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INDIA: SHAPING THE GLOBAL SUSTAINABILITY AGENDA?

Evaluating the vision for Sustainable Development
in 12th Five Year Plan of India

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Abstract:

The purpose of this thesis is to investigate how India's national 12th Five Year Plan (2012-2017) incorporates Sustainable Development, with a special focus on the strength and the weakness of the vision on Sustainable Development. Simply, India is in need of a specific national Sustainable Development strategy. However, a vision on Sustainable Development is clearly integrated in the 12th Five Year Plan, an overall document for the development of India in five next years, which argues that each state, sector and ministries/departments must take sustainability into account. The theory of the thesis suggests at basic that this national Sustainable Development strategy or vision should attempt to balance economic, social and environmental aspects at all times with a wide-ranging participation and consensus. A qualitative content analysis was used to analyse the 12th Five Year Plan and this was done by Cherp et al (2004) National Sustainable Development Strategy framework, which the five above mentioned criteria's could analyse Sustainable Development in a broad setting. The further criteria's in Cherp et al (2004) framework to see how the 12th Five Year Plan incorporates SD are: ownership and commitment, comprehensive and coordination policy process and targeting, resourcing and monitoring. The analysis is expected to show that there is a balance or that the national vision is mainly based on economic factors. The analyse shows that the 12th Five Year Plan incorporates Sustainable Development mainly in terms of the economy and that there is not always a good balance between social, environmental and economic aspects in the various sections of the plan. Furthermore, there is a lack in participation and consensus and capacity to implement strategies.

Key words: Sustainable Development, National Sustainable Development Strategies, Planning Commission of the Government of India, Agenda 21, Johannesburg Summit, Aleh Cherp, Elkington

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1. Introduction

Since the beginning of the industrialization the development of the society has been accompanied by a rapid pollution that has become a major global problem. With the raising awareness of this problem the Brundtland report *Our Common Future* (WCED, 1987) defined the concept of Sustainable development (SD). The United Nations World Commission on Environment and Development (WCED) identified the various governmental levels to be the key actors and the key was to make the human development as one main track that does not destroy the whole planet. If man proceeds doing nothing, the future generations would be endangered.

Some years later The United Nations conference on Environment and Development (UNCED) in Rio de Janeiro (1992) recognized an action plan for SD. The main goal of this non-binding action plan (often referred to as the Agenda 21) was to create mechanisms to strive for SD at international, national, regional and local levels. Ten years later a UN conference was held in Johannesburg in South Africa, which is often referred to as the Johannesburg summit. This summit reaffirmed the Agenda 21, but updated the content, particularly strengthening the links between environmental protection and poverty. The actors participating in the Johannesburg summit were not only governments, but also non-governmental organizations, intergovernmental organizations and commercial structures (WSSD, 2002). In 2012 the Rio+20 conference largely reaffirmed the Agenda 21, although the concept of “green economy” was the most important update (UNCSD, 2012:9-12). Despite hopes of more specific practical solutions and convening binding goals, no specific binding agreements were decided. The main approach of how states shall implement SD has throughout these summits been based on a solicitation that each state shall cooperate and try to integrate SD, which shall be based on an integration of environmental and development concerns at all levels of the society.

The IISD (International Institute for Sustainable Development) coordinated in 2004 a research on 19 countries national SD strategies and outlined how the countries selected organized their SD strategies. One of the countries investigated was India. In that study it was made clear that India’s plans and strategies regarding SD were highly integrated in their national Five Year Plan (Tharan, 2004). Five years later Berger et al conducted a similar updated study which confirmed the same (Berger et al, 2009:8). Recently, the first volume of latest Five Year Plan of India, the 12th Five Year Plan (FYP), got called a “faster, more

inclusive and sustainable growth”, which indicates that the goal of the plan is SD (12th FYP of the Government of India, 2013). India is a country that has a great opportunity in shaping the global SD agenda, with both promises of keeping low GHG-emissions per capita and vast changes of a massive amount of the population moving into the cities.

Some countries have applied a specific document when it comes to how they address the progress of their goals towards SD (a national SD strategy), whereas other countries have included their plans regarding SD in their Poverty Reduction Strategy or in a National Vision. The international forum on national SD strategies, held in Accra in 2001, agreed that a National Vision, National Agenda 21 or Poverty Reduction Strategy as frameworks can provide a good basis for a strategic action towards SD (NSSD, 2001). A national SD strategy and a National Vision of a country are the same, because if both have common characteristics and are effective, they act as an appropriate strategy towards SD (ibid). Several scholars have investigated various countries, especially Eastern European countries, when it comes to how effective national SD strategies have been in promoting SD (Cherp et al, 2004, Meadowcroft, 2007:153). Some countries have also assessed the effectiveness of the national SD strategy themselves. However, India which overarching goal in their 12th FYP is to achieve a growth that is: “faster, inclusive and sustainable”, has not been researched how effective the national 12th FYP is promoting SD.

1.1 Aim of the thesis and Research question

The purpose of this study is to examine the strengths and the weaknesses of India’s national vision of SD in India’s 12th FYP. Further, the study attempts to explore the extent to which India’s 12th FYP (2012-2017) promotes sustainable development, especially in relation to social concerns. A case study on how India’s 12th five year plan (2012-2017) reflects the SD concept is necessary due to that 1/3 of the total amount of the world’s extreme poor live in India and 2/3 of the population are directly dependent on agriculture, fisheries and forests. The government of India stated in their national 10th five year plan (2002-2007) that a specific national SD strategy would be created by 2005. However, India has so far not implemented any specific strategy. India has neither a national SD strategy nor a PRSP (Poverty Reduction Strategy Paper) to outline specific plans for a poverty reduction.

The most prominent formal document that integrates the concept of SD in India is the 12th FYP prepared by the Planning Commission of the Government of India in 2013. The

integration is certainly obvious when the first volume of the 12th FYP was named: “Faster, more inclusive and sustainable growth”. My research is suitable especially now, because India is undergoing a change by replacing the Planning Commission by an institution named NITI (National Institution for Transforming India), which announced its formation on 1st of January in 2015. Consequently investigating the strengths and weaknesses is necessary in order to evaluate how India’s 12th FYP made by the Planning Commission is promoting SD. More specifically it wants to find out how the concept of SD is perceived, what goals and objectives the 12th FYP has, which points are satisfying and what could be improved. Consequently the research question is the following:

How does the 12th five year plan of the Government of India incorporate the concept of SD?

1.2 Summary

Consequently, the first chapter will provide the background of SD, India and national SD strategies and why the topic was chosen. Chapter two will consist of a literature review on India, SD and national SD strategies. It will give the reader multiple reasons of why India was selected and comprehensively describe how I perceive SD and what is important for a national SD strategy. A summary of previous research findings will be presented and clarified at large. Chapter three, the theoretical framework of this thesis regards the theories of SD and the criticism of the concept. It also describes the theories that relates to national SD strategies framework and which framework that was chosen. Chapter four, methodological approach, will illustrate the methods available for this thesis and the one picked, but also give the reader an explanation how the ‘scoring’ was performed. Chapter five, the analysis, is divided into seven different sub-chapters with an introduction, the five sub-chapters deriving from the national SD strategy framework and a summary with the limitations of this thesis. Chapter six, results and recommendations, gives the reader what results can be drawn from the analysis. This chapter further consists of future recommendations both for the 12th FYP of the Government of India but also for future research.

2. Background and Previous research

2.1 India

India has a total amount of 2.4% of the world's land and 17% of the total world population (Myers et al, 2013:49). India has since 2012 been backed by a strong electoral mandate and a government that is actively working on clean technologies and energy efficiency in its endeavour to pursue a low-carbon growth model (Planning Commission, Government of India, 2014). Their plans with the clean technologies and energy efficiency constitute as a major plan in their energy sector. In 2013 an Indian renewable energy and energy efficiency database website opened (IREED). In the database one can find that India's National Solar Mission from 2014-2015 plans to set up 15,000 million watts of grid-connected solar power until 2017 (Ministry of New & Renewable Energy, Government of India 2015). When it comes to GHG-emissions per capita, India is only one-third of the global average of 5.3 tons of carbon dioxide per person and much lower than any of the developed countries. As an example according to the statistics of 2011 United States emits 17 tons and India 1.8 tons of carbon dioxide per person (WB, 2015a). The prime minister of India Manmohan Singh stated on a G8+5 meeting in Heiligendamm that India's emission level per capita will never exceed the average per capita as in the levels of the developed countries (12th FYP, Planning Commission, Government of India, 2013, Vol 1, p.223).¹

Chapter 8 of the Agenda 21 calls for countries to adopt national strategies for sustainable development. 106 countries had adopted a specific strategy by 2009 (UN, 2015b). India is not among these 106, but has still different strategies and a vision regarding SD, as can be indicated throughout the whole 12th FYP, and specifically referred to in chapter 4 'Sustainable Development'. The reasons for why India should adopt a specific National Sustainable Development Strategy are many, but since several strategies or visions are integrated in the 12th FYP a possible idea would be to further develop the ideas within the Five Year Plan into a single strategy document. An evaluation is necessary to find out where the 12th FYP has departed in SD, what is concluded and what can be improved. Its visions are explicitly explained in the overarching goal of the 12th plan that an economic, inclusive and sustainable growth is the overall goal. The national plan is the backbone of the Government of India's national planning process and chapter 4 specifically address SD as an own chapter. The five year plan also interlinks their plan on a poverty reduction in their first chapter, which

¹ The source: (12th FYP, Planning Commission, Government of India, 2013, vol x, page. number) refers to pages in one of the three volumes of the 12th five year plan of the Government of India (2012-2017).

is one of the most important aspects of the SD. The 12th FYP refers to several national Indian policy programmes and strategies that address poverty and SD issues. National Environmental Policy (NEP), 2006, which address the importance of sustainable development in a combination of ecological constraints and social justice, but also The National Agricultural Policy, the National Electricity Policy and the Integrated Energy Policy (Ibid, p.115).²

The main reasons for choosing India are several. Firstly, as explained earlier the governmental agency, the Planning Commission of India, set their aim of the country's planning that it must follow a sustainable growth. Secondly, poverty reduction is a very important aspect of SD and 1/3 of the world's extreme poor live in India (Millennium development goals 2014:9). Despite several strategies and programmes implemented, India has reduced people living in extreme poverty from 48% in 1990 to 32% in 2010 (ibid). An estimated 2/3 of the total population is directly depending on agriculture, fisheries and forests (Sathaye et al, 2006:324). According to Sathaye et al (2006) climate change is likely to have high implications on food production, water supply and livelihoods in India. Third and lastly, there is much research made on SD and especially European countries. However SD and India's future plans have not been investigated in terms of the strengths and weakness of their plans regarding SD.

India is in a need of sustainable development strategies that, as process, both favors the environment and vastly decreases the amount of people in extreme poverty. Another specific point of departure when it comes to SD is that India needs to be cautious about the urbanization, where it is expected that the urban population will increase from 377 million to 590 million by 2030 according to Mc Kinsey Global Institute (2010). It is in order to follow SD important to build green infrastructure and create a sustainable housing and lifestyle. However, this might be difficult as ¼ of all urban housing is at present slums. The urban areas constitute about 90% of GDP and require much energy (WB, 2015b). This might constitute a challenge because India is the third top coal user in the world according to statistics from 2009. India's use of coal energy is also estimated to 54% of the total energy usage (IEA, 2012:46). India has as all other countries in one way or other issue with increasing environmental problems followed by an ever-increasing industrialization and has as many developing countries a long way to reach an environmental quality similar to the developed economies. Despite the situation of an increasing pollution the environmental situation was

² These various policies and documents will not be analyzed due to that they are constantly referred to in the 12th FYP chapter 4. Moreover, they do not cover a 'whole strategy' of India in a way as the 12th FYP does.

overall worse in India between 1947 and 1995. Between 1995 and 2010 India has achieved to be one of the fastest countries in the world to address its environmental issues and improving its environmental quality (WB, 2010). India has as well a national forest policy which aims to increase India's forest cover from 20 to 33% by 2020 (Ministry of Environment & Forests, Government of India, 2012).

SD does not only consider environmental issues but the whole planning of a country. However the environment is one key point as it shall be integrated into each aspect of the society. A country's environmental problems are related to a country's economic development, demographic and pollutants produced by industrial production systems with emissions (Jöst et al 2006). SD is related to many more issues, but some are more urgent, as will be described in the next chapter. The effectiveness of SD is dependent on the governance's capacity of India to in the end guarantee a complete interaction among economic, social and environmental issues. Therefore now, India has a great opportunity in shaping the global sustainability agenda with the change of the population moving into the cities and the low GHG-emissions per capita, but also the achievement of improving its environmental quality. They also have an opportunity because the promise of focus on clean energy technologies and energy efficiency. Several of the issues and the development of India have to be solved in the context of a sustainable and inclusive growth, as argued in the beginning of the volume one of the 12th FYP of the government of India.

2.2 Sustainable Development

“Earth provides enough to satisfy every man's need, but not every man's greed”

- Mahatma Gandhi.³

What firstly needs to be defined is *Sustainable development*. In 1987 the Brundtland Report was published by United Nations World Commission on Environment and Development. The guiding principles in that report state that SD consists of a balance between nature and society. The importance is a balance within a society at their stage of development (WCED, 1987). The Brundtland Report laid the groundwork for the Earth Summit ‘Agenda 21’ as this idea was made official at the UN Conference on Environment and Development in Rio de Janeiro in 1992. The ‘Agenda 21’ starts with: ‘an integration of the environment and

³ Quoted in Pyarelal Nayyar (1958) Mahatma Gandhi: The Last Phase (Volume 10), page 552 (1958).

development concerns (...) will lead to the fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems” (UNCED, 1992:3). The countries signed upon the conference the non-binding agreement and agreed to do as much effort as possible in several areas regarding SD.

In 2002 a UN conference took place in Johannesburg (the Johannesburg summit). In this summit the task of “environment for development” became the primary and the problem was dominated by a discussion how to on a practical level integrate the environment. Two outcome documents were made during the summit: “Plan of implementation of the World Summit on Sustainable Development” and the “Johannesburg Declaration on Sustainable Development”. The priority was in both outcome documents specifically given to social issues of SD and particularly poverty eradication, promotion of health and the newly priorities integrated into the planning process, sanitation and clean drinking water (WSSD, 2002).

The Johannesburg Declaration on Sustainable development changed the focus to not only a focus on the environmental aspects as primary, but also complementing the “development” term with social aspects of development (The Johannesburg Declaration on Sustainable development, 2002). The Rio+20 outcome document reaffirmed in 2012 the Johannesburg Summit and similar principles. The focus was further for states to set up SDGs (Sustainable development Goals), which should be built upon the Millennium Development Goals and the post-2015 Millennium Development Goals. “An inclusive and transparent intergovernmental process open to all stakeholders” is in these goals confirmed to be an important part of the SGSs (UN, 2015a: Internet). This can be translated into that a good governance and transparency is needed in the process of getting SD.

In the Rio+20 the SDGs was specified to be: poverty eradication, food security and nutrition, health and population dynamics, education, gender equality and women’s empowerment, water and sanitation, energy, economic growth, industrialization, infrastructure, employment and decent work for all, promoting equality, sustainable cities and human settlements, sustainable consumption and production, climate, marine resources, oceans and seas, ecosystems and biodiversity, means of implementation and peaceful and non-violent societies (The UN, 2014). Although specified these goals have been mentioned since the Agenda 21. What has changed is the focus specifically to poverty eradication, promotion of health and water and sanitation in the planning process (The Johannesburg Declaration on Sustainable development, 2002).

The reasons for interlinking poverty reduction and SD are many. Not surprisingly the Agenda 21 first chapter starts with poverty alleviation and the WSSD links the goals of poverty alleviation together with the Millennium goals. Eradicating poverty is outlined as the greatest challenge facing the world today and the goal in the WSSD outcome document was straightforward to follow the Millennium goals and reduce poverty by half by 2015 (WSSD, 2002). In the environmental debate there has for long been a discussion regarding leapfrogging. Several authors argue that developing countries can leapfrog polluting development using clean, efficient technologies and that this new technologies are the great contribution that the idea of sustainability offers (Anderson, 1996; Goldemberg et al, 1998; World Bank, 2003). As a criticism to this some argue that SD in practice condemns developing countries into poverty, where people in the developing countries are encouraged to use tools that do not pollute (NY Times, 2007). To stay in a certain lifestyle or put limits to growth or to develop can be argued to have been the argument towards the developing countries when *Our Common Future* was published in 1987. Hence, the developing countries made it clear at start that they will not accept limits to growth, because they also want to both develop economically and improve their lifestyle (Langhelle, 1999:146-147).

This led to a north-south divide in the arguments regarding SD when it comes to especially the environmental pillar of SD. Where countries such as China and India, as examples, since long argue by the principle that there are: ‘‘common but differentiated responsibilities’’, when it comes to the efforts regarding SD and lowering of Green House Gas emissions. Both countries have long argued that the developed countries have more responsibilities when it comes to the environment (Fues et al, 2014:47). In the WCED it is stated that ‘‘the world must design strategies that will allow nations to move from their present, often destructive, processes of growth and development onto sustainable development paths’’ (WCED, 1987:49). To relate back to the poverty reduction and the sustainable development nexus this is problematic, where the problem is that the economic pillar of *Our Common Future* has been at too much focus. It was presented as necessary in the WCED to link economic development and environmental questions in a positive way. In the WCED poverty was described as a major cause of environmental problems, and if economic growth contributes to the reduction of poverty, economic growth will be good for the environment and automatically solve all environmental problems. This view implies ‘‘that you can have your cake and eat it too’’ (Langhelle, 1999:141).

The debate has however changed over time. There is a broad debate whether poverty causes environmental deprivation or if it is simply the other way around. According to Durraipah (1998), which has investigated the poverty and environmental degradation nexus, the poor do not directly or indirectly affect a degradation of the environment, but other factors, such as institutional and market failures cause an environmental degradation. It is rather the lifestyle of the wealthy and the powerful that degrade the environment, because they can influence the market to their advantage (Durraipah, 1998:2177). A large population increase and a large amount of over-using the nature by the industrialized countries is the cause for the environmental deprivation (SERI, 2009).

In the Johannesburg summit outcome document both sides of the coin are present and the outcome document ‘protects’ itself by explaining both. It is clarified that poverty causes environmental deprivation, but also the need of SD-processes in order to reduce poverty, which makes it possible to interpret and focus differently. It is possible to either first focus mainly on a poverty reduction (by traditionally economical means to lower poverty), which per automatic will lower the environmental deprivation. Another way is to focus on environmental, health, water and sanitation, agriculture etc. issues to get a poverty reduction and by that in the end achieve SD (WSSD, 2002). However this is a complex issue, where the main aim is a poverty reduction, but how to reach there is a bit diffuse in the summit, because one may interpret it as not possible to reduce poverty without an economic growth.

Poverty reduction is as argued by the OECD, the UN, the UNDESA and several international organizations and reports, to be multidimensional. More specifically poverty reduction is a key to all other elements and the important part in poverty alleviation goals to ensure basic needs for all, such as health, education and productive resources (UN DESA, 2010:8-10). The recommendations by Sida, a Swedish aid organization, and UNDP (United Nations Development Programme) are that poverty must be reduced in the context of environmental sustainability. This meaning a specific focus on protecting environmental systems, drinking water and sanitation, and sustainable resource management is required to ensure a sustainable poverty reduction (UNDP, 2013; Sida, 2014). At core the problematics are if the population of the developing countries follows the same track as the developed countries and start live the same way, then this would increase the environmental crisis.

2.3 National SD Strategies

A national SD strategy is defined as a strategy or a vision to make the development of the country sustainable. In the case of India's 12th FYP the overall goal of the plan is an inclusive and sustainable growth, proposedly in terms of what the previous SD agendas and meetings have concluded. There is no specific national SD strategy (as the 12th FYP is an overall document for the development of India between 2012 and 2017) in place. However as mentioned when the 11th FYP (2007-2012) was briefly analysed the sustainability concern became vital in the five year plans (Berger et al, 2009:8). Tharan analysed in 2004 similar that the Indian government had no feeling of a specific national SD strategy at the time and concluded that the strategies of sustainable development were integrated into the 10th FYP (2002-2007). The goals in the 10th FYP were a poverty reduction of 5% until 2007 and 15% to 2012. All children should be in elementary school by 2003, reduce population growth, increase tree coverage to 25% by 2007 and 33% by 2012, all villages have access to water by 2007 and cleaning of all major polluted rivers by 2012. An inter-generational equity was however lacking and not a major part of the 10th FYP (Tharan, 2004:7). Since the plan has extended to claim that SD must be integrated within each section one analyse and assess whether the 12th FYP have consequent strategies to effectively plan for promoting SD. In the previous plan (the 11th FYP of the Government of India) the first volume was called inclusive growth and the 12th added "sustainable" as a new word.

Firstly, there are multiple methods of assessing a national SD strategy that have emerged in the literature (see e.g. Niestroy, 2005, Swanson et al 2004, Berger-Steurer, 2006 and Cherp et al, 2004). Niestroy developed an evaluation framework by a study on 9 European countries. This framework as evaluation model focuses towards European developed countries and their vertical and horizontal mechanisms affecting each SD council of each country. There is also focus on the link between national SD councils and their connection to the EU SD strategy, which makes it difficult to apply this model when one investigates India (Niestroy, 2005). Berger-Steurer also focuses on assessing but covers the different approaches in the evaluation of national SD strategies in Europe (Berger-Steurer, 2006). Cherp et al (2004) have constructed a model with five core principles. The first two core principles come from the Agenda 21 which stresses the importance of a combined integration of social, economic and environmental factors and an active participation in the national SD strategy. The three other assess the ownership, the comprehension, the targeting and monitoring of a countries national SD strategy. These five core principles clearly reflect

to a link between both what is argued in the summit outcome documents, but also the assessment criteria's made by the OECD and the UN. The ideas and strategic planning evolves over time as a 'rational' model of a sequential cycle of formulation, implementation, monitoring and evaluation (Cherp et al, 2004). The evaluation framework made by Swanson et al, which in their study of 15 countries investigated India in 2004, is rather similar to Cherp et al with categories such as leadership, planning, implementation, monitoring, co-ordination and participation (Swanson et al, 2004).

Secondly, what has evolved since these assessment methods were created are concepts such as governance and transparency, which has been included to have an important role for a national SD strategy and how a country is performing (EU, date; IISD, 2013; UN, 2015b). The European Commission recommends in their latest European SD Strategy that a balance is necessary in the evaluation and that there is a broad participation, similar to Cherp et al's second core principle. There is an importance of a broad participation of the CSO (Civil society organization) in the last updated European NSSD strategy (European Commission, 2006).

Thirdly, this thesis wants to assess the SD processes of the government of India's 12th FYP according to the five principles made by Cherp et al (Cherp et al, 2004; UN, 2001; OECD, 2001). There is no broad plethora of studies made with specifically Cherp et al's framework. This is due to that several other frameworks exist and several studies have been built on these different framework depending on in which context the researcher want to analyse a national SD strategy (see EASY-ECO Vienna Conference, 11 March, 2008). According to a table by Gathy (2008) among various national SD strategy frameworks, Cherp et al's framework engages in fewer criterions than the other frameworks (Gathy, 2008:9). The studies performed with this framework are suitable for analysing the strength and weakness of a national SD strategy. According to Cherp et al the framework was meant to be shaped for medium-sized projects for scholars, country officials and aimed towards a country's own strategic planning process (Cherp et al 2004:919-920). In a master thesis made by Persson in 2005 of Ethiopia's poverty reduction strategy paper (PRSP) as a SD strategic paper it was concluded that an analysis of the PRSP along with interviews worked as a method to assess Ethiopia's national SD strategy. It was also concluded that on several points of the criteria's used the contents of the strategy was not satisfactorily covered. A reason behind this was lack in capacity building and lack of a comprehensive strategy that could work as an efficient national SD strategy (Persson, 2005). In a master thesis made by Timbo similar was

concluded, that there was a lack of capacity and of a comprehensive and coordinated strategy in the PRSP, Gambia’s Vision 2020 and The National Action to Combat Desertification documents (Timbo, 2006). However before a model that evaluates India and their integrated national SD vision, it is required to outlay the theoretical framework of SD and the framework that will be used to evaluate the plan.

3. Theoretical framework

3.1 Definition of Sustainable development

Sustainable development can mainly be defined within three dimensions: *economic, social and ecological* components that are interlinked with each other. The SD entails a balancing of these three objectives and the goal is to, whenever it is possible, integrate them, through mutually supportive policies and practices (OECD, 2001, UN 2007, Graniger et al 2013). This three-pillar approach was created by the Brundtland report and can be argued to be crucial in the definition of SD (WCED, 1987). Several authors rename the three pillars and argue that this view is too anthropocentric and that the focus has generally been on the economic pillar (Pezzey, 2004). The three pillars of WCED are referred to another model called ‘‘the triple bottom line’’ by (Elkington, 2007), which can be referred similarly to, ‘‘environmental responsibility, social awareness and economic profitability’’. The most prominent visual example of this pillar-approach could be drawn from the IUCN Report ‘‘The Future of Sustainability: Re-thinking Environment and Development in the Twenty-first Century’’ (2006) (see Figure 1 A-C). It includes the integration of three pillars as the ‘‘interlocking circles’’ (IUCN, 2006).

Figure 1.A. The theory

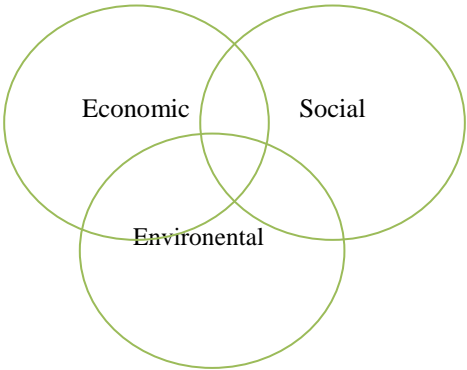


Figure 1.B. Now

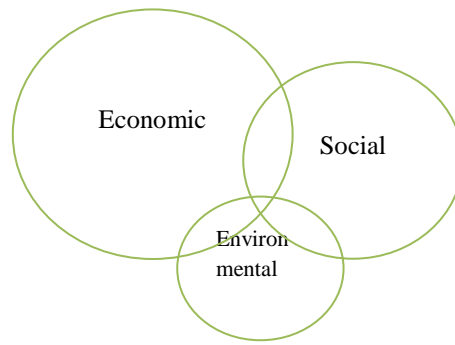
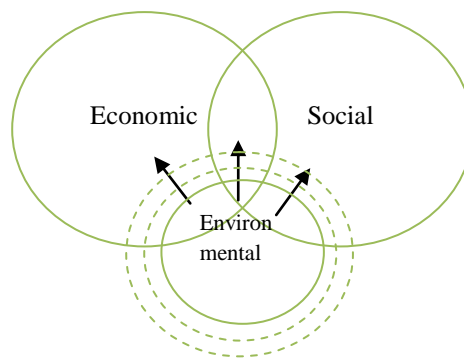


Figure 1.C. The change needed



The first figure (1.A.) show the WCED model ‘as it should be’, that each aspect share the same space. As shown in the figure (1.A.) the pillars are highly integrated, where the goal is to integrate the pillars and to get a balance between the three (Cherp et al, 2004). According to Elkington’s ‘Triple Bottom Concept’ the term SD should be to care for the environment, be good to the people by improving facilities for especially minorities or disadvantaged persons. When it comes to economic dimension the government’s goal to excess revenue over expenditure is not considered as an appropriate goal for government policy. The goal related to the change needed (1.C.) is an economic sustainability where social and environmental goals are included, not necessary a surplus (Elkington, 2007, Kuhlman et al 2010:3438).

The current three pillars of SD need, as shown in the third interlocking circle, a further extension and growth, the environment should be considered as the vital and equally important issue as the other two. Kates et al. (2005) came up with this perspective. In their model of SD the authors identify SD as a set of clear principles of social and natural approaches to development. The sustainable development as concept can be defined in more various ways as the scientific debates of the meaning of SD have changed since the Brundtland report was submitted. An alternative sustainability triangle made by Seghezzeo

(2009:540) states that SD, to get more concrete solutions, should be defined by “Place”, “Permanence” and “Persons”, which in turn can improve certain practical ways of national policies. The term place comes from where people belong and see their environment around them. Permanence is improvements and changes that can be made. Persons refer to the individual and the point is that the individuals and the society might be at an unbalance. The view on sustainable development is dependent on values and rights and the surrounding around an individual and is thereby not a replacement but a complement to the original SD framework (Seghezzeo, 2009:548-552).

The definition “sustainable development” proposed by the Brundtland commission and the three pillar approach is widely used. The SD concept does only reflect what the strategic objectives are and the issue has throughout the summits and conferences afterwards been to point out the way for concrete actions. This was early notified by Lélé, who argues that the concept of SD can be criticized for its vagueness, where specific strategies towards concrete actions by citizens will hardly be organized or realised. It is rather scientists and policy-makers that will be engaged with ecological SD issues (Lélé, 1991:615-616). It has also been criticized by Robinson (2003) that it should include substantial ideas of preserving the environment, where one can know what is “green” or environmentally benign. The issue is not how SD is defined, but how it can be measured in a practice (Robinson, 2003:374).

When the Brundtland report established the concept of SD, it laid the foundation of SD for the Agenda 21, the Johannesburg summit and the Rio+20 outcome documents. The establishment of the concept would in turn affect the international, national and local level implementation based on these summits. The Brundtland report has been criticized for paying too much attention on the economy as the driving force and that the economic components have been dominant in comparison to the social and ecological components (Seghezzeo, 2009:540). The economic aspects have always been most important and played the most important role in the implementation, which has sometimes led to that few important improvements and changes have been made (Jackson, 2009).

The sustainable development embraces at basic wider concerns of the quality of life - nutritional status, educational attainment, access to freedom and spiritual welfare. The term ‘development’ is a value word with no consensus. It is depending on the development agency, government or advisers. Development might include increase in GDP, access to resources, educational achievements and improvements of health depending on the social goals of a

country, region or local area (Pearce et al, 1990:1-3). The often commonly used broad definition of SD can be argued to be problematic, as countries need to focus on several areas at the same time. The progress on countries implementing national sustainable development strategy (NSDS) has also been limited, where many of the strategies that exist have only been partially implemented (Clive et al, 2006). Few actual important changes and improvements under the guiding idea of sustainable development have been achieved so far (see Millenium Ecosystem Assessment, 2005). Despite this criticism it is discernible that SD from a broad literature and from its original point of view implicates to achieve a balance between social, economic and environmental factors. The politics of SD development and the planning in regards to SD can in the end provide to be an effective way to pursue global environment-and-development change (Lafferty, 1996:203). The SDGs from the Rio+20 summit emphasized 19 focus areas, which refers to areas already set as clear goals in the Agenda 21. Each focus area should be present in a national SD strategy and try to be planned with a balance. From the above mentioned definition of SD the assumption is that a national SD strategy seeks to combine economic, social and environmental objects of the society. A national SD strategy try to integrate SD at all times possible and try to do trade-offs when it is not possible in each focus area.

3.2 Principles for Assessing National Sustainable Development Strategies

It is necessary to define the theoretical framework of that assessment method. The method that will be used in order to assess India's 12th five year plan is called the Principles for assessing National Sustainable Development Strategy (NSDS) method. The decision of this model is based on that the method derives from earlier lessons and experience of strategic development planning in lower-income developing and transition countries (Cherp et al, 2004). This framework is developed by Cherp et al (2004), and the method to gather the data to this framework will be described in more detail in the method section. The model of Cherp et al uses five core principles to assess the national SD strategies of countries. The principles are defined as: (1) Integration of economic, social and environmental objectives (2) participation and consensus, (3) country ownership and commitment, (4) comprehensive and coordinated policy process, (5) targeting, resourcing and monitoring (OECD, 2001; UN, 2001, In: Cherp et al, 2004).

In turn there are four key assessment criteria that serve as a basis for an assessment of each particular principle. In order to evaluate a qualitative scoring scheme will be used and a

‘‘sub-chapter’’ on each principle is required in order to give a more detailed explanation of the effectiveness of the planning processes. The theoretical assumption among each criterion is necessary to outline in order to be able to assess India’s national vision on SD. To clearly define the differences between SD processes from other forms of development the Rio Declaration together with Agenda 21 can be taken as the starting point for defining the characteristics of the SD (Cherp et al, 2004). The interpretation of these documents is based on two key principles:

- a) Integration of economic, social and environmental priorities; and
- b) Wide participation of stakeholders in the development process.

The NSDS method which Cherp et al (2004) has conducted defines these two key principles that derive from the Agenda 21 (1992) and the Rio Declaration (1972):

‘‘The first of these principles (‘‘integration’’) means that sustainable development entails balancing the economic, social and environmental objectives of society in decision-making. This involves consideration of the positive and negative economic, social, and environmental consequences of policy changes, the identification of ‘‘trade-off’’(...). In particular, the attention to the ‘‘social’’ pillar of sustainable development means that appropriate weight must be given to the needs of the poor and other disadvantaged or marginalized groups, in integrated policy and decision making’’. (Cherp et al, 2004:914).

The purpose of the assessment criteria (see table 1) is to provide the basis for making a qualitative assessment of the quality of the NSDS (Kirkpatrick, 2001). The assessment is based on a scoring scheme (see table 2). The assessment will be based on scoring grades from A to D, where the outcome is that the grading scores will be higher if the 12th FYP covers the criteria’s and whether the strategic planning integrates certain issues in the plan. For example if India in their integration of economic, social and environmental objectives fully, partly, or unsatisfactorily integrates certain issues (see table 1). Basically to what extent and if the strategic planning covers each criterion will be evaluated and described in a sub-chapter of each criteria in the analysis section.

**Table 1 - A METHODOLOGY FOR ASSESSING NATIONAL
SUSTAINABLE DEVELOPMENT STRATEGIES**

Principles	Criteria	Explanations
Principle A - Integration of economic, social, and environmental objectives	Criterion A1 – Integration	Strategic planning in the country is based on a comprehensive and integrated analysis of economic, social, and environmental issues, which clarifies links between the three spheres, resolves conflicts between them where practicable, and negotiates appropriate trade-offs where conflicts remain.
	Criterion A2 – Social and poverty issues	Strategic planning in the country integrates poverty eradication, gender issues, and the short-term and long-term needs of disadvantaged and marginalised groups into economic policy.
	Criterion A3 – Environmental and resource issues	Strategic planning in the country integrates the maintenance of sustainable levels of resource use and the control of pollution to maintain a healthy environment into economic policy.
	Criterion A4 – International commitments	Measures are in place to ensure compliance with international agreements which the country has entered into, on environmental and social issues
Principle B - Participation and consensus	Criterion B1 – Involvement of stakeholders	The country's processes of strategic planning, implementation, monitoring, and review include the participation of stakeholders, including government, decentralised authorities, elected bodies, nongovernmental and private sector institutions, and marginalised groups
	Criterion B2 – Transparency and accountability	The management of the country's strategic planning processes is transparent, with accountability for decisions made.
	Criterion B3 – Communication and awareness	Measures are taken to increase awareness of sustainable development, to communicate relevant information, and to encourage the development of stakeholder involvement in the strategic planning process.
	Criterion B4 – Long-Term vision and Consensus	The country's strategic planning processes are based on a long-term vision for the country's development, which is consistent with the country's capabilities, allows for short-term and medium-term necessities, and has wide political and stakeholder support.
Principle C - Ownership and commitment	Criterion C1 – High level governance commitment	The process of formulating and implementing the national strategy is led by government, with evidence of high-level commitment.
	Criterion C2 – Broad-Based Political Support	The country's strategic planning process has broad-based political support.
	Criterion C3 – Responsibilities for Implementation	Responsibility for implementing strategies is clearly assigned to bodies with the appropriate authority.
	Criterion C4 – Coordination with Donors	The country's strategic planning process is coordinated with donor programmes.

Principle D - Comprehensive and coordinated Policy Process	Criterion D1 – Build on Existing Processes	The national strategy for sustainable development is based on existing strategic planning processes in the country, with coordination between them, and mechanisms to identify and resolve potential conflicts.
	Criterion D2 – Analysis and Information	Strategic planning in the country is based on a comprehensive analysis of the present situation and of forecasted trends and risks, using reliable information on changing environmental, social, and economic conditions.
	Criterion D3 – Realistic Goals	The national strategy is based on a realistic analysis of national resources and capacities in the economic, social, and environmental spheres, taking account of external pressures in the three spheres.
	Criterion D4 – Decentralization	The country’s strategic planning processes embrace both national and decentralised levels, with two-way iteration between these levels.
Principle E - Targeting, Resourcing and Monitoring	Criterion E1 – Budgetary Provision	The sustainable development strategy is integrated into the budget process, such that plans have the financial resources to achieve their objectives.
	Criterion E2 – Capacity for Implementation	The sustainable development strategy includes realistic mechanisms to develop the capacity required to implement it.
	Criterion E3 – Targets and Indicators	Targets have been defined for key strategic economic, social, and environmental objectives, with indicators through which they can be monitored.
	Criterion E4 – Monitoring and Feedback	Systems are in place for monitoring the implementation of strategies and the achievement of their defined objectives, for recording the results, and for reviewing their effectiveness as strategies for sustainable development, with effective mechanisms for feedback and revision.

Source: (Cherp et al, 2004).

The framework of the NSDS method is based on certain assumptions as presented below. The first principle means that SD entails balancing the economic, social and environmental objectives of society in decision-making. This means in this case that the Indian 12th FYP tries to balance between all factors as much as possible. The second principle requires that there is a broad participation, including also nongovernmental stakeholders in the strategic planning process, which in turn can build a broad legitimacy for the process. The third principle is based on that the country’s planning process comprises their perception of what constitute its national strategy for SD. The fourth principle includes that an effective strategy must be based on reliable information. What is also important following the criteria is that “an effective strategic planning process should allocate specific means and responsibilities to the most appropriate bodies at the national, regional, or local levels”. The final and the fifth principle is that India is concerned with measuring and monitoring of the

development outcomes (Cherp et al, 2004:914–917). The purpose with this NSDS method that Cherp et al created on the basis of the UN and OECD principles, was primary so that the countries could: ‘‘assess the effectiveness of their national sustainable development strategies, in pursuit of their own sustainable development goals and the international commitments they have’’ (Cherp et al, 2004).

The reasons for the specific choice of Cherp et al’s national SD strategy methodology framework selected are many. The framework was influenced by organizations such as the OECD and the UN (2001) and makes it possible to evaluate the strength and weakness of a country’s NSDS. The framework has, as one of several, been used by numerous scholars in their research (see e.g. Persson, 2005; Timbo, 2006; Nimea, 2006; Tils, 2007). Several scholars and countries officials have also investigated in similar terms of the strength and weakness of a country’s national SD strategy before the framework was made (see: Filcak, 2003; Hanson, 2001; Skunca, 2002; Slovak Republic, 2001; Belarus 2004). The national SD strategy framework made by Cherp et al (2004) also constitutes the most basic of the strengths and weakness of a national SD strategy compared to evaluation methods of other researchers (Gathy, 2008). Several other frameworks are more complicated and suitable for the size of a dissertation. This assessment method is chosen because the five principles clearly bind together the principles made by the UN and the OECD in 2001. The framework made it also possible for both scholars and policymakers to evaluate different countries national SD strategy. This national SD strategy method has also had an influence and added more specifically points to OECD when they updated their 10 evaluating criteria in 2007 (OECD, 2007:138-139).

4. Methodological approach

The method that has been used in this research is a qualitative textual analysis. A textual analysis is a method to describe the content, the structure and meaning of the messages in different texts (Frey et al, 1999:227-229). A qualitative text analysis or more specifically a content analysis has been used on three written documents, namely the three volumes of the 12th FYP of the Government of India. There has been a mix of quantitative and qualitative methods, where a counting of words has not been used, but rather the qualitative type of content analysis with ‘‘patterns or the ‘‘wholes’’ of the texts (Kohlbacher, 2008:11). However several sectors and sentences have been analysed from different parts of the three separate

volumes. The data has been obtained based on a category-system (the principles, see table 1) designed by Cherp et al (2004), which have structured the material and made it able to analyse and assess the 12th FYP planning on SD. To structure the content analysis, categories is one of the most important aspects of a content analysis (Ibid, 2008:16). The goal has been in the evaluation of the 12th FYP to filter out a specific structure, of all the 24 sections to be able to analyse whether the plan is comprehensive and if each section take SD into account. The Principle A to E (see table 1) contains the different categories and in these there are four sub-categories, which have been used as a schema of categories.

The research data that has been analysed is a document, the 12th FYP made by the Planning Commission an institution of the Government of India in 2013. The data or the document, which is separated in three volumes, has been obtained by the internet⁴. Regarding to the theoretical framework of SD the data that has been analysed within the 12th FYP, is aspects of social, economic and environmental factors and whether the plan seeks to combine these. The data from each section (see table 2) that constitutes a chapter in the 12th five year plan has been analysed and summed together.

Table 2 - Table of Contents of the 3 volumes of the 12th FYP.

Sections/Chapters Vol I	Vol II	Vol III
1. Twelfth Plan: An overview	12. Agriculture	20. Health
2. Macroeconomic framework	13. Industry	21. Education
3. Financing the plan	14. Energy	22. Employment and Skill Development
4. Sustainable Development	15. Transport	
5. Water	16. Communication	23. Women's Agency and Child Rights
6. Land Issues	17. Rural Development	
7. Environment	18. Urban Development	24. Social Inclusion
8. Science and technology	19. Other Priority Sectors	
9. Innovation		
10. Governance		
11. Regional Equality		

Source: Planning Commission, Government of India (2013). Twelfth Five Year plan 2012/2017. Volume I-III.

The analysis focused on how the plan combines the social, economic and environmental objectives of the society. What have been analysed with Cherp et al's national SD strategy

⁴ The Planning Commission, Government of India, 2013, "the 12th five year plan" planningcommission.gov.in/plan/planrel/12thplan Accessed: 2015-01-05.

framework are the balance of these three factors, participation, country ownership and whether the plan outlines a comprehensive policy process. Moreover, if and how these sectors integrate with each other has been critically analysed.

This thesis is a *case* study of the 12th FYP of the Government of India and how they in that plan in-depth reflect to the concept of SD. More specifically, it has been a case study amongst exploring and assessing SD strategies of different countries. It has been an intensive and detailed study of a single case and the case study will to some extent be a critical, as my study wants to assess a certain document (Bryman 2012:66-67). Since it is a case study one will not be able to generalize to other cases of evaluating national SD strategies of different countries. However, the strategical choice of this study is based upon that India's 12th FYP make the goal that the development of India must be 'fast, inclusive and sustainable'.

In social science a strategic choice of a single case might add up the generalizability depending on how the case is chosen and the methods used (Flyvbjerg, 2006:8). The theory has been testing whether India applies to the 'how it is now' interlocking circle (figure 1.B) or if they try to reach a balance between social, economic and environmental aspects according to the SD concept. The framework for analysing qualitative data on how the Indian national plan use the concepts of SD and the planning process of SD has been done by a Principles for assessing National Sustainable Development Strategies framework (see table 1). This national SD strategy framework acts as a critical assessment method and is concerned with measuring the quality of the national SD strategy (Cherp et al 2004).

Interviews along with the content analysis could have worked as a part of the method as some of the previous scholar's conducted a qualitative content analysis of a document(s) along with interviews. Interviews are according to Silverman a common qualitative research method and its strength is its ability to access what happens in the world (Silverman, 2013:166). Interviews was not selected due to that there is a reform of the government and because of the difficulty in reaching the 27 steering/working commissions. The choice of the text is based on the assumption that where one is dealing with texts, the data is already available and for this the textual data is most reliable (Silverman, 2013:364).

The qualitative content analysis mainly consists of a critical assessment of a document (the 12th five year plan) and systematizing the data of the actual text into an already established design (see table 1). The analysis is in that way conducted by a content analysis, where the text is analysed and systemized into the different categories of the national SD

strategy framework made by Cherp et al (2004). I have, as previous researchers have done, assessed the SD strategy and identified strengths and weakness in order to evaluate the SD strategies in the 12th five year plan. This research intends to assess by an existing assessment method how well India’s past state governmental agency, the Planning Commission, explains the concept of SD, their planning, the coordination between the departments in their 12th five year plan.

In order to be able to evaluate I have used the criteria and scores table made by Filcak (2003) and Cherp et al (2004). The principles as a framework constitute as a tool for assessing the quality of the national SD strategy and by the principles it is possible to get the indication of the effectiveness in the planning process of a country. The following qualitative scoring scheme below with the grading from an A to D is necessary to show the extent to which each criterion has been fully met (ibid).

A = all of the requirements of the criterion are fully met

B = all the requirements of the criterion are satisfactorily met, although some further improvements are desirable.

C = some requirements of the criterion have been satisfactorily or fully met, but others have not yet been satisfactorily met.

D = few of the requirements of the criterion have, as yet, been satisfactorily met.

As suggested in Cherp et al’s methodology an assessor may make use of supplementary guide questions for each question (Kirkpatrick et al 2001). The scoring is proposed to be able to draw general conclusions of the effectiveness of the national SD strategy and to identify areas which need to be improved. The aim of the assessment and the scoring criteria’s is to investigate a country’s actual strategic planning process. It is important to summarize a brief text to each criteria and the reasoning and evidence behind the score (Cherp et al, 2004).

Table 3 – Assessment of the country’s Sustainable Development principles

Principles	Criteria and scores	Remarks
A. Integration of economic, social, and environmental objectives	e.g. A1:C A2:C A3:B A4:B	-
B. Participation and consensus		-

C. Ownership and commitment		-
D. Comprehensive and coordinated Policy Process		-
E. Targeting, Resourcing and Monitoring		-

Source: Filcak (2003), Cherp et al (2004).

5. Analysis

5.1 The assessment result of India's 12th five year plan - Introduction

In 2011-2012 India's Governmental agency the Planning Commission prepared their 12th five year plan. The plan claims that there has been a countrywide participation during the consultation in preparing the 12th five year plan, where every citizen has been able to let their opinion. The Planning Commission consulted widely with not only Central Ministries and State Government but also with experts, economists, scientists, sociologists, political scientists and civil society organizations. About 146 Working Groups were established under the chairmanship of Secretary of the Ministry and included sector experts from within and outside the Government. Their reports were reviewed by a steering Group chaired by the respective Member of the Planning Commission (12th FYP, Planning Commission, Government of India, Vol I, preface). The working groups output were reviewed by 27 different Steering committees in related areas to each Steering Committee. The reports from the steering groups were used as input in the formulation of the 12th FYP (Planning Commission of the Government of India, 2015). The 12th FYP is not a specific national sustainable development strategy. Hence, it is the first time in the FYP when a whole chapter is dedicated to Sustainable development (chapter 4). The goal of the first plan (volume 1) clearly argues for a growth that must be sustainable. This is why I will call this a 'national vision', because SD is clearly integrated and there are goals and strategies likewise that can be related to SD in the five year plan.

The main goal in 12th FYP strategy is to reduce poverty by 10 % during the five year period (12th FYP, Vol I, preface, p.35). In the 'financing the plan' section of the 12th FYP it is outlaid that the focus on poverty reduction will consist of 'ensuring access to basic physical

infrastructure, health and education facilities to all, while giving importance to bridging the regional/social/gender disparities and attending to the marginalised and the weaker social groups” (p. 81). The GDP growth aim in the plan is to increase on an average of 8% a year. It is clearly stated that a planned use of land must be the highest priority (p. 21). A strong GDP growth, as argued earlier, will hardly be possible without efficient access to water, which is why water availability and an improvement of water use efficiency is one of the highest priorities (p. 24). The three different volumes of the 12th FYP are divided into 24 different sections and each section covers a couple of different ministries. Multiple programmes, issues and subjects are elaborated upon in the different sections in order to link the plan as one strategy in the planning of the development of India from 2012 to 2017.

5.2 Integration of economic, social & environmental objectives

This principle covers the criteria of integration, social and poverty issues, environmental and resource issues and international commitments. The strategic planning of the 12th FYP is to some extent based on a comprehensive and integrated analysis of economic, social and environmental issues. In almost every section it is possible to both fully see their specification and their goal regarding SD. The sections of water issues, energy, health, environment forestry and wildlife, transportation and urban development are sections that specifically integrate various issues from the SD section. Several sections have an integrated analysis that covers onto the other sections, for example water, land, rural development, agriculture and health sections often mention different aspects that are interlinked between the various sections (12th FYP, Planning Commission, Government of India, 2013). However, term ‘inclusiveness’ is fully based on economic assumptions. If India has a slower GDP growth rate and will have 4-5% GDP growth per year during the five year period, ‘the inclusiveness’ as described in the goal, will be worse off with a general lower inclusiveness (ibid, Vol I, p.4-6). This implicates that the increase of wellbeing, or the decrease of persons in poverty, is highly depending on the economic growth of India. The sections of industry, communication, transport does not relate to a greater extent to the other sections, these mostly discuss economic issues and do not to a greater extent involve social and environmental issues.

Early in the plan it is described that the poverty reduction strategy shall specifically focus on the marginalized groups of the society. There will be almost a double budget towards regional balance in this term to reduce the large difference between different regions. 10% of the funding from ‘central ministries’ will go to regional inequality (ibid, p.330). Several

programmes will be launched in order to reduce poverty, deal with gender issues and “deliver direct benefits to the poor and excluded groups” These are: Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Sarva Siksha Abhiyan, Mid-Day Meals scheme, Pradhan Mantri Gram Sadak Yojana, Integrated Child Development Services, National Rural Health Mission (ibid, p.3). The major programme of MGNREGA⁵ is connected with several areas such as the sections of agriculture, water and land issues, rural development and social inclusion. In the section of 24 Social Inclusion a promise is made that 15% of the funding from the Ministries of Small and Medium Industries, Youth Affairs, Agriculture and Rural Development (especially MNDREGA) shall be earmarked for minority population. “In order to ensure adequate funds and benefits reach the minorities, the existing guidelines of earmarking ‘15 per cent of funds wherever possible’ should be revised to ‘15 per cent and above’ in proportion to the size of the minority population” (12th FYP, Planning Commission, Government of India, 2013, Vol III, p.255-256).

In depth, the strategic planning of poverty eradication, gender issues and the long and short term of disadvantaged persons is mentioned in several sections, where there are both concrete but also not so concrete solutions. Regarding education there will be 2500 new schools built during the 12th plan. Out of four million new students 2.5 million will be enrolled from the underprivileged category (ibid, 2013, Vol I, p.96). Regarding gender issues section 23, “Women agency and Child’s right” interlinks nutrition of the child and the women as a major aspect. The ICDS programme will aim specifically at 200 heavy burden districts and by increasing the number of health workers limit maternal and child malnutrition (ibid, Vol III, p. 206). Furthermore there are strategies to increase the amount of women in politics in especially the Panchayat level, but these are based on woman participation (ibid, p.165). In the last section of ‘Social Inclusion’ there are several strategies to improve education and life standards for the Scheduled Tribe⁶ and Scheduled Castes⁷, where scholarships will be earmarked for the Scheduled Tribe/Scheduled Caste minorities, where hostels for boys and girls will be built so that they can continue to go to school and where full access to water will be accomplished in regions with a majority of Scheduled Tribes and Scheduled Castes by the end of the 12th FYP (ibid, p.232-248). On the other hand, strategies

⁵ MNDREGA is India’s major employment programme which aims towards creating jobs for millions of persons from especially rural households.

⁶ Scheduled Tribes are indigenous disadvantaged population or tribes, not related to any specific religion.

⁷ Scheduled Castes are often referred to Dalits, historically disadvantaged castes of low rank. Both the Scheduled Tribes and Scheduled Castes have reservoir status, guaranteeing political representation.

for the Other Backward Castes⁸ minorities are not as comprehensive. The National Backward Classes Finance and Development Corporation will be launched, which aims at improving the skills of Other Backward Classes youths. In addition, a bike programme for Muslim girls to decrease dropout rates from schools will be launched during the 12th FYP (ibid, p.249-251).

In the water section it is stated that there is a strong link between farmers and industries and it is cautions to avoid conflicts, where disadvantaged farmers argue that the industry use their water. There is however no specific solution given to this problem. There is a need to improve toilet facilities, which will be done in especially public buildings such as schools (ibid, Vol I, p.165). Here one can find out how much of the budget that will be spent on toilets and construction of drains. When it comes to the section of Land Issues the plan mandates that: ‘enactment of legislations to earmark 10–15 per cent of land or 20–25 per cent dwelling units for housing projects for economically weaker sections/LIG category and earmarking of at least 25 per cent of municipal budget for urban poor’ (ibid, p.199). A Public Land Bank will be created to make it able for poor farmers to rent land (ibid, p.194-195).

The agriculture section in the plan suggests mechanisms to make it easier for poor farmers to borrow money with mixed schemes of guarantee in case of miss harvest or drain (ibid, Vol II, p.15). In the Industry section, the specific focus is on the manufacturing sector, where an increase of this sector will automatically generate to other jobs in the industry sector (ibid, p.60). There is no specific mention how to tackle the issue of poverty in this section but the strategy implicates that the focus of manufacturing jobs will lead to a higher export diversification (ibid, p.61). More specifically in the section ‘employment and skill development chapter 22’ this is further elaborated, where the main aim will be to create 10 million manufacturing jobs during the 12th plan. This will most certain result in 25-50 million job-opportunities in the non-farm sector (ibid, Vol III, p.137).

In the transportation sector the focus is to extend the public transportation in the whole India. The focus shall be on, except for increasing the overall capacity, an investment in business wagons and fast trains between the major cities, now once the east and west corridor gets completed (ibid, Vol II, p.215). The poorer north-east region shall be at specific focus when it comes to transportation (ibid, p.250). However no specific budget is in this section given to that region, but to the different ministries of road transport and highway, railways,

⁸ Other Backward Castes are socially and educationally disadvantaged castes in India. They have rights to 27% of seats within the government and are entitled to the same rate education and work in the public sector.

shipping and civil aviation. In the communication sector the goal is to get “universal access to all uncovered areas, including the rural areas, and the provision of high-level services capable of meeting the needs of the country’s economy” (ibid, p.258). However, one does not know the real focus except for that it will continue under same principles as the 11th plan (ibid, p. 265-266). As stated earlier, there are several aspects that need to be improved and most important is to build infrastructure to get access and improve media and entertainment (ibid, 285). The funding is given to the different ministries and there is no earmark in the budget to achieve the stated goal.

When it comes to the environmental and resource issues the plan link together the MGNREGA programme and environmental issues. The MGNREGA programme can make a major contribution to improving land productivity and to sustain levels of resource use (ibid, Vol I, p. 31). In the water section it is argued that the MGNREGA programme must be reformed to massive programme of water restoration and groundwater charge (ibid, p.145). A problem is that there is no exact data for much of the water that is polluted. In order to improve the environment industries must in their annual report present on how their water footprint of the year has looked like (ibid, p.160-161). There is as argued earlier an unbalance in the distribution of water and much needs to be done to maintain sewers and connect toilets. However it is explained that there are different laws among states which makes it hard to on a central level set up specific rules (ibid, p.179). Overall, the budget to agriculture and water resource will be increased by 143% during the 12th plan (ibid, p.82). In turn, 65% of the budget within the Water Issues section will be earmarked for completing ongoing irrigation projects. 15% of the budget will go to ERM (Extension, Renovation, Modernization) of old irrigation projects, which makes that 80% of the budget will be given to irrigation projects (ibid, p.150). When it comes to land resource use it is described as “the most critical bottleneck that is likely to arise is in the capacity building of human resources” (ibid, p.200). However, there are no further plans than that the records of land will be modernized and that the compensation will be slightly higher for persons that get displaced (ibid, p.196-200).

As stated at the beginning an economic contribution from the state budget will be given to especially renewable energy (ibid, p. 35). In the total energy capacity, the use of coal will increase from 50% to 57% during the 12th FYP, but decrease to 42% in 2030. Hydro (9%), nuclear (2%) and renewable energy (6%) are also expected to increase during the period to consist of 26% of the total energy capacity by the end of the 12th FYP (ibid, Vol II, p.147). In turn 50% of the coal that will be used will be based on supercritical technology that will

contribute to less pollution (ibid, p.160). There will be a cess on coal with 50 crore⁹ per ton, where the government expect to collect 10 000 crore under the Clean Energy Fund by 2015 (ibid, Vol I, p. 114). The short time goal is to invest in clean coal technology or to put it simply: “faster adoption of ultra-super-critical and super critical coal technology can save as much coal as would be saved by installation of ten times the solar power capacity”. The Jawaharlal Nehru National Solar Mission goal and the long term goal is however to have 20 000 MW of solar power by the end of 2022 (ibid, p.119-120). The plans under the National Mission on Enhanced Energy Efficiency to limit pollution are: “ to reduce 98.95 MTs of Carbon Dioxide equivalent annually over a five year period” (ibid, p.205).

In general, the 12th FYP mentions few international agreements. India, as described in chapter 7, is an active participant in the Clean Development Mechanism (CDM) under the Kyoto protocol, having second highest number of projects in the world. These projects have a potential to offset almost 10 % of India’s total emissions per year (ibid, Vol I, p. 223). The United Nations Development Programme in India ended in 2005, however the programme continues under Andhra Pradesh Mahila Samatha Society involving 4500 women farmers. This programme contributes to help landless labours and marginal farmers (ibid, p. 195).

Overall, the criterion of Integration receives a score of C because the fundamentals of the plan are depending on the growth of GDP. Social and environmental aspects are depending on the economy. Core objectives are in place, however only few sections seem to fully reach the potential to integrate social, economic and environmental aspects, where the Rural Development section is the best example having as task to improve water access and quality, build green housing and reduce slum (see ibid, Vol II, chapter 17, page 286). The criterion of Social and Poverty issues receives the score of C, because there is as earlier mentioned mechanisms, programmes and initiatives integrated in the economic policy. However the aspects of land and women rights are huge issues without clear strategies, which must be dealt with more seriously because millions of poor people especially from minorities are displaced. Women rights must receive further attention and have concrete solutions in order to improve the rights of women at all levels of the society.

The criterion of Environmental and resource issues receives the score of B as there are planning regarding resource use and maintainable levels of pollution. Overall there are strategies integrated into the economic policy to control pollution, cess on coal, efficiency

⁹ 1 crore is 10 million Indian rupees.

strategies of coal usage, renewable energy, updated energy efficient labels and solar power programmes. The criterion of International Commitments receives the score of D. There are no international commitment regarding social issues or human rights mentioned that India has entered in the 12th FYP, which is problematic due to that this constitutes a core part of the social aspect of SD. The human rights aspect is complicated due to the country's large size, but it's a concern that the 12th FYP mentions nothing regarding this issue because one can interpret this as an absence of human rights.

5.3 Participation and consensus

This principle covers the criteria of: involvement of stakeholders, transparency and accountability, communication and awareness and long-term vision and consensus. These will be discussed in turn. There is a promotion of other actors to be involved into various issues throughout the plan. However at several times there are no specific actors given, except for that both the public and private shall do as much effort as possible in order to improve several areas (ibid, p.57). It is described in chapter 3 that a ‘promotion of private investors’ is necessary when it comes to economic investments. In the chapter of SD there is described that a cooperation and the engagement of several NGOs mentioned have led to innovations in the areas of poverty eradication, empowerment of woman and management of forest and water resources (ibid, p. 117).

Section ten, Governance, clarifies that the stakeholders and citizens perspective is generally missing in the planning of the different ministries. The importance of broad and well-managed consultations is a key to get accountability for the decisions (ibid, p.296). In some programmes NGOs expect to take part in the funding and in other incentives the NGOs will provide better services by being actively involved. As an example the Mid-Day Meals programme promotes an active partnership with panchayats¹⁰ and municipalities, NGO's and other government agencies (ibid, Vol III, p.66). The marginalized groups do not seem to be involved into the strategic planning. Similarly, there is an encouragement of several actors to be involved into the decided strategies. However, except for the 27 steering committees that included representatives from a couple of different ministries and the 146 working groups that wrote and analyzed various subjects within different sections on forehand, there has not been many other actors involved in the strategic planning of the 12th FYP.

¹⁰ Panchyats are local governments on the Indian subcontinent. Panchyats often consists of wise and elders chosen and accepted by the local community.

When it comes to transparency and accountability there are some strategic planning processes that are lacking in several strategies. The estimated budget for each of the 24 monitor-able targets or sections is described for almost each one in the outcome document, except in the section of land issues and SD, where several issues relating to the section of SD is included into other sections. The different ministries will be allocated the funding and for each section there are a couple of ministries or departments. Hence, to what the budget will destine and how the strategic plans are regarding several areas are occasionally lacking. There are lists of multiple prioritization areas or issues without any specific order shown in the different sections. In several strategies proposed it is not clear to what extent something will be upgraded. There is more a description of each area that is in need of improvement and then a budget projection, which does not give fully detailed information regarding how the strategy will be imposed in practice.

In the strategies regarding various programmes the allocation of funding is shown (ibid, Vol I, p. 83) and at times one get to know how the strategy regarding these programmes will proceed. This is especially the case in health, rural development, water issues, industry and agriculture sections, where one get clear indications of to what the strategy aims in achieving. A good example of this is the National Health Mission, where the Central Government will allocate the budget at a rate of 90% to 10% the poorer North-East region and for the rest of the regions a 75% to 25% rate. The clear aim with the increased budget is that health shall constitute 2% of GDP by the end of the plan, from 1.04% of GDP by 2012 levels. The aim is also to increase amount of nurses to doctors from 1.4:1 to 3:1 and create community based health care centers (ibid, 2013, Vol III, p.18-20). Throughout the plan it is clear that the poorer North-East region will get specifically more funding to improve the capacity. The 12th FYP is transparent when it acknowledges that some areas have been under-prioritized and need a much larger amount of funding and consideration. As examples: agriculture, rural development and water are areas where strategies are very important as they will shape the county's future. These sections have more adequate strategies to achieve their goals.

The 12th FYP plan is clearly stating that it has a goal to raise the awareness regarding SD in several areas, such as the environment, water use, agriculture, health and resources (ibid, Vol I, p.116). In the section on water and in the land issues section information systems will be created, that will make citizens get online information about water coverage and regarding land-leasing. The last aspect is to avoid illegal renting of farms in India, which is a common problem where agricultural land has been abandoned (ibid, Vol I, chapter 6). There

will be water reuse and rain water usage campaigns and integrated different projects connected to MGNREGA to promote this in several states during the 12th FYP. This campaign will also aim towards wise-water use in the industry sector (ibid, 2013, p.168-171). There will be information campaigns towards farmers regarding soil use and fertilize usage (ibid, Vol II, p.14).

Enterprises or universities that are working with technical solutions to improve the environment in areas such as health, education, agriculture, handloom, handicrafts and other small business enterprises will receive extra funding from the National Innovation Council (ibid, 2013, p.278). There will be major interventions and campaigns under the NRHM (National Rural Health Mission) to combat health issues (ibid, Vol III, p.32). Furthermore, problems with malnutrition and commercialized feeding practices of children, which have resulted in defective child nutrition, will be solved by community based Nutrition Rehabilitation Centers (ibid, p.190). They encourage a participation of several stakeholders, such as CSOs, NGOs and the UN to be involved into the strategic planning process of promoting SD (ibid, Vol I, p.117). There is no specific information campaign regarding specifically SD as concept, however parts of it are in place with the different campaigns in the various sections.

There are long-term visions in place, which stretch to the end of the 12th FYP, 2020 or until 2030 (see 12th FYP, 2013, Vol I, p.35-36). There is an overarching emission goal to reduce India's emission intensity by 25% of GDP from 2005 to 2020 (Ibid, p. 188). Moreover, the aim of wind power is to reach a total energy production of 30 000 MW wind power by 2020 (ibid, p.119), to clean all large polluted rivers fully by 2020 (ibid, p.147) and be done with the dedicated freight corridor in March 2017 (ibid, vol II, p.209). Other examples are the share of hydro and nuclear power aims to reach 39% by 2030 from currently 26%. The share of renewable energy is expected to rise from 6% by 2012 to 16% by 2030 (ibid, Vol II, p.114). The aim of the overall education of India is an almost-near universal enrolment (of 90%) in secondary education by 2017 (ibid, Vol III, p 72). The goal that will be achieved through information campaigns is to improve child sex ratio of girls to boys from 914 girls per 1000 boys in 2012 to 950 per 1000 by 2020 (ibid, p.182). The main vision of the 'inclusiveness' is to decrease poverty by 2% per year in the term of the 12th FYP (ibid, vol I, preface). There is potential to reach the goals. However some goals such as renewable energy, solar power and wind power are set further ahead to the future, to 2030. The main visions to reduce India's emission intensity by 25% of GDP from 2005 to 2020 and to 2% decrease

poverty have a higher priority by several strategies and thereby a higher potential to be achieved. Also the more direct goals of e.g. cleaning the rivers, increase amount of students in secondary schools and birthrate are more urgent and thus have higher potential to be achieved.

Overall, the 12th FYP does not involve several stakeholders and therefore the criterion ‘involvement of stakeholders’ receives the score of D. The 12th FYP calls for a large involvement but it’s is not the case in the strategic planning. The score of C is given for the criterion of transparency and accountability as parts are transparent with explanation of strategies planned by different ministries. The issue of accountability is discussed as a major problem the 12th FYP. There are communication and awareness in place in the 12th FYP, not directly on SD as concept, but related parts and therefore it receives the score of B. The last criterion, Long-term vision and consensus receives the score of B based on that several long term goals and visions are in place, some of them hard to achieve, but many seems well thought of throughout the plan.

5.4 Country ownership and commitment

This principle covers the criteria of high level governance commitment, broad based political support, responsibilities for implementation and coordination with donors. The national strategy formulation was led by the Government or the Planning Commission, especially dedicated to formulate the 12th FYP. In the process of implementing a difficulty is that States to some extent can build further on what the 12th FYP outlays. “States are encouraged to set state-specific targets corresponding to the monitor targets, taking account of what is the reasonable degree of progress given the initial position” (ibid, Vol I, p.36). The States can consider which initiatives that are feasible and it is largely up to them (ibid, p.23, 32). The government has formulated several goals and what needs to be done (ibid, p.209). However implementation is in some cases up to the different ministries, where the government envisages various schemes. There are also earmarked aspects, such to achieve a regional balance and reduce inequalities, which indicate that the Central Government is in charge of the implementation to some extent. When it comes to the major programmes, which constitute a large proportion of some sections, the Central Government is responsible for formulation and implementation.

There is not much information regarding whether the country’s strategic planning has a broad political support in the 12th FYP. The preface of the first volume of the 12th FYP states:

(...) ‘the setting of targets is not just a technocratic process. It must reflect the aspirations of an increasingly aware public and a vocal civil society to command the broadest possible social and political support’. This indicates that achieving a broad political support is an important goal in the 12th FYP. In the preface of the plan it is claimed that 146 Working Groups were established that involved experts within and outside the Government before their reports were reviewed by a Steering group. Each Steering group was chaired by the members of the different ministries, NGO-experts and other stakeholders. Also experts, scientists, political scientists, sociologists and economists were involved into the process of formulating the country’s strategic planning (ibid, Vol I, preface).

The responsibility for implementing strategies is at some occasions given to bodies with the appropriate authority. However, since there are different laws among the States in India the strategies and frames given in the 12th FYP will not be the same over the whole country. In some sections, such as Communication, they setup specific goals, but without a prioritization given. The main aim is capacity building in order to reach universal communication. The appropriate authority is given the task to improve the communication, but one does not know specific strategies in the first place.

There are in total 68 different ministries/departments, of which some are easier to find what strategies they will implement. Some ministries are more bound to specific programmes, which are put up by the Government. This is especially the case in the rural development section. 85% of the budget within the Ministry of Rural Development will be for the flagship programmes: MGNREGA, Indira Awas Yojana, Pradhan Mantri Gram Sadak Yojana and National Rural Livelihood Mission (ibid, Vol II, p.319). In the end of almost each section one can clearly see how much of the budget that will be given to the different ministries/departments. This is not the case in the sections on SD and Land issues, where no specific ministries or department budget is mentioned. However the goals within the SD section are interlinked and formulated within other sections and by that also by other ministries/departments. Most ministries/departments in the three volumes of the 12th FYP have a dedicated strategy, but for the larger ministries (ibid, Vol I, p.82) the tasks and funding are more clear, e.g. The Ministry of Agriculture task of a National Mission for Sustainable Agriculture (ibid, Vol II, p. 46), The Ministry of Urban Development task of various strategies to improve the urban development (ibid, Vol II, p.342-347), The Ministry of Water Resources task to measure the water quality, create a database and improve river basins (ibid, Vol I, p.172-173) are a couple of examples where strategies are clearly dedicated. However,

with the amount of ministries/departments in the 12th FYP it is quite complex of their exact use and who is responsible to implement the strategies.

The 12th FYP does not coordinate to a large extent with donor programmes. The World Bank is one donor that will provide external funding for a couple of programmes. The Eastern dedicated freight corridor will be partly funded by the World Bank (ibid, Vol II, p.209). The capacity building schemes of urbanization aid will be provided externally from the WB and given assistance to the Ministry of Urban Development and the Ministry of Housing and Urban Poverty Alleviation (ibid, p.360). A very important aspect here is that the little attention to aid and the connection to international donor programmes must be seen in the context of Indian politics from 2012. The finance minister of India, Pranab Mukherjee, stated in August 2011, as an example that the British aid of 280 million pounds is just "peanuts". "We do not require the aid. It is a peanut in our total development exercises" (quoted in: The Times of India, 2012).

The criterion 'high level governance' receives the score of B, because large programmes are organized by the Central Government and certain tasks are given the States. However especially environmental goals, major irrigation and water projects are considered and planned by the Central Government. The criterion of Broad-Based Political Support receives a C, because one does not clearly recognize the party of the persons, the persons responsible or involved in each Steering group. However, the involvement of several actors represents a broader political support than if only sector experts from the Government were consulted in the planning process. The criterion of Responsibilities for Implementation is clearly a score of C, because only partly one will know what tasks various ministries/departments and States are assigned to. The various ministries/departments and States are in the end free to further organize the implementing of the strategies without earmarked budget or specific programmes. The criterion of coordination with donors is difficult to assess. However it receives the score of C as surprisingly critical parts of external aid is present in the plan, where one upon assessing must take the context of Indian politics into account.

5.5 Comprehensive and coordinated policy process

The Comprehensive and coordinated policy process principle covers: building on existing processes, analysis and information with forecasted trends and risks, realistic goals based on the country's capacity and decentralization. The 12th FYP is the first of the FYP's to

include Sustainable Development. However the 12th FYP builds on several earlier existing strategic processes, some especially to preserve the environment. A couple of earlier existing strategic processes that will be built further on under the National Action Plan of Climate Change, which was initiated in 2008 are: The National Mission on Enhanced Energy Efficiency, The Green Mission of India, Coastal Zone regulation and a Biodiversity Action Plan (The 12th FYP, Planning Commission, Government of India, 2013, Vol I, p.205-209). The 11th FYP focus was three primary goals to include the environment at all levels in the development and a National Environment Policy was unveiled in 2006 to mainstream this into development activities (ibid, p.203-205). Most sections are based on existing strategic planning processes, where some does not have existing strategic planning process (especially the Land issue section). However some does not include a SD or the environment, which is why there are not mechanisms to resolve conflicts. A good example of this is within the 'Social Inclusion' section, it is mentioned that the 11th plan was first to introduce schemes aiming to improve to conditions of the minorities (ibid, Vol III, p.253). There is no aspect regarding the environment mentioned in the whole section as similar to the section 'Rural Development', where the National Rural Livelihood mission aims at improving the skill of one million youths from the North East States, with a high scheduled caste population, along with improving housing conditions, water accessibility and quality (ibid, Vol II, p.299-302). There is in this sense often a narrow focus on the own area of issue within each section.

The plan address early that there is a climate change and that if nothing is to be done, it will seriously harm the agriculture and water availability in India (ibid, Vol I, preface). There are estimated statistics regarding some issues in several sections, whereas others do not have statistics and will thereby create mechanisms to get a full cover of statistics (such as in the sections of water, land and biodiversity). The estimated percentages of how many that does not have access to sanitation are addressed as an example of an unsustainable situation that needs to be dealt with urgently (ibid, Vol II, p.301). Regarding the economic condition there are three scenarios forecasted. How well the 12th FYP can perform depends on GDP growth in the following next five years. There are forecasted risks that a higher temperature or a climate change will affect water, agriculture and health in several occasions (see e.g. Vol I, p.225-226, Vol II, p.3). Regarding rural development there are forecasted risks regarding slum and poverty and strategies to combat slum (Vol II, p. 228-229). There are however not integrated forecasted risks of changing environmental, social and economic conditions addressed in

several occasions in the plan, where statistics or information of the current situation and forecasts are lacking.

Some goals in the 12th FYP plan are at some time unrealistic as they even describe that agriculture of the States need 20 times more than the budget frame (ibid, p.152). There are however other projects, such as groundwater projects, that were conducted in the previous plan that did not need as much funding as was estimated (ibid, p.159). There are positive strategies “towards” the goals that the plan says to have at the beginning. However, in several sections the goals are higher than what can be performed, and thereby unrealistic. There is also an encouragement of private investors, CSO and NGO investment in order to achieve the goals. In the first volume, however, the overarching goal is described at the beginning:

“It must ensure upliftment of specific groups such as the SCs/STs/OBCs (Scheduled Castes, Scheduled Tribes, Other Backward Classes), minorities and other marginalised groups that suffer from historical exclusion. It must systematically close the gender gap, which is a blot on our social structure. It must also ensure balanced development of all the regions. Finally it must ensure that the growth strategy is consistent with sustainability concerns which are now gaining importance” (ibid, preface).

This goal that the 12th plan must ensure to improve is to some extent related back during the different volumes, especially in the regional equality, land issues and social inclusion sections. In the Land Issues section the Rajiv Awas Yojana programme promise to earmark at least 25% for urban poor, when it comes to dwelling units for new housing projects (ibid, p.199). The goal of reducing India’s emission intensity by 25% of GDP from 2005 to 2020 will hardly be achieved with an increase of coal usage from 50% (or 54% according to IEA) to 57%, despite the plans of cleaner coal technologies. Other examples are the goals of universal food security, water, education (secondary level) and health. These are goals in the long run, but when it comes to the goal of water access realistic goals are setup: e.g. that the access to drinking water in rural households will increase from 35% to 50% by the end of the 12th FYP (ibid, Vol II, p.301). The secondary level education will be almost universal with 90% of the population having access by the end of the 12th FYP (ibid, Vol III, p.72). This makes the goal(s) more realistic within the frames of the country’s context.

The plan embraces both the national and decentralized levels (the States) as India is a decentralized country. The central Government and the States will fund the different

ministries/department tasks. The strategic planning is shaped so decentralized levels of the States and Panchyats are assigned certain tasks and the Central Government more overarching tasks. However in a major part of the planning the States are encouraged to follow what is outlined in the 12th FYP. They can do different except for issues where there is earmarked budget. In order to make sure of not to large imbalances between the States making it difficult for disadvantaged States to implement certain tasks or projects, funding will be given to disadvantaged States. This is shown in the section Regional equality, which concludes that more money must be given to the regions that has disadvantages (ibid, p.320). The measure here that will be taken into account is percentage of agricultural workers, Scheduled Caste+ Scheduled Tribe population, female literacy rate and households without electricity (ibid, p.329). This is partly related to that the previous plan was criticized in the area regarding regional imbalances, and thereby 76, 500 crore will be invested by the BGRF (Backward Regions Grant Fund) through the 12th FYP. There are mandatory earmarked funds of 10% from the central ministries that are dedicated to the BGRF (ibid, p.330-331).

The 12th FYP does partly meet the criterion of build on existing processes, with awareness especially in the section Environment, Forestry and Wildlife on existing strategic planning process, especially aiming towards SD. This criterion therefore receives the score of C. The criterion of Analysis and information receives a score of C, because there are few analyses of the present situation and forecasts overall of changing environmental, social and economic conditions. For the criterion of Realistic Goals the score of C is given based upon that there are several goals set that are high and some does not right now seem to be going in the right direction. The score of C is given to the criteria of Decentralization. A clear structure is given that major programmes will be organized by the Central Government. States are assigned to certain tasks but can in the end build further on the 12th FYP in various aspects.

5.6 Targeting, Resourcing and Monitoring

This principle consists of the criteria of budgetary provisions, capacity for implementation, targets and indicators and monitoring and feedback. The 12th FYP has a projection of the estimated budget to the major sectors (p.82), and to the 68 ministries/departments (p.100-102). The 12th FYP will increase the budget to several major sectors compared to in the 11th FYP plan. Water and land issues will have an increase by 143%, education 153% and health and child development by 262% in the estimated budget for the 12th FYP (ibid, p.82). In the section ‘technology and science’ special technology improvements will be financed to food security, agriculture, water, health, energy and the environment areas by all six departments of

technology research (ibid, p.239-241). The major programmes, as mentioned earlier in subheading 5.1, does not always have specific financial resources to achieve their objectives. As example the section of Education has a specified funding in place by Ministry of Human Resource Development for the Sarva Shiksha Abhiyan programme (ibid, Vol III, p54). This is the case for the MGNREGA (ibid, Vol II, p.286) and Pradhan Mantri Gram Sadak Yojana (rural roads coverage) (ibid, Vol II, p.226). For other programmes such as the Mid-day Meal Scheme the 12th FYP just clarifies that the programme will be expanded during the plan (ibid, Vol III, p.67). The Integrated Child Development Services and National Rural Health Mission as major programmes does not either have specified funding, even though it is stated that the funding will increase. These programmes constitute a major part of the Women's agency and Child Rights section and the Education section.

That some of these major programmes have funding shows a tendency of that some ministries/departments in the 12th FYP have a responsibility to finance improvements specifically relating in the direction to SD. The section of SD does not have a dedicated ministry, as the Ministry of Environment and Forest is responsible to implement SD. The SD section, however, links various strategies with other sections, such as the sections of water issues, energy, environment forestry and wildlife, transportation and urban development (ibid, chapter 4). The ministries/departments within the above mentioned sections have certain strategies specifically related to the SD section. They in turn are responsible to invest in various issues, which makes it more difficult to discern how strategies mentioned in the SD section will be financed. In general, there is a lack of a specification to which areas that budget will go to in several issues. This is due to, as earlier mentioned, that the ministries/departments that receive the funding can in the end decide what the prioritizations will be and what the funding will be given to, except for if a strategy is earmarked or part of a major programme.

The 12th FYP states several times that there is not enough capacity for implementation. This has to do with, as mentioned earlier, the section of Financing the plan, encourage that private investments are made in various areas in order to fully implement the goals (ibid, p.87). When it comes to energy, environmental, land and water issues the National Action Plan on Climate Change has 8 overarching missions to reach SD. It is estimated that 2, 30,000 crore are needed (where several sections and programmes need to contribute) to achieve these 8 missions and it is argued that investments cannot only come from the government alone (ibid, p.226). The Ministry of Environment and Forest alone receives 17,899 crore in the 12th

FYP (ibid, p.220). Overall in the 12th FYP the majority of sections clarify what is needed, and partly solutions to the problem. There are adequate analyses of what is needed, but not how to realistically develop capacity to implement several strategies.

One of the 12th FYP key economic targets is a GDP growth of an average increase of 8% per year. There are several economic indicators of projections to monitor this target (ibid, chapter 3). Regarding the main key social target to reduce poverty by 10% there are no specific indicators through which this can be monitored. However, there are as argued earlier through various programmes and improvements of health, education, basic infrastructure that this will be achieved (ibid, p.81). In the key target of reducing India's emission intensity by 25% of GDP from 2005 to 2020, there are no specific indicators through which this can be monitored (ibid, p.115). Regarding several key strategic targets there are indicators especially in economic key strategies within the sections in the 12th FYP (section 2 and 3). Targets with indicators through which they can be monitored exist regarding energy (ibid, Vol II, p.147-148), health (ibid, Vol III, p.15-16) and Urban Development (ibid, Vol II, p.349). There are few indicators regarding resource use, solely statistics regarding water saving potential within various industries (ibid, p.168) and energy usage targets in the 12th FYP (ibid, Vol II, p.133). Hence many more indicators could have been shown for social and environmental issues.

There are a Central Plan Scheme Monitoring System that enable real-time tracking of all the schemes for which resources are transferred to States and their agencies (ibid, p.83-84). Regarding monitoring of the private-public partnerships Central Ministries are expected to submit quarterly reports (ibid, p.93). In the water section there will be resources to a monitoring and evaluation of the watershed programme (ibid, p.158). The National Programme Coordination Committee of the National Rural Health Mission will include expertise and monitoring to serve the National Health Mission (ibid, Vol III, p.34). The mid-day meal programme will have strengthened Management Information Systems to report outcomes of the programme (ibid, p.67). In the section of environment, forestry and wildlife a National Environment and Assessment & Monitoring authority will be setup to monitor the strategies imposed in the 12th FYP (ibid, Vol I, p.205). The transportation, agriculture, industry, rural development, urban development, women's agency and child rights sections state that there is a need of monitoring and evaluating at various issues and programmes, but not who is responsible for the monitoring and the feedback.

The budgetary provision criteria receive the score of C based on that only some strategies and programmes have particular plans of financial resources to achieve their objectives. Furthermore, ministries/departments are except for when earmarks are made free to in the end decide how they will finance in various strategies. The capacity for Implementation criteria receives the score of D, because almost every section implicates that several other sponsors such as the private sector, NGOs etc. are required to develop the capacity. The targets and indicators criterion receives the score of C, because in general mostly key strategic economic targets are covered with indicators through which they can be monitored. There are in general not many systems in place to monitor the implementation of the strategies or evaluating them, which is why the criterion Monitoring and Feedback receives the score of D.

5.7 Summary

The 12th FYP allocate several strategies relating to SD to various ministries as shown in the analysis. However, if one looks beyond the surface, there is no integration of social, economic, and environmental aspects. Only a few sections in the 12th FYP implicate a cross-sector cooperation, where the most prominent example is the Ministry Rural Development, which will engage themselves with green and sustainable infrastructure, reducing slum and water connection tasks. As my analysis shows there are in general more concrete assigned strategies of environmental and resource issues than social and poverty issues. These are often interlinked, but there are on an overall level more concrete strategies for e.g. irrigation, water, energy and the environment if one compare with strategies in e.g. land, women's agency and child rights and social inclusion.

When it comes to the participation and consensus principle the awareness of SD, resources and environmental issues is present in several sections and many have long-term goals. The transparency and the accountability of the strategies are not adequate, because a major group was not involved into the strategic planning of the 12th FYP. The transparency of the overall plan is only partly satisfying, where one will know the major programmes purpose and strategies, but hardly get clear picture in sections where a huge list of targets and tasks are set without prioritizations.

For the Ownership and commitment principle there is a high level governance commitment in the 12th FYP, where the Central Government is responsible for the formulation and implementation of the 12th FYP. Overall, most major programmes and

strategies are covered by the Central Government. In the end States can decide freely, but mechanisms and programmes are in place to control major strategies. One does not fully know whether the 12th FYP plan has a broad-based political support, but if several actors were involved it represents a broader political support than if only actors from the Government were involved. The ministries/departments and the States are responsible for the implementation of the strategies. A problem is that the allocation of funding is given to various ministries/departments in the end of some sections, where no specific strategy is given before in that section. For major ministries/departments it is clearer and one can then know that the responsibility is given the appropriate authority. The criterion of coordination with donors is difficult to assess, as the 12th FYP mentions nothing except the World Bank. Here one must take the context of Indian politics into account, where aid lately is refused.

For the principle of Comprehensive and coordinated policy process only some of the requirements are fully met. This is due to that there are few existing strategic planning processes which relates to SD, which might depend on that SD was not as integrated in previous plans. There are few analyses of the present situation and forecasted risks and trends in the 12th FYP. Several goals will have a difficulty in achieving their potential, because some of the goals are even going in the wrong direction, some are unrealistic and others realistic. There is to some extent a two-way iteration between the national and the decentralised level as certain tasks are allocated specifically.

Overall the 12th FYP manages to integrate a budgetary provision for most major programmes and strategies. There is a lack of capacity for implementation and the 12th FYP calls for both private investments and NGO's involvement to be able to reach up to several goals. There are not several targets and indicators that regard social and environmental aspects. The 12th FYP does not have monitoring and feedback mechanisms in several critical sections.

Table 4 – Assessment of the 12th FYP Sustainable Development principles

Principles	Criteria and scores	Remarks
A. Integration of economic, social, and environmental objectives	A1: C A2: C A3: B A4: D	The 12 th FYP manages to integrate environmental and resource issues, and to some extent the social and poverty issues, but falls short on the integration between sectors and on international commitments.
B. Participation and consensus	B1: D B2: C B3: B B4: B	The communication and awareness, and long term-vision and consensus are integrated into the 12 th FYP. The transparency and accountability falls short and

		there is no major involvement of stakeholders.
C. Ownership and commitment	C1:B C2: C C3:C C4: C	The 12 th FYP integrates to a great extent a high level governance commitment. Only some of the requirements have been fully met for the criterions of broad-based political support, responsibilities for implementation and coordination with donors
D. Comprehensive and coordinated Policy Process	D1:C D2:C D3:C D4:C	For the criterions of build on existing processes, analysis and information, realistic goals and decentralization only some of the requirements have been fully met in the 12 th FYP.
E. Targeting, Resourcing and Monitoring	E1: C E2: D E3: C E4: D	The 12 th FYP manages to integrate some of the requirements for the targets and indicators and the budgetary provision for major programmes and ministries/departments. The capacity for implementation and monitoring and feedback is lacking in the 12 th FYP.

5.8 Limitations

The greatest potential impact on the quality of my findings is that SD is an integrated part of the 12th FYP and the plan is not a national SD strategy as whole. This made it difficult to answer the research question in the sense of that some parts focus on SD, whereas other parts of the 12th FYP does not focus on SD. Another limitation impact is the complexity of the plan, with 68 ministries/department and many major programmes. This meant that the analysis would especially focus on the larger strategies of the larger ministries. Additionally, a challenge was to appropriately analyse the country ownership and commitment (subheading 5.4) principle, where interviews would have made this clearer.

My research did not intend to assess any other document than the 12th plan. The reasons for this are several. Firstly, the 12th five year plan covers 25 sectors into three volumes and all three are together 900 pages long. These cover a major part of the general lines of the planning of India in the upcoming four-five years. Secondly, there is not any specific national SD strategy by India, but the 12th FYP presumes that SD must be integrated into all sectors. Thirdly, there also exist various documents such as the National Action Plan on Climate Change (2008) and the Empowering People for Sustainable Development (2002), which I could analyse, as they could be defined as other documents similar to a national SD strategy. However, the first document has been evaluated by Purohit et al. (2010). They analyse the National Action Plan on Climate Change in technical and economic terms along with solutions to the environment and not a whole picture of the SD integrated into the planning of the country. The second document can be argued to be not up-to-date. Hence, if more documents would have been analysed (see 12th FYP, Vol I, p.115) it would have been

possible to get a broader view on how the Planning Commission of the Government of India incorporate SD.

Another major limit to the SD as a concept, which emerges in almost all literature, is how to measure what is SD. In this thesis the simple answer would be: a balance of economic, social and environmental factors at all levels. However this is difficult to measure as obviously the Ministry of Finance would talk economics and Ministry of the Environment would speak about the environment. The researcher should in a future research elaborate further on the model of SD and what is actually a ‘balance’ and how to achieve this. In order to overcome the issue of participation and consensus first two criterions, the ownership and commitments principle, but also to clearer see the integration of social, economic and environmental aspects, performing interviews and analysing more documents is suggested to get a more profound and broader understanding.

6. Conclusions and recommendations

The aim of this thesis was to examine how the 12th FYP incorporate the concept of SD and the strength and weakness of the SD vision in the 12th FYP. This has been done through Cherp et al’s framework in the chapter 5 ‘Analysis’. This framework has worked as a profound tool in investigating how the 12th FYP incorporate the concept of SD. By investigating the integration of social, economic and environmental factors, participation and consensus, country ownership and commitment, comprehensive policy process, targeting, resourcing and monitoring, it has been possible to get a broad picture of how the strategic planning of the SD vision is made. The 12th FYP incorporate the concept of SD mainly in terms of the economy. The issues of the environment, an inclusive society and poverty reduction, depend on how well India’s GDP growth rate performance is over the next five years. The budget projected in the 12th FYP builds on the scenario that India has a steady growth of 8% in terms of GDP. However, it has been possible to see a focus on SD within parts of the 12th FYP of India, especially in the section of SD, water and environment, forestry and wildlife. The vision is to a large extent not involved in the economic sections.

The strength of 12th FYP is the awareness of SD, that long-term goals are in place and that the Government is involved in formulating the 12th FYP and has a high commitment in especially the major programmes. The weakness of the 12th FYP is that there is a lack of

capacity to realize all the strategies. This by several indications of that some goals are set to high, that other investors are needed to fully implement the strategies and that States are free in the end to decide upon what is decided in the 12th FYP.

For the environmental aspect, as specific, the strength is that several sections can help to increase the awareness of SD by various strategies. Long term goals of renewable energy resources, water and sanitation are in place. A weakness is that coal and oil usage will increase during the 12th FYP, which hardly will reduce pollution. For the social aspect, the strength is that there will be more focus on the rural development, health, education and regional imbalances. There are funding earmarked to receive a regional balance and to reduce inequalities. A weakness is that there are sections regarding social issues without specific prioritizations of the strategies. There is not one specific strategy of poverty reduction in the 12th FYP. Throughout the volumes one can discern that the strategy to reduce poverty by 2% a year is based on an improvement of water, agriculture, education, health and job opportunities, not only depending on GDP. An overall weakness is although that there are lacks of funding to realize several targets when it comes to social and environmental issues. There is to a small extent a comprehensive and coordinated policy process regarding SD strategies in the 12th FY. Hence, several sections, especially agriculture, water, health, education and employment aspects, interlink each other in respective sectors. This is done through the programmes applied in the 12th FYP and through the major programme of MGNREGA, which constitutes a major part of the rural development section.

The results confirm that similar strategies, as concluded by Tharan (2004) and Berger et al (2009), which were present in the 10th and the 11th plan FYP, now has been developed further and there are more defined goals and strategies to reach the targets. The difference is that the 12th FYP dedicates SD an own chapter and argues at core that SD must be included into all sections. My result concludes similarly as Tharan concluded in 2004: That a major issue in the 12th FYP is the lack strategies regarding of equity, where the focus of the social development is on employment and education. The results further conclude and confirm that the capacity to implement is lacking and there is to a little extent a comprehensive and coordinated policy process similar to what Persson (2005) and Timbo (2006) concluded in their respective theses. Additionally accountability and involvement of stakeholders were not to a large extent present in my results if one compare to the findings by Persson and Timbo. There is an awareness of SD and both the social and environmental aspects have been further involved into the economic policy, nevertheless this is only to parts satisfying.

A criticism is that the SD is depending on institutional capacity and that this thesis tries to simplify the SD concept. The term of SD can be argued to be very broad and has been used in an unlimited amount of literature. The framework made by Cherp et al (2004) tries to analyse how well a national SD strategy is in place in a strategic planning of a country. The framework is abridged in the way that the researchers, scholars and national authorities can interpret different among the criteria's, depending on the national context and what is said in the document(s) analysed. The strategic planning document is different among countries and therefor in some countries the framework applied does not fit all the principles. The 12th FYP of the Government of India do not mention much about political issues, international aid and cooperation. There are important points in the national SD strategy framework, which has been difficult to cover. For future research one may investigate India's ministries/departments and interview country officials regarding SD, in order to get a picture of how they reflect SD. To build further on this research findings one may investigate participation and consensus in-depth as an interesting point of accountability and transparency.

6.1 Recommendations

These recommendations are to serve all concerned parties including governments, NGO's, CSO's, Media and as well donors to help to improve SD strategies in India.

The environmental and social aspects need to be involved further in the economic sectors. As one typical example: the industry must measure their footprint of water in the 12th FYP. This is written in the water section but not mentioned in the industry section. This is the case for several critical social and environmental issues, where they are accounted for in their section, but not to a greater extent elaborated in other sections, even though they are highly related.

The 'let my opinion' option was released to everyone on the homepage of the 12th FYP before the 12th FYP was formulated. This was an opportunity for everyone to be involved into the planning process. This is an important aspect for accountability and transparency that should be further extended by the new Planning Commission into pilot-projects of how citizens think about the plan. The involvement of other actors should be evaluated and published by the Planning Commission and be worked further upon, as this is mentioned as a problem in the section of Governance.

The strategies of SD is highly integrated into the 12th FYP, despite that it accounts for as a national SD vision. However, there to a little extent a comprehensive and coordinated policy

process. One will discern mixed approaches of realistic goals. There needs to be more analysis and information of the current situation and forecasted trends and risks related to SD. Much of the information relates back to the 11th FYP which is satisfying, however several scenarios are not generated of forecasted risks and trends of a changing economic, social and environmental system.

There need to be adequate monitoring and feedback for all of the sections in the 12th FYP. There is a real-time track of the economic funding to each ministry/departments. It is suggested to create mechanisms in place to evaluate and monitor the strategies in sections specifically related to social aspects. This should certainly be the case for the strategies in the Social inclusion and Women's Agency and Child Rights sections, but also for other critical sections.

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