. 107, No. 1, pp. 37–54 [Online]. (Accessed 1 August 2014).

Crettaz, E. and Suter, C. (2013) 'The Impact of Adaptive Preferences on Subjective Indicators: An Analysis of Poverty Indicators', *Social Indicators Research*, Vol. 114, No. 1, pp. 139–152 [Online]. (Accessed 3 August 2014).

Dalal-Clayton, B. and Kriekhaar, F. (2007) *A New Sustainable Development Strategy: An Opportunity Not To Be Missed*, Den Haag, RMNO.

Das, K. S. and Barua, A. (1996) 'Regional Inequalities, Economic Growth and Liberalisation: A Study of the Indian Economy.', *The Journal of Development Studies*, Vol. 32, No. 3, pp. 364–390 [Online]. (Accessed 26 September 2014).

Dasgupta, P. (1998) 'The Economics of Poverty in Poor Countries', *Scandinavian Journal of Economics*, Vol. 100, No. 1, pp. 41–68 [Online]. (Accessed 25 September 2014).

Dasgupta, P. and Serageldin, I. (1999) *Social Capital: A Multifaceted Perspective* [Online], The World Bank Group. Available at http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/1999/11/19/000094946_99110505361324/Rendered/PDF/multi_page.pdf (Accessed 7 August 2014).

Datt, G., Kozel, V. and Ravallion, M. (2003) 'A model-based Assessment of India's Progress in Reducing Poverty in the 1990s', *Economic and Political Weekly*, Vol. 38, No. 4, pp. 355–361 [Online]. (Accessed 20 August 2014).

Datt, G. and Ravallion, M. (2002) 'Is India's Economic Growth Leaving the Poor Behind?', *Journal of Economic Perspectives*, Vol. 16, No. 3, pp. 89–108 [Online]. (Accessed 19 August 2014).

Dayal, E. (1993) 'Regional Changes in Food Poverty in India', *Geo Journal*, Vol. 30.2, No. 2, pp. 167–177 [Online]. (Accessed 3 August 2014).

Deaton, A. and Drèze, J. (2002) 'Poverty and Inequality in India - A Re-Examination', *Economic and Political Weekly*, Vol. 37, No. 36, pp. 3729–3748 [Online]. (Accessed 21 August 2014).

Deaton, A. and Kozel, V. (2005) 'Data and Dogma: The Great Indian Poverty Debate', *The World Bank Research Observer*, Vol. 20, No. 2, pp. 177–199 [Online]. (Accessed 7 August 2014)

Dempsey, N., Bramley, G., Power, S. and Brown, C. (2011a) 'The social dimension of sustainable development: Defining urban social sustainability', *Sustainable Development*, vol. 19, no. 5, pp. 289–300 [Online]. (Accessed 8 August 2014).

Dempsey, N., Bramley, G., Power, S. and Brown, C. (2011b) 'The Social Dimension of Sustainable Development: Defining Urban Social Sustainability', *Sustainable Development*, Vol. 19, No. 5, pp. 289–300 [Online]. (Accessed 8 August 2014).

Desai, S. B., Dubey, A., Joshi, B. L., Sen, M., Sharif, A., Vanneman. Rajeeve and Desai, S. (2010) *Human Development in India // Human development in India: Challenges for a society in transition*, Oxford, New York, Oxford University Press.

Dias-de-Avila-Pires, F., Mior, L. C., Porto Aguiar, V. and De Mello Schlempe, Susana Regina (2000) 'The Concept of Sustainable Development Revisited', *Foundations of Science*, Vol. 5, pp. 261–268 [Online]. (Accessed 1 August 2014).

Dryburgh, A. (2011) 'Don't You Believe It…It's smart to Have SMART Objective', *Management Today,* p. 14 [Online]. (Accessed 11 August 2014).

Dutta, S. (2014) 'Identifying Single or Multiple Poverty Trap: An Application to Indian Household Panel Data', *Social Indicators Research* [Online]. (Accessed 3 August 2014).

Engelbrecht, H.-J. (2013) *A Comparison of Sustainability Indices Associated With the Capital Approach to Development, Non-Monetary Sustainability Indices, and Life Satisfaction: Mixed messages from OECD countries* [Online] (Discussion paper No. 2). Available at http://www.murdoch.edu.au/School-of-Management-and-Governance/_document/ Australian-Conference-of-Economists/A-comparison-of-sustainability-indices.pdf.

Fernandez, B. (2010) 'Poor Practices: Contestations Around 'Below Poverty Line' Status in India', *Third World Quarterly*, Vol. 31, No. 3, pp. 415–430 [Online]. (Accessed 23 July 2014).

Friedman, R. D. (1965) *Poverty-Definition and Perspective* [Online]. Available at http://www.aei.org/files/2014/04/03/-poverty_094645455237.pdf (Accessed 7 August 2014).

Gaiha, R., Imai, K. and and Kaushik P.D. (2001) 'On the Targeting and Cost-Effectiveness of Anti-Poverty Programmes in Rural India', *Development and Change*, Vol. 32, No. 3, pp. 309–342.

Gaiha, R. and Kularni, V. (1998) 'Is Growth Central to Povery Alleviation in India', *Journal of International Affaires*, Vol. 52, No. 1, pp. 145–180 [Online]. (Accessed 23 July 2014).

Gibson, R. B. (2006) 'Beyond the Pillars: Sustainability Assessment as a Framework for effective Integration of Social, Economic and Ecological Considerations in Significant Decision-Making', *Journal of Environmental Assessment Policy and Management*, Vol. 8, No. 3, pp. 259–280 [Online]. (Accessed 4 August 2014).

Gorobets, A., Hull, R. N., Barbu, C.-H. and Goncharova, N. (2007) *The integrated Indicator of Sustainable Development and Policy Tools* [Online], Dordrecht, Springer. Available at http://download.springer.com/static/pdf/479/chp%253A10.1007%252F978-1-4020-5996-4_10.pdf?auth66=1406304124_7ce71f641ecd62e21acf5c423b429186&ext=.pdf (Accessed 24 July 2014).

Gough, I., McGregor, J. A. and Camfield, L. (2006) *Wellbeing in Developing Countries:: Conceptual Foundations of The WeD Programme* [Online]. Available at http://www.welldev.org.uk/research/workingpaperpdf/wed19.pdf (Accessed 5 August 2014).

Government of India (1997) *Agenda 21 - India: Social Aspects* [Online]. Available at http://www.un.org/esa/agenda21/natlinfo/countr/india/social.htm (Accessed 24 June 2014).

Government of India (2010) *Self Help Group* [Online]. Available at http://megselfhelp.gov.in/resources/SHG%20Concept%20-%20English.pdf (Accessed 31 July 2014).

Government of India (2011) *Final Approach: 12th Five Year Plan* [Online]. Available at http://planningcommission.gov.in/plans/planrel/12appdrft/appraoch_12plan.pdf (Accessed 17 August 2014).

Government of India, Central Statistics Offical and Ministry of Statistics and Programme Implementation (2013) *India Country Report 2013: SAARC Development Goals* [Online]. Available at http://mospi.nic.in/mospi_new/upload/ SAARC_Development_Goals_%20India_Country_Report_29aug13.pdf (Accessed 29 July 2014).

Government of India and Ministry of Rural Development (2011) *Swarnajayanti Gram Swarozgar Yojana: Guidelines* [Online]. Available at http://rural.nic.in/sites/downloads/ programmes-schemes/prog-schemes-sgsy.pdf (Accessed 31 July 2014).

Government of India (2013) *Press Note on Poverty Estimate, 2011-2012* [Online]. Available at http://planningcommission.nic.in/news/pre_pov2307.pdf (Accessed 29 July 2014).

Government of India (2014) *Report of the Expert Group to Review the Methodology for Measurement of Poverty* [Online]. Available at http://planningcommission.nic.in/reports/ genrep/pov_rep0707.pdf (Accessed 30 September 2014).

GRADÍN, C., DEL RÍO, C. and CANTÓ, O. (2012) 'Measuring Poverty Accounting for Time', *Review of Income and Wealth*, Vol. 58, No. 2, pp. 330–354.

Grosskurth, J. and Rotmans, J. (2005) 'The Scene Model: Getting A Grip On Sustainable Development In Policy Making', *Environment, Development and Sustainability*, Vol. 7, No. 1, pp. 135–151.

Guruswamy, M. and Abraham, R. J. (2006) 'Redefining the Poverty Line in India', *Public Policy Research*, Vol. 13, No. 3, pp. 191–199.

Hametner, M. and Steurer, R. (2007) 'Objectives and Indicators of Sustainable Development in Europe: A Comparative Analysis of European Coherence', *Sustainable Development*, Vol. 21, No. 4, pp. 224–241 [Online]. (Accessed 25 July 2014).

Hauff, M. v. and Kleine, A. (2009) *Nachhaltige Entwicklung: Grundlagen und Umsetzung*, München, Oldenbourg.

Haughton, J., R. Khandker and Shahidur R. (2008) *Handbook on Poverty and Inequality* [Online], The World Bank Group. Available at http://siteresources.worldbank.org/INTPA/ Resources/429966-1259774805724/Poverty_Inequality_Handbook_Ch01.pdf   (Accessed 30 July 2014).

Idowu, S. O., Capaldi, N., Zu, L. and Gupta, A. D. (2013) *Encyclopedia of Corporate Social Responsibility* [Online], Berlin, Heidelberg, Springer Berlin Heidelberg; Springer. Available   at http://download.springer.com/static/pdf/491/prt%253A978-3-642-28036-8%252F4.pdf?auth66=1407047825_82ef3afd6c7a968d831fb9573614e731&ext=.pdf (Accessed 1 August 2014).

Ikefuji, M. and Horii, R. (2009) 'Wealth Hetergogeneity and Escape from the Poverty-Environment Trap', *Journal of Public Economic Theory*, Vol. 9, No. 6, pp. 1041–1068 [Online]. (Accessed 16 August 2014).

India Country Profile (2010) 'India: Country Analysis Report–In-depth PESTLE Insights', pp. 1–106   [Online].   Available   at http://content.ebscohost.com/pdf9/pdf/2008/VZV/ 01Jan08/ 36428190.pdf?T=P&P=AN&K=36428190&S=R&D=buh&EbscoContent=dGJyMNHX8kSe prA4v%2BvlOLCmr0yeprNSsq24TLCWxWXS&ContentCustomer=dGJyMPGqsU2zrK5Lu ePfgeyx44Dt6fIA (Accessed 3 August 2014).

Inoue, T. and Hamori, S. (2012) 'How Has Financial Deepening Affected Poverty Reduction in India? Empirical Analysis Using State-Level Panel Data', *Applied Financial Economics*, Vol. 22, No. 5, pp. 395–408 [Online]. (Accessed 23 July 2014).

Kemp, R. and Martens, P. (2007) 'Sustainable Development: How to Manage Something that is Subjective and Never can be Achieved?', *Sustainability: Science, Practice, & Policy*, Vol. 3, No. 2, pp. 5–14 [Online]. (Accessed 7 August 2014).

Khan, M. A., Khan, M. Z., Zaman, K., Hassan, U. and Umar, S. (2014) 'Global Estimates of Growth–Inequality–Poverty (GIP) Triangle: Evidence from World Bank's Classification Countries', *Quality & Quantity*, Vol. 48, No. 5, pp. 2631–2646 [Online]. (Accessed 3 August 2014).

Kirch, W. (June 2008) *Encyclopedia of Public Health*, New York, Springer.

Krapivin, V. F., Varotsos, C. A., Abrey, L. E., Chamberlain, M. C. and Engelhard, H. H. (2007) *Globalization and Sustainable Development Leptomeningeal metastases: Environmental Agendas* [Online], New York, Springer Verlag; Springer Science. Available at http://download.springer.com/static/pdf/870/bok%253A978-3-540-70662-5.pdf?auth66=1406814953_a54fde37b7ceb5b11f8b5fbf9979658a&ext=.pdf (Accessed 29 July 2014).

Kumar, A. and Ayyappan, S. (2014) 'Food Security and Public Distribution System in India', *Agricultural Research*, vol. 3, no. 3, pp. 271–277 [Online]. (Accessed 30 September 2014).

Kundu, A. (2011) 'Effectiveness of Microfinance Under SGSY Scheme to Reduce Poverty and Vulnerability of Rural Households: A Natural Experiment', *The IUP Journal of Financial Economics*, Vol. 9, No. 3 [Online]. (Accessed 30 July 2014).

Lal, D., Mohas, R. and Natarajan, I. (2001) 'Economic Reforms and Poverty Alleviation: A Tale of Two Surveys', *Economic and Political Weekly*, Vol. 36, No. 12, pp. 1017–1025 [Online]. (Accessed 21 August 2014).

Lanjouw, P. and Murgai, R. (2009) 'Poverty Decline, Agricultural Wages, and Nonfarm Employment in Rural India: 1983-2004', *Agricultural Economics*, Vol. 40, No. 2, pp. 243–263 [Online]. (Accessed 23 July 2014).

Lenka, S. K. and Samantaraya, A. (2010) 'Government-Sponsored Development Programs for Rural India: A Case Study of SGSY in Orissa', *The IUP Journal of Public Finance*, Vol. 8, No. 4, pp. 21–30 [Online]. (Accessed 30 July 2014).

Macmillan Dictionary (2014) *Development - Definition of Development by Macmillan Dictionary* [Online]. Available at http://www.macmillandictionary.com/dictionary/british/developmenthttp://www.macmillandictionary.com/dictionary/british/development (Accessed 26 July 2014).

Mayor, F. (1994) *World Summit for Social Development* [Online], UNESCO. Available at http://unesdoc.unesco.org/images/0009/000981/098176eb.pdf (Accessed 16 August 2014).

Mccool, S. F. and Stankey, G. H. (2004) 'Indicators of Sustainability: Challenges and Opportunities at the Interface of Science and Policy', *Environmental Management*, Vol. 33, No. 3, pp. 294–305 [Online]. (Accessed 9 August 2014).

McKenzie, R. B. and Tullock, G. (2012) *Maslow's Hierarchy of Needs and Economist's Demand // The new world of economics: A remake of a classic economics book for new generations of economics students* [Online], 6th edn, Berlin, London, Springer. Available at http://download.springer.com/static/pdf/979/chp%253A10.1007%252F978-3-642-27364-3_3.pdf?auth66=1407581244_83b7bf64223dfa03d50b2b87f79499e2&ext=.pdf (Accessed 7 August 2014).

McNicoll, G. (2003) 'Review on Bhalla's "Imagine there is no Country: Poverty Inequality and Growth in the Era of Globalization"', *Population and Development Review*, Vol. 29, No. 2, pp. pp. 322-324 [Online]. (Accessed 19 August 2014).

Meadows, D. L. (1972) *The Limits to Growth // The limits to growth* [Online], New York, Universe Books. Available at http://www.donellameadows.org/wp-content/userfiles/Limits-to-Growth-digital-scan-version.pdf (Accessed 12 June 2014).

Meier, G. M. and Rauch, J. E. (2000) *Leading Issues in Economic Development // Leading issues in economic development*, 7th edn, New York, NY, Oxford University Press.

Meyer, B. D. and Sullivan, J. X. (2012) 'Identifying the Disadvantaged: Official Poverty, Consumption Poverty, and the New Supplemental Poverty Measure', *Journal of Economic Perspectives*, Vol. 26, No. 3, pp. 111–136 [Online]. (Accessed 12 August 2014).

MISHRA, A. and RAY, R. (2011) 'Prices, Inequality, and Poverty: Methodology and Indian Evidence', *Review of Income and Wealth*, Vol. 57, No. 3, pp. 428–448 [Online].

Mitra, A. and Schmid, J. P. (2008) 'Growth and Poverty in India: Emerging Dimensions of the Tertiary Sector', *The Service Industries Journal*, Vol. 28, No. 8, pp. 1055–1076 [Online]. (Accessed 23 July 2014).

Murphy, K. (2012) 'The Social Pillar of Sustainable Development: A Literature Review and Framework for Policy Analysis', *Sustainability: Science, Practice, & Policy*, Vol. 8, No. 1 [Online]. (Accessed 7 August 2014).

OECD (2001) *Sustainable Development: Critical issues* [Online], Paris, France, OECD. Available at http://www.keepeek.com/Digital-Asset-Management/oecd/environment/sustainable-development_9789264193185-en (Accessed 2 August 2014).

OECD (2008) *OECD Inisghts: Sustainable Development: Linking Economy, Society, environment* [Online], OECD. Available at http://www.oecd.org/insights/41773991.pdf (Accessed 29 September 2014).

Panda, N., Mahapatra, A. S. and Samal, R. (2012) 'Impact Evaluation of SGSY on Socio-Economic Development of Women in Aquaculture in Eastern Hills of Orissa', *Aquaculture International*, Vol. 20, No. 2, pp. 233–247 [Online]. (Accessed 31 July 2014).

Parayil, G. (1996) 'The ' Kerala model' of Development:: Development and Sustainability in the Third World', *Third World Quaterly*, Vol. 17, No. 5 [Online]. (Accessed 4 August 2014).

Parthasarathi, N. and Aryasri, A. (2014) 'Infrastructure Development in India: Financial Issues and Solutions', *ASCI Journal of Management*, Vol. 43 [Online]. (Accessed 16 August 2014).

Peeters, H. (2003) 'Sustainable Development and the Role of the Financial World', *Environment, Development and Sustainability*, Vol. 5, pp. 197–230 [Online]. (Accessed 24 July 2014).

Prasso, S. (2014) 'In India, Slum Dwellers Move Into High Rises', *Bloomberg Businessweek*, No. 4392, pp. 13–15.

Prusty, S. (2009) 'Analysis of Poverty, Openness and Literacy in India', *Paradigm*, Vol. 13, No. 2 [Online]. (Accessed 23 July 2014).

Pülzl, H., Prokofieva, I., Berg, S., Rametsteiner, E., Aggestam, F. and Wolfslehner, B. (2012) 'Indicator Development in Sustainability Impact Assessment: Balancing Theory and Practice', *European Journal of Forest Research*, Vol. 131, No. 1, pp. 35–46 [Online]. (Accessed 31 July 2014).

Ramakrishna, G. (2011) 'India's Trade Policy: The Impact on Economic Growth, Balance of Payments and Current Account Deficit', *Journal of International Economics*, Vol. 2, No. 1, pp. 4–17 [Online]. (Accessed 29 September 2014).

Ravallion, M. (2011) 'A Comparative Perspective on Poverty Reduction in Brazil, China, and India', *The World Bank Research Observer*, Vol. 26, No. 1, pp. 71–104 [Online]. (Accessed 23 July 2014).

Reddy, S. G. and Minoui, C. (2007) 'Has World Poverty Really Fallen?', *Review of Income and Wealth*, Vol. 53, No. 3, pp. 484–502.

Rojas, M. (2009) 'Enhancing Poverty-Abatement Programs: A Subjective Well-Being Contribution', *Applied Research in Quality of Life*, Vol. 4, No. 2, pp. 179–199 [Online]. (Accessed 3 August 2014).

Sen, A. and Himanshu (2004) 'Poverty and Inequality in India: Getting Closer to the Truth', Vol. 39, No. 38 [Online]. (Accessed 27 August 2014).

Shah, S. and Ramamoorthy, V. E. (2014) *Soulful Corporations: A Values-Based Perspective on Corporate Social Responsibility*, New Delhi, Springer India.

Shmelev, S. E. (2012) *Ecological Economics: Sustainability in Practice* [Online], Dordrecht, Springer. Available at http://download.springer.com/static/pdf/231/ bok%253A978-94-007-1972- 9.pdf?auth66=1406536254_5305718e5d495cf9120071a0034f1f97&ext=.pdf (Accessed 26 July 2014).

Siggel, E. (2010) 'Poverty Alleviation and Economic Reforms in India', *Progress in Development Studies*, Vol. 10, No. 3, pp. 247–259 [Online]. (Accessed 23 July 2014).

Singhiv, G. S. and Joseph, K. (2013) 'Plastic Waste Time Bomb Ticking for India, SC Says', *Chemical Business*, Vol. 27, No. 4, pp. 24-25. 2p. [Online]. (Accessed 28 August 2014).

Strange, T. and Bayley, A. (2008) *Sustainable Development: Linking Economy, Society, Environment* [Online], Paris, Organisation for Economic Co-operation and Development. Available at http://www.oecd.org/insights/41773991.pdf.

Stutz, J. (2010) 'The Three-Front War: Pursuing Sustainability in a World Shaped by Explosive Growth', *Sustainability: Science, Practice, & Policy*, Vol. 6, No. 2, pp. 49–59 [Online]. (Accessed 7 August 2014).

Suda, T. and Bantilan, M. (2014) 'Achievements and Challenges of SHG-Bank Linkage Program in India: The Result of Village Surveys in Andhra Pradesh and Maharashtra', in Bhandari, A. K. and Kundu, A. (eds) *Microfinance, Risk-taking, Behaviour and Rural Livelihood* [Online]. (Accessed 30 July 2014).

Takashino, N., Maharjan, K. L. and Fukui, S. (2014) 'Impacts of Caste, Risk, and Time Preference on Borrowing Behaviour: A Case Study in West Bengal, India', in Bhandari, A. K. and Kundu, A. (eds) *Microfinance, Risk-taking, Behaviour and Rural Livelihood* [Online]. (Accessed 30 July 2014).

Tendulkar, S. D. (1995) 'Economic Reforms and Poverty', *Economic and Political Weekly*, Vol. 30, No. 23, pp. 1373–1375 [Online]. (Accessed 30 July 2014).

Tendulkar, S. D., Sengupta, S. and Radhakrishna, R. (2009) *Report of the Expert Group to Review the Methodology for Estimation of Poverty* [Online], Government of India. Available at http://planningcommission.nic.in/reports/genrep/rep_pov.pdf (Accessed 29 July 2014).

The Economist (2014) *Economist Debates: India's economy: India's Economy: As Economic growth slows, is India losing its way?* [Online]. Available at http:// www.economist.com/debate/debates/overview/238 (Accessed 4 August 2014).

The World Bank Group (1997) *India: Achievements and Challenges in Reducing Poverty* [Online]. Available at http://www-wds.worldbank.org/external/default/WDSContentServer/ WDSP/IB/1997/06/01/000009265_3971113151130/Rendered/PDF/multi_page.pdf (Accessed 29 July 2014).

The World Bank Group (2000) *Attacking Poverty* [Online], New York: Oxford University Press. Available at https://openknowledge.worldbank.org/handle/10986/11856 (Accessed 30 July 2014).

The World Bank Group (2005) *India's Undernourished Children: A Call for Reform and Action* [Online]. Available at http://siteresources.worldbank.org/SOUTHASIAEXT/ Resources/223546-1147272668285/IndiaUndernourishedChildrenFinal.pdf (Accessed 27 September 2014).

The World Bank Group (2011) *Poverty - Basics of Poverty Reduction & Inequality Analysis* [Online]. Available at http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/ EXTPOVERTY/ 0,,contentMDK:23003423~pagePK:210058~piPK:210062~theSitePK:336992,00.html (Accessed 30 July 2014).

The World Bank Group (2014a) *GDP Growth (annual %) | Data | Table* [Online]. Available at http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?page=1&display=default (Accessed 27 September 2014).

The World Bank Group (2014b) *Poverty And Inequality Database | Data | The World Bank DataBank - Create Widgets or Advanced Reports and Share* [Online]. Available at http:// databank.worldbank.org/data/views/variableselection/ selectvariables.aspx?source=poverty-and-inequality-database (Accessed 28 August 2014).

UNECE, OECD and Eurostat Working Group on Statistics for Sustaianable Developmemt (2008) *Measuring Sustainable Development* [Online]. Available at http://www.oecd.org/ greengrowth/41414440.pdf (Accessed 23 July 2014).

United Nations (1992) *Agenda 21* [Online]. Available at http:// sustainabledevelopment.un.org/content/documents/Agenda21.pdf (Accessed 23 July 2014).

United Nations (1995a) 'World Summit for Social Development' [Online]. Available at http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N95/116/51/PDF/ N9511651.pdf?OpenElement (Accessed 7 August 2014).

United Nations (1995b) *World Summit for Social Development* [Online]. Available at http:// daccess-dds-ny.un.org/doc/UNDOC/GEN/N95/116/51/PDF/N9511651.pdf?OpenElement (Accessed 7 August 2014).

United Nations (2007a) *Indicators of Sustainable Development: Guidlines an Methodologies* [Online]. Available at http://www.un.org/esa/sustdev/natlinfo/indicators/guidelines.pdf (Accessed 13 June 2014).

United Nations (2007b) *Population Living Below Poverty Line* [Online]. Available at http:// www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets/poverty/ national_poverty_line.pdf (Accessed 22 July 2014).

United Nations (2007c) *Ratio of Share in National Income of Highest to Lowest Quintile* [Online]. Available at http://www.un.org/esa/sustdev/natlinfo/indicators/ methodology_sheets/poverty/ratio_quintile.pdf (Accessed 22 July 2014).

United Nations (2013) *World Economic and Social Survey: Sustainable Development Challenges* [Online]. Available at http://sustainabledevelopment.un.org/content/ documents/2843WESS2013.pdf (Accessed 24 June 2014).

Wamsley, J. J. (2002) 'Framework for Measuring Sustainable Development in Catchment Systems', *Environmental Management*, Vol. 29, No. 2, pp. 195–206 [Online]. (Accessed 1 August 2014).

WCED (1987) *Our Common Future: Report of the World Commission on Environment and Development* [Online]. Available at http://www.un-documents.net/our-common-future.pdf (Accessed 26 July 2014).

Welfens, P. J. (2008) *Grundlagen der Wirtschaftspolitik: Institutionen - Makroökonomik - Politikkonzepte* [Online], 3rd edn, Berlin, Heidelberg, Springer. Available at http:// download.springer.com/static/pdf/994/bok%253A978-3-540-74773- 4.pdf?auth66=1412265691_7257b95df7c2bff6acd5b358e9606bf0&ext=.pdf (Accessed 30 September 2014).

Zarzosang Varte, I. and Neitham, E. L. (2013a) 'People and development: With special reference to the tribal peoples of north-east India', *International Journal of Development and Sustainability*, vol. 2.

Zarzosang Varte, I. and Neitham, E. L. (2013b) 'People and Development: With Special Reference to the Tribal Peoples of North-East India', *International Journal of Development and Sustainability*, Vol. 2, No. 1, pp. 46–51 [Online]. (Accessed 7 August 2014).

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