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Chapter 6

Gross National Happiness and SCP in Bhutan

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6.1 Introduction

Bhutan is a small and landlocked country, situated between the Tibet Autonomous Region of China and India. It has an area of 38,394 km² with an estimated population of 745,153 in 2014 [NSB, 2014b]. It is located in the Eastern Himalayas and is mostly mountainous and heavily forested. Bhutan's economy is one of the fastest growing in the world and was ranked fifth in the world in 2013 in terms of the speed of growth [IMF, 2014]. Growing at an average of 8% since 2000, per capita GDP has more than tripled from USD 780 in 2000 to USD 2,460 in 2013. Bhutan's Human Development Index (HDI) value for 2013 is 0.584, which is in the medium human development category, positioning the country at 136 out of 187 countries and territories. Between 2010 and 2013, Bhutan's HDI value increased from 0.569 to 0.584, an increase of 2.7% or an average annual increase of about 0.88% [UNDP, 2014].

According to the Bhutan Poverty Assessment 2014, the country's poverty reduction has been rapid, broad-based, and inclusive. The report suggests three necessary interventions in order to sustain the trend in poverty reduction: (i) mitigating risks from persistent shocks facing the agricultural

sector, (ii) increasing private sector led development, and (iii) building formal social protection for clearly identified vulnerable population groups. The overall Gini coefficient for 2012 was 38.75%, indicating a medium level of inequality by global standards. While Bhutan has done well in reducing poverty in the recent years, the risk of downward mobility is greater than average for rural residents, male-headed households, people in informal jobs (casual and self-employed), those with low education levels, and particularly high for those living in poorer *Dzongkhags* (districts) such as Pema Gatshel, Dagana, Samtse, Trashigang, and Tsirang [NSB, 2014a]. Thus, in its path to sustainable and equitable development, some challenges still exist for Bhutan.

Bhutan has gained worldwide attention for its unique development philosophy of Gross National Happiness (GNH), which encompasses the four pillars of sustainable and equitable socio-economic development, preservation and promotion of culture, conservation and sustainable utilisation and management of the environment, and promotion of good governance. Pursuant to Section 2 of Article 9 of the Constitution, which directs the State “to promote those conditions that will enable the pursuit of GNH,” the operational aspects of GNH have been strengthened, most notably with the introduction of the GNH Index in 2008 and the GNH Policy Screening Tool in 2009. The GNH Index is based on biennial surveys and provides an overview of performance across nine domains of GNH that include health, education, living standards, ecological diversity and resilience, good governance, psychological wellbeing, time use, community vitality, and cultural diversity and resilience. Based on the 2010 GNH Index composite score of 0.743, 41% of Bhutanese were identified as ‘happy’ having achieved sufficiency in 73% of the domains, while the remaining 59% achieved sufficiency in 57% of the domains [GNHC, 2013a]. The GNH Policy Screening is being used as a tool to assess the impact of new policies on GNH and to mainstream GNH into all new policies being formulated against 22 variables representing the nine domains of GNH. Since its introduction, numerous policies related to human resources, youth, education, health and nutrition, land, natural resources, and industries have been approved.

GNH, thus, can be regarded as an Sustainable Consumption & Production (SCP) indicator developed in response to dissatisfaction with the

conventional gross domestic product (GDP) measure, which does not capture many aspects that are central for people's wellbeing. For example, GDP does not include unpaid work in households or communities, which plays a significant role in traditional Bhutanese village life where people have a custom of helping each other without expecting any monetary compensation. Bhutan's focus on happiness and the approach of directly collecting information from households on aspects related to happiness have inspired a number of other countries, including OECD member countries such as Japan, to develop their own indicator systems for wellbeing [UNEP, 2012].

The 11th Five-Year Plans (FYP) (2013–2018) is the second FYP to be implemented since the introduction of Democratic Constitutional Monarchy in 2008. It builds on the strong foundations that have been laid since the inception of planned development in 1961. The Plan's underlying objective of "Self-reliance and Inclusive Green Socio-Economic Development" is underpinned by a results-based planning framework that articulates clear national outcomes and outputs. Three main strategic thrust areas have been identified in order to achieve these outcomes and outputs, viz. inclusive social development, accelerated green economic development, and strategic infrastructure development. Through these strategic thrust areas, the government aims to achieve an annual average economic growth rate of 10% or more over the 11th Plan period and reduce the poverty level to less than 5% by 2018 [GNHC, 2013a].

The majority of Bhutan's population is reliant upon agriculture and forestry. India is the nation's closest trading partner, and increasing hydro-power exports are expected to drive Bhutanese employment and economic growth. Bhutan currently exploits only an estimated 5% of its total hydro-power generation capacity and plans to have 10,000 MW of hydropower generation capacity by 2020. The electricity sector's share of the economy has reached almost 20%, outstripping agriculture as the single largest contributor to GDP. There are also concerted efforts to promote tourism, agro-industries, socio-cultural industries, and local construction materials. Cottage and Small Industries (CSI) constitute more than 96% of total industry in Bhutan. In December 2014, there were 15,193 operational CSI in the country as compared to 12,548 during December 2013 [DCSI, 2015], which underscores the importance of this segment in self-employment and income generation. Bhutan's CSI is dominated by the services and

contracts industries with a very small production and manufacturing sector base.

Bhutan has placed environmental conservation at the centre of its development strategy, being one of the four pillars of GNH. In addition, the Constitution mandates that at least 60% of the country remain forested for all time (currently 72.5%). Bhutan is one of the few countries in the world with net GHG sequestration capacity largely due to its vast forest cover and widespread use of hydropower and biomass energy. Due to its geographical location, Bhutan is also especially vulnerable to the adverse effects of climate change.

There are several policies and legal instruments that promote SCP in Bhutan. More specifically, the National Environment Commission Secretariat (NECS) is working with UNEP on SCP-related policy initiatives in Bhutan, such as mainstreaming SCP, greening hotels, greening public procurement, greening products and introducing an SCP curriculum. An energy-labelling programme is currently being reviewed by the Department of Renewable Energy (DRE) and an Integrated Energy Master Plan is in place. Furthermore, there has been a recent push by the government to move towards an electric-powered transport sector including levying a 5% green tax on fossil fuels and also a 5% green tax on import of fossil fuel-based vehicles. In 2008, Bhutan's tourism policy changed from "high value — low volume" to "high value — low (environment) impact" indicating a strategic direction towards sustainable tourism. The Economic Development Policy (EDP) 2010 aims to enhance the productive capacity of the economy and provide a strategic direction for economic development up to 2020. With a vision to promote a green and self-reliant economy sustained by an IT-enabled knowledge society, the EDP's objectives are to achieve economic self-reliance and full employment of 97.5% by 2020. The strategies set out to achieve the objectives include diversification of the economic base with a minimal ecological footprint, harnessing of and adding value to natural resources in a sustainable manner; and increase in and diversification of exports, promoting Bhutan as an organic brand, promoting industries that build "Brand Bhutan" and reducing dependency on fossil fuel.

With the present government's focus on promoting private sector development, an enabling environment to better businesses is foreseen,

such as simplification of licensing procedures, enhancement of productivity and efficiency, enforcement of conducive legislation and policies, and facilitation of infrastructure investments to promote ease of doing business. These favourable conditions, coupled with the strategic thrust towards accelerated green socio-economic development, provide a real opportunity for sustainability and promotion of sustainable industries in Bhutan, especially in the cottage-, small-, and medium-sized enterprise (CSME) sectors. However, the inherent limitations to scale up production and manufacturing, small market size, limited human resources, and inconsistencies in the quality of goods, services and infrastructure pose challenges to fostering SCP practices in Bhutan. The country's dependence on its development partners and donors for funding and technical assistance has been declining over the years. Apart from the European Union (EU), major development partners and donors include the Government of India (GOI), the World Bank Group, the Asian Development Bank (ADB), United Nations (UN), etc. The EU funds the government directly as well as providing funds through the SWITCH-Asia Programme. Three projects are being implemented in Bhutan under the SWITCH-Asia Programme: (i) "Sustainable & Efficient Industrial Development in Bhutan and Nepal" (SEID), 2012–2015, (ii) "Tourism in Bhutan: An Integrated Approach to Sustainable Production (SP), Consumption, and Livelihood Development", 2012–2015, and (iii) "Green Public Procurement in Bhutan (GPP Bhutan)", 2014–2017 (see Table 6.1).

6.2 Major Industry Structures and Situation of SMEs

Bhutan's economy is driven mainly by hydropower, construction, services, and power-intensive manufacturing sectors. All have low employment elasticity and minimal linkages in the domestic economy. Due to this, the spillover effects of structural changes and economic modernisation have not been able to tackle challenges related to poverty alleviation, rising income inequalities and unemployment. While the government recognises that private sector development is important for economic diversification and generating employment, the sector remains underdeveloped and is dominated by CSMEs.

Table 6.1: Overview of SWITCH-Asia projects in Bhutan [www.switch-asia.eu]

Name of Project	Period	Main Implementing Organisation	Places of Implementation	SCP Practice	Brief Description of Objectives or Impact
SEID in Bhutan and Nepal	2012–2015	Center for Appropriate Technology (GrAT), Austria	Bhutan and Nepal	Appropriate technology, resource efficiency	To contribute to sustainable development of Nepal's and Bhutan's economy with a clear focus on industrial sectors that impact environment, generate employment, and alleviate poverty
Tourism in Bhutan: An Integrated Approach to Sustainable Production (SP), Consumption and Livelihood Development	2012–2015	Association of Bhutanese Tour Operators (ABTO), Bhutan	Bhutan	Sustainable tourism, sustainable consumption	To promote SCP practices across the tourism value chain of Bhutan coupled with sustainable livelihood development
(GPP Bhutan): A Cross-sectoral Strategy for Sustainable Industrial Competitiveness	2014–2017	International Institute for Sustainable Development (IISD), Canada	Bhutan	Sustainable consumption, GPP	To implement GPP practices in Bhutan, enabling the procurement cycle to be used as a driver for green growth

Industries in Bhutan are categorised by two parameters — employment size and capital investment — as reflected in Table 6.1.

Under the 11th FYP, private sector development policies are being reviewed and appropriate interventions designed and implemented to bring the vulnerable and the poor into mainstream socio-economic development. Special emphasis is being accorded to CSMEs and rural enterprises, as they are deemed crucial for fostering entrepreneurship and innovation, creating employment, generating income, and helping engender pro-poor growth with equity and inclusion. Hence, the success of CSMEs contributes meaningfully towards realising the tenets of GNH.

The Bhutan Vision 2020 and the EDP 2010 identify and deem “small and cottage industries” as a priority sector. The CSMI Policy 2012 provides the necessary enabling and conducive policy environment for the promotion of CSMI development in Bhutan. The Department of Cottage and Small Industries (DCSI) is the line agency mandated to promote CSI development while the Department of Industry (DOI) is responsible for medium and large industries in Bhutan. Both departments are placed under the Ministry of Economic Affairs (MOEA).

According to the National Statistics Bureau (NSB), 99.4% of the 26,807 industries registered in 2013 fall into the cottage (23,324), small (3,053), and medium (268) category, which underscores the importance of the CSME segment in self-employment and income generation. In 2013, out of the 2,485 production and manufacturing registered industrial establishments, 44% (1,094) were forest-based, 14% (348) were agro-based and 10% (248) were mineral-based establishments [NSB, 2014b] (see Table 6.3). CSMEs face various constraints and challenges that prevent their full development and limit a more meaningful contribution to the national development goals including sustainability targets. These include diseconomies of scale, lack of infrastructure, difficulties in accessing finance, inadequate marketing facilities, non-standardisation of products, uncertainty in raw materials procurement, use of obsolete machinery, difficulty in retaining trained personnel, and limited business development services. Industrial establishments in Bhutan can be categorised based on ownership, size, and type (see Table 6.2).

With seven new mega hydroelectric projects planned for the 11th FYP, the construction sector provides an excellent opportunity for Bhutan to

Table 6.2: Industry categorisation in Bhutan

Industry Category	Parameters ¹	
	Employment Size	Investment (BTN)
Large	100+	> 100 million
Medium	20–99	10–100 million
Small	5–19	1–10 million
Cottage/Micro	1–4	< 1 million

Source: Cottage, Small, and Medium Industry (CSMI), Development Strategy (2012–2020), and Action Plan (2012–2014) [Ministry of Economic Affairs, 2012].

Table 6.3: Number of industrial establishments by ownership, size, and type (2009–2013)

Industrial Establishment	2009	2010	2011	2012	2013
Ownership	30,317	32,360	34,692	37,282	39,951
(a) Private	30,207	32,218	34,550	37,155	39,814
(b) Joint	14	46	46	27	29
(c) Public	96	96	96	100	108
Size	19,472	21,008	22,776	24,605	26,807
(a) Large	103	114	133	141	162
(b) Medium	156	201	220	240	268
(c) Small	2,330	2,878	2,649	3,014	3,053
(d) Cottage	16,883	17,815	19,774	21,210	23,324
Type	30,317	32,360	34,692	37,282	39,951
(a) Production and Manufacturing	1,565	1,777	1,977	2,240	2,485
– Agro-based	252	287	291	325	348
– Forest-based	651	733	831	954	1,094
– Mineral-based	163	178	209	236	248
– Others	499	579	646	725	795
(b) Contract	10,845	11,352	11,916	12,677	13,144
(c) Services	17,907	19,231	20,799	22,365	24,322

Source: DOI, MOEA, Thimphu [NSB, 2014b].

¹In the event of conflict in the usage of the two parameters, capital investment would take precedence over employment size.

realise the goal of full employment. In order to make it an attractive sector for youth employment, mechanisation of the construction industry is being promoted, together with improved working conditions, and higher remuneration gained by enhancing productivity through skills development. Additionally, initiatives are being undertaken to promote the use of local materials to reduce imports and strengthen the capacity of local construction industries to participate in large infrastructure projects.

The following sections focus on food and agriculture, tourism, and renewable resources.

6.2.1 Food and agriculture

Agriculture is an important economic sector in Bhutan, particularly as a source of livelihood for the rural poor. The 11th FYP objectives for the agriculture sector include, among others, meeting a greater share of the demand through local production, and hence increasing self-sufficiency in food production. Even though only 2.93% of the land area in Bhutan is classified as agricultural, crops and livestock's share in GDP stood at 13.29% in 2013 and provided employment to over 56% of the total population. Paddy, maize, apple, oranges, and potatoes are the major crops, and cattle, and poultry the major livestock. Given the predominance of subsistence farming, 60% of cereals, vegetables and animal products, and 95% of fruit and nuts are domestically produced while 97% of fish, 80% of beef, 77% of pork, and 90% of oils and fats demands are met from imports.

The sector continues to grow, although slowly, and faces a number of challenges. Studies indicate that yield per hectare has been on the decline at a compound annual rate of 1.84% over the last 27 years [World Bank, 2014]. A lack of sufficient farmer labour is considered a constraint because of out-migration in rural areas. This is compounded by inadequate access to markets due to limited number of farm road linkages. Lack of irrigation is another constraint; agriculture is still dominated by rain-fed dry land farming. Other challenges include high soil erosion rate, vulnerability to various pests and diseases, crop loss to wild animal invasion, and lack of good storage and processing facilities.

In order to meet these challenges, through the 11th FYP, Bhutan aims to shift from subsistence to commercial farming, and develop agri-business enterprises to increase rural livelihoods and facilitate economic growth.

Mechanisation will be promoted to help address labour shortages, and large-scale irrigation schemes will be developed with watershed management plans implemented to make water resources available. A comprehensive strategy to address potential human-wildlife conflict is also being developed and the country hopes to work towards ensuring sustainability at the same time as improving productivity, through soil and water conservation, natural resources restoration, and appropriate farming systems. Five advanced cold storage facilities are being established across the country to retain home-grown vegetables, especially potatoes, to make them available to Bhutanese consumers during the lean season, and also to help reduce vegetable imports. These measures aim to support SCP practice in the food and agriculture sector in Bhutan. For example, cold storage and processing facilities play a vital role in the food harvest, preservation, and distribution system. The establishment of advanced cold storage facilities would help people to consume what they produce and cut down on imports and help the country meet its goal of self-sufficiency in domestic vegetable production. Today, self-sufficiency in rice is 48%, beef 39%, pork 40%, chicken 76%, fish 2%, egg 63%, and vegetables 56% [GNHC, 2013b].

6.2.2 Tourism

Tourism is an important sector in Bhutan, which has the potential for further growth. The industry began in 1974 and was privatised in 1991. There were 116,209 tourists in 2013 including international, regional, business, official and familiarisation visitors, about 10% higher than in 2012 [NSB, 2014b]. Culture and nature have been the two main attractions for tourists, making this an important sector for green growth. Approximately 22,045 employment opportunities were created in 2011 through this sector [GNHC, 2013b]. The sector is considered an important source of foreign exchange earnings. Gross earnings from international leisure tourism reached USD 63.89 million in 2013, an increase of 0.69% compared to 2012 [NSB, 2014b].

Challenges faced by the tourism sector include accessibility, seasonality, and product diversification. The capacity of air transport services puts constraints on visitors, and there is also a shortage of trained guides and

skilled workers in the hospitality sector. Product development and destination marketing are also required. During the 11th FYP, Bhutan plans to increase tourist arrivals to more than 200,000, raise the sector's contribution to GDP almost four times, and employment to 40,000. Bhutan aims to improve product diversification so that regional and seasonal variations are smoothed out and standards of services are improved. New product development is planned in categories including wellness, cultural tourism, sports, adventure, eco-tourism, and MICE (meetings, incentives, conventions, and exhibitions). Based on concerns that too much of the income from eco-tourism is channelled to the government and tour operators, efforts are being made to ensure that local communities also benefit from tourism. To cope up with the increasing tourist arrivals, the Tourism Council of Bhutan (TCB) is continuing to diversify the tourism offering, encourage visits to less-visited districts and to encourage activity throughout the year. The Council is also working on an integrated approach to sustainable tourism development and destination management at the district level. Measures for monitoring by stakeholders are also being strengthened.

Bhutan has always sought to sell tourism as an exclusive product since the country's opening up in the early 1970s. Over the years, the country has migrated from a policy slogan of "High Value, Low Volume" to "High Value, Low Impact" in 2008, suggesting a larger focus on increasing arrivals while ensuring minimal (ecological) impact. The TCB together with other stakeholders have been instrumental in the development and launch of new eco-tourism products, such as the Nabji-Korphu community-based trail in Jigme Singye Wangchuck National Park, the community-based trail in Merak Sakteng in Trashigang, and various farm stay programmes. Furthermore, the country has opened up some of its national parks for tourism and infrastructure development. While the number of tourists has increased following the move to boost economic growth through tourism, the government has been mindful of the low impact goal. The impacts from the sector are recognised, thus policies in the tourism sector promote and provide incentives to the different stakeholders in order to become more sustainable and to adopt green practice, be they in hospitality, transport and tourism products. Along the hospitality front, the Bhutanese Government has been working on the

classification of hotels, which also establishes standards for a green hotel and the incentives accorded. The increasing number of tourists results in higher consumption levels as well as creating much needed employment in the country.

Box 6.1 SWITCH-Asia case study: Tourism in Bhutan: An Integrated Approach to Sustainable Production (SP), Consumption, and Livelihood Development

This first SWITCH-Asia project in Bhutan started in January 2012 and ended in October 2015 after securing a three-month implementation extension. The overall project objective was to contribute to economic prosperity, poverty reduction and climate change mitigation in Bhutan, by promoting sustainable tourism development. The specific objective was to promote SP and consumption practices across the tourism value chain of Bhutan, coupled with sustainable livelihood development. Some of the specific goals of the project were:

- Environmental Information System (EIS) for the tourism industry (first of its kind in the country).
- Reduction in GHG emissions from the operation of tourism business.
- Overall reduction in resource utilisation and an increase in tourism sector income.
- Low carbon (LC) tourism products & packages (20 products and packages offered).
- Promote and adopt LC & SCP measures in tourism operations.
- Facilitate public-private partnerships (PPPs) and policy interventions to improve LC & SCP practice by the industry.
- Improve opportunities for rural communities (capacity building, platforms, and linkages).
- Capacity building of the key government stakeholders and intermediary sectors in LC & SCP.
- Capacity building of service providers and industry staff along the supply chain.
- Awareness creation for industry, general citizens, and tourists on GHG, LC, and SCP.

(Continued)

Box 6.1 (Continued)

By the end of January 2015, the project had achieved key results, listed in brief below:

- PPPs and policy dialogues:
 - Skills development and market linkages for the cooperatives and farmers' groups of five tourist districts (Thimphu, Paro, Punakha, Wangdue, and Tsirang) with industry consumers, mainly hoteliers, in coordination with the Department of Agricultural Marketing and Cooperatives, Ministry of Agriculture and Forests.
 - Support and interventions in the incorporation of environmental and LC components into the hotel classification system of the TCB.
 - Elaboration and inclusion of two modules on LC and energy management in the curriculum of the Royal Institute of Tourism and Hospitality (RITH), the premier government-run tourism and hospitality training institute.
- Capacity-building of government and intermediaries:
 - About 20 local trainers trained to ensure project objectives continue beyond the funding period.
 - More than 70 key government stakeholder staff and intermediary organisations trained.
- Capacity-building and support to industry and rural communities:
 - 33 case studies completed and one-to-one support for high impact industry entities.
 - 620 industry staff and rural community suppliers trained in 19 training programmes with 13 different sector-specific training themes.
- Development of 20 LC tourism products/packages.
- Development of:
 - the first EIS for the industry and creation of an environmental database (based on a comprehensive baseline survey covering eight sub-sectors of the industry),
 - LC benchmarks for the tourism industry,
 - support centres in industry associations,
 - a carbon calculator specific to Bhutan.

(Continued)

Box 6.1 (Continued)

At the time of going to press, with a few months left to run of the project, most set targets have been achieved. The next step is to implement the recommendations and mitigation measures identified during the survey analysis and industry case studies, thus reduce GHG emissions and the industry's carbon footprint, and following a comparative re-survey of the industry entities. Facilitating green finance and credits from Bhutanese financial institutions was problematic due to the general moratorium by the central bank on general loans because of the economic situation in Bhutan.

Some of the challenges stated by the project implementers were:

- Overall incentives permissible within the regulations of the EU SWITCH-Asia Programme were not persuasive enough for a full commitment of the industry for maximum investment and change, especially as the tourism industry was granted stronger incentives from the government. However, much was achieved through one-to-one training sessions, consultations, and expert support;
- Lack of vital data about Bhutan's tourism industry required a commitment of almost 1.5 years from the project start just to conduct the comprehensive baseline survey (covering almost all sub-sectors and industry entities throughout the country);
- Limited pool of local experts and resources in specific fields, plus the seasonality of tourism business, gave the project only a six month window for scheduling programmes and industry initiatives, somewhat limiting the scope and span of interventions.

Overall, the project has been successful in raising awareness on GHG, LC, and SCP aspects in the tourism industry, and in promoting changes towards improving energy efficiency and resource use, and lowering the overall carbon footprint of the industry. In order to achieve continuity in the concepts of LC and SCP and sustainable tourism, capacity building of industry stakeholders, as well as provision of tools and the skills to do so efficiently and effectively, were achieved beyond the set target figures (targeted 500, achieved 620). To ensure sustainability of the objectives beyond the project period, recommendations were made to incorporate and further LC and SCP concepts and practices in tourism, such as: establishment of linkages between cooperatives and farmers' groups with hoteliers; incorporation of environmental and LC components in the Hotel Classification System; and inclusion of two modules on LC and energy management in the curriculum of the RITH.

6.2.3 *Renewable resources*

Forests are an important natural resource in Bhutan. The Constitution of Bhutan stipulates that the country maintain a “minimum of 60% of the total land area under forest cover for all time to come.” In addition to this Constitutional mandate, since the 1960s regulations do not allow for the export of raw timber out of the country [RGOB, 2012].

As a share of GDP, the forestry and logging sector accounted for only 2.89% in 2013 as compared to 4.24% in 2009. This figure, however, does not do justice to the importance of the sector in the livelihoods of the poor: rural people rely heavily on functioning forest eco-systems for subsistence goods, including fuel wood, non-wood forest products (NWFPs), construction timber, etc. In Bhutan, firewood constitutes about 57% of total energy consumption. Households account for 95% of total fuel-wood consumption, while the government, commercial sector, and industry consume the balance. Stones and sand are the most important NWFPs followed by woodchips, bamboo, resin, and cordyceps.

Although deforestation is not considered to be a major problem in Bhutan, urban expansion and the establishment of new infrastructure, such as roads and hydropower projects, have had a negative effect on forests. Another potential challenge is low productivity, a challenge that is particularly relevant for promoting green growth in this sector. Wood charcoal was one of the top 10 commodities imported into the country from 2008 to 2012, despite the large forested areas in the country. Aside from productivity differences, this partly appears to reflect reluctance to accept the nearby presence of charcoal kilns. Under the 11th FYP, Bhutan hopes to overcome some of these challenges and manage its forest resources in order to supply economic goods and services through the establishment of Forest Management Units, Working Schemes, Community Forests (CFs), plantations, and NWFP user groups. The number of CFs in particular is to be increased to help empower rural communities to manage forests sustainably and alleviate poverty. The plan also emphasises biodiversity conservation and the maintenance of ecosystem services through protected area management, watershed management, and wildlife management. Bhutan is also conducting Reducing Emissions from Deforestation and Forest Degradation (REDD+) readiness activities, and

hopes to be ready for implementing REDD+ activities by the end of the 11th FYP, by which time it is hoped that there will be clarity on the availability of global funds to support these activities.

Another crucial element to promote green growth and sustainability in renewable resource sectors such as forests is to ensure that the resource is managed to enhance productivity and prevent resource rent dissipation, given its common property nature. A package of measures is often needed to realise green growth outcomes: to reap higher and sustainable economic returns from natural forests, for example, requires aligning policies, incentives, capacity, and governance. Enforcing access rights, to avoid over-exploitation given the open access nature of forests, for example, will be as important as developing markets for forest products.

6.3 Policies for SCP

As previously mentioned, Bhutan's pursuit of GNH since its inception in the early 1970s has had the intention for Bhutan to be on the path to becoming a country that is holistic, inclusive, and sustainable in its development. There is a close relationship between GNH policies and those promoting SCP, described in this section. Bhutan has been guided by GNH in implementing its FYP for development. The 11th FYP is currently being implemented and the document centres on the goal of "Self-reliance and Inclusive Green Socio-economic Development" [GNHC, 2013a]. Since 2009, the GNH philosophy has been translated into a Policy Screening tool that is used to align all development policies and activities in Bhutan to the GNH philosophy within which environment and social aspects are carefully considered. There remain challenges in enforcement due to a lack of financial resources to monitor effectively the implementation of activities and developmental programmes.

6.3.1 *National policy framework relating to SCP*

UNEP has defined a Green Economy as "one that results in improved human wellbeing and social equity, while significantly reducing environmental risks and ecological scarcities" and this fits in very well within the framework of GNH pursued by Bhutan. The concept of GNH, based on

the premise that true development takes place when social, economic, spiritual, and environmental wellbeing occur side by side (complementing and reinforcing each other), has been the principal driving force behind the growth and development agenda in Bhutan. The GNH development philosophy is the Bhutanese version of the global concept of sustainable development with the Constitution of the Kingdom of Bhutan enshrining it as a state policy [RGOB, 2008a]. The Constitution also spells out the duties and rights of the parliament, the government and the people to safeguard and protect the environment, and establishes the need for inter-generational equity for natural resources. The GNH framework in the sphere of public policy is based on the four main pillars of:

- a. Equitable socio-economic development;
- b. Conservation of the environment;
- c. Preservation and promotion of culture; and
- d. Promotion of good governance.

Bhutan currently subjects all national and sectoral policies to the GNH policy screening tool, which currently covers 23 determinants relating to nine GNH domains (see Figure 6.1) identified from the four pillars.

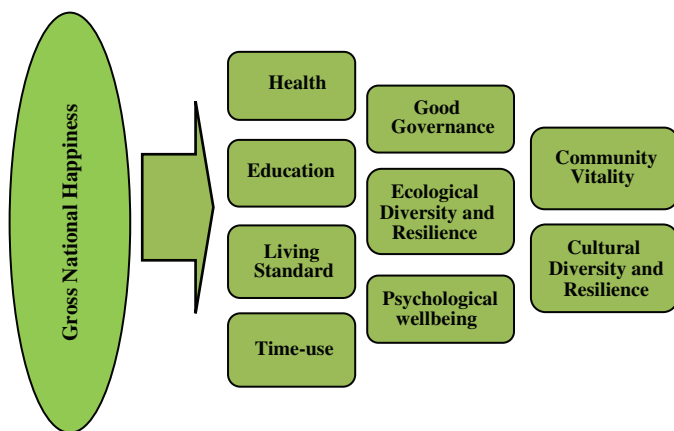


Figure 6.1: The nine domains of GNH

Source: Authors representation adapted from www.grossnationalhappiness.com/ninedomains.

Policies that do not sufficiently meet GNH criteria are reverted to the proponent agencies for review and improvement.

The National Environment Commission (NEC) signed an agreement with UNEP in November 2014 under the 10 Year Framework of Programme (10YFP) with the objective of “mainstreaming SCP into policy making for achieving sustainable development” [Tshering, 2015]. Under the programme, five activities have been prioritised for implementation. These activities, which started in February 2015, are:

Activity 1: Mainstreaming SCP into national policy and plans. Under this activity, the NEC is expected to deliver four outputs to be able to carry out mainstreaming into national policy and plans. Output 1 is a baseline report on SCP in the Bhutanese context, Output 2 assigns the review of policy protocol and policy review tool to identify the gaps, while Output 3 focuses on integrating SCP into the National Environmental Strategy, and Output 4 will provide advocacy and capacity building for conducting Life Cycle Assessments (LCA) and life cycle management. This mainstreaming is being carried out to ensure the sustainability of SCP policies.

Activity 2: Supporting sustainable tourism through the development of green hotel guidelines and provide recommendations for the integration of sustainable tourism into the five-year tourism strategy.

Activity 3: Supporting sustainable public procurement (SPP) through the revision of national procurement rules and regulations (PRR) in partnership with the EU SWITCH-Asia funded “GPP Bhutan” Project and carrying out Training of Trainers on SPP to both procurers and suppliers (see Box 6.2).

Activity 4: Integrating SCP learning materials in technical and vocational education training, tertiary level, civil servant, and continuing education curricula.

Activity 5: Developing guidelines for paperless operations in the public sector and providing “training of trainers” on paperless office operations to managers across agencies and to showcase the benefits of SCP, a pilot project will be identified and paperless operations implemented to document the benefits of such a transition.

Box 6.2 SWITCH-Asia case study: GPP in Bhutan — A Cross Sectoral Strategy for Sustainable Industrial Competitiveness (GPP Bhutan)

This SWITCH-Asia project started in January 2014 and will continue until June 2017. The project aims to establish a strategic approach for the government to scale-up public demand for environmentally and socially preferable goods, services and infrastructure, and utilise GPP as a tool to drive green growth. Specifically, it seeks to:

- lower the direct impact of state's consumption,
- incentivise SP among suppliers,
- build demand-side and supply-side capacity, and
- trigger private sustainable consumption and green economic transformation.

To date, quantitative mapping of public procurement, analysis of legal procurement documents, mapping of institutional arrangements and procedures for public procurement, assessment of supplier pre-qualification requirements, and market assessment for green goods, services, and infrastructure have been completed. Based on the findings, the project will provide policy recommendations, design preferential programmes, train public procurers and suppliers to respond to 'green' tenders, mentor pilot tenders, and finally establish a GPP knowledge platform and curriculum in Bhutan.

Additionally, in its capacity as the SWITCH-Asia Regional Policy Support Component (RPSC), UNEP has signed a Small Scale Fund Agreement (SSFA) with Bhutan's NEC to mainstream SCP into GNH-guided development, in which one of the activities is supporting SPP. In order to avoid duplication, the *GPP Bhutan* project has agreed to take on most of the activities related to SPP, while NEC will provide guidance and serve as the government associate. Their other activities under the SSFA include mainstreaming SCP into policy and plans, developing green hotel guidelines, and incorporating sustainable tourism into the tourism policy, integrating SCP in technical, vocational and continuing education curricula, and developing guidelines for paperless offices.

6.3.2 *Other policies relevant for SCP*

In addition to the overarching guiding principle of GNH in public policy, the Royal Government produced the National Environment Strategy, titled “The Middle Path” (the equivalent of a National Sustainable Development Strategy), some 15 years ago as a strategic document to guide the country in its development. The Middle Path identifies three main avenues for sustainable development in Bhutan and remains relevant to this day with its thrust in developing hydropower based on integrated watershed management, agricultural development based on SP practice, and industrial development based on effective pollution controls and enforcement of environmental standards [NEC, 1998].

With the GNH screening tool and the Middle Path guiding development in Bhutan, in 2010, a new EDP was launched with the vision “to promote a green and self-reliant economy sustained by an IT-enabled knowledge society guided by the GNH philosophy” [MOEA, 2010]. The key strategies towards this end are geared to diversify the country’s economic base with a focus on harnessing the natural resources in a sustainable manner, reducing the need for fossil fuels in the economy (especially with regard to transportation), promoting Bhutan as an organic brand and as an eco-tourist destination, with the overall end goal of minimising ecological damages. This is being effected through targeted interventions in the form of tax holidays, tax exemptions, and subsidies.

The Royal Government of Bhutan (RGOB) also formulated and launched “the National Strategy and Action Plan for LC Development” in June 2012, following its declaration to remain a carbon neutral country at the 2009 Conference of Parties of the UNFCCC in Denmark which further reinforces and strengthens Bhutan’s commitment to develop with the principles of sustainable development. The National Strategy and Action Plan for LC Development comprises various scenarios analysing development paths until the year 2040. The strategy includes a number of short and medium-term policies regarding residential, commercial, and industrial energy consumption, as well as addressing transport. Non-energy related sectors are also addressed, and further categorised into industrial processes, agriculture, land use and forestry, and municipal waste. The overall objective is to achieve carbon neutrality while still pursuing sustainable

economic development based on baseline information provided by the NEC and the NSB.

At the same time, the country is working towards formulating standards; the Bhutan Standards Bureau (BSB) was thus established in 2010. Its aims are to foster and promote standards and standardisation activities as a means of advancing the national economy, benefiting the health, safety and welfare of the public, assisting and protecting consumers, protecting the natural environment, promoting industrial efficiency and development, and facilitating domestic and international trade [BSB, 2010]. This coupled with the launch of work being carried out at the DRE on energy efficiency standards, the launch of the green building design guidelines by the Ministry of Works and Human Settlement, and the development of the Green Hotel Guidelines (under the NEC Secretariat — UNEP 10YFP) provides room for SCP standards in the energy and construction sectors.

Similar to most countries, RGOB also spends a major chunk of its GDP in the procurement of goods, works and services. Public procurement is governed by the PRR 2009 (Revised 2014). Although current practices do not necessarily prioritise sustainability, the PRR provides space for the government to consider value for money and expressly provides that the lowest evaluated bid is not the only criteria for making procurement decisions. The PRR also provides for a 5% award to local vendors and local goods [MOF, 2014].

With the GNH philosophy that guides sectoral policy development through the GNH screening process (an iterative process between the sector and the Gross National Happiness Commission) and a National Environment Strategy and the declaration to remain carbon neutral — there exists a well formulated policy premise for pursuing SCP through green economic development in Bhutan, which is covered in more detail below.

6.3.3 Sectoral policies related to SCP

As previously mentioned, all sectoral policies in Bhutan are formulated with the GNH philosophy and screened by the GNH Commission before implementation. The Middle Path also plays a vital role in the development agenda and was a guiding document for policy makers and planners in Bhutan in developing sectoral policies before the introduction of the

GNH screening framework in 2009. Against this background, the 2010 EDP also provides incentives and subsidies to the following targeted sectors. The policies governing the major sectors of revenue and costs for Bhutan are discussed below.

6.3.3.1 Energy

Hydropower has been the primary driver of economic growth in the country since the 1960s. Hydropower generation potential is tremendous in Bhutan with a total generation potential estimated at 30,000 megawatt (MW). Currently, several hydropower projects are under construction or at the planning stage in order to harness additional power to achieve the target of total installed capacity of 10,000 MW by 2020. In 2013, the Government announced a subsidy of 100 units of free electricity to rural households in the country in addition to the already progressive power tariff, which was designed with the objective of ensuring affordable energy for all users and higher tariffs to deter wasteful consumption. The power tariff decisions are mandated to the Bhutan Electricity Authority and made with the objective to ensure affordable energy rates as well as to reduce the use of non-renewable and polluting sources of energy. To ensure the sustainability of the hydropower plants, the country has demarcated approximately 52% of the country as national parks, protected areas or biological corridors. This is necessary to protect not only the rich biodiversity, but also the watershed quality, which has a direct impact on the generation potential and the lives of communities downstream in Bhutan, India, and Bangladesh. To this effect, the government mandates that a minimum of 1% of the royalties of hydropower sales will be reinvested into integrated watershed management through the Ministry of Agriculture and Forests, making resources available for pursuing alternative payment models for eco-system services in the management of natural resources [RGOB, 2008b].

Furthermore, the EDP clearly lays down numerous incentives and tax breaks for investment in other renewable sectors, such as wind and solar farms. The Government has undertaken assessments on solar and wind energy potential in Bhutan, although no major projects are yet planned. Approximately 4,000–5,000 rural households currently use solar power

for lighting their homes through government-funded projects. On the wind energy front, the first 600 kW farm was initiated in 2014 by the DRE, MOEA, feeding the electricity generated into the National Grid. At the same time, the Ministry of Agriculture and Forests has been closely working with the Stichting Nederlandse Vrijwilligers (Foundation of Netherlands Volunteers — SNV Netherlands) to implement biogas initiatives in rural households in the country.

6.3.3.2 Agriculture, forests, and biodiversity

Approximately 69% of the country's population lives in rural areas and are primarily dependent on agriculture for their livelihood. The 11th FYP identifies the agriculture sector as critical for pursuing equitable socio-economic growth. Agriculture has always been a priority area under the FYPs and the 11th FYP has expanded programmes to scale up crop productivity and reduce environmental risks. To this end, the Government continues to provide mechanised equipment, tools, seeds, saplings, and livestock at a subsidised cost in addition to professional human resources in agriculture and livestock to all *gewogs* (smallest administrative unit) across the country. To ensure a competitive advantage, the Government established the Department of Agricultural Marketing and Cooperatives with the goal to implement the Cooperatives Act and provide support to farmers for formation and management of these agricultural enterprises. With the objective of SP and consumption in agriculture, the Government launched the National Framework for Organic Farming in 2007 with the vision of developing widespread organic farming and to become fully organic by 2020.

In the forestry and biodiversity sector, in addition to the constitutional mandates of forest coverage and GNH guiding the principles of state policy as laid out in the Constitution of the Kingdom, the forestry sector is managed through a well-established structure of Forest Management Units under the Department of Forests. These units have been established with the purpose of production forestry and the implementation of sustainable forestry practice in the country. Another major programme under the Department of Forests has been the community forestry programme, which integrates community development and forest conservation,

allowing members of the community to avail themselves of the economic opportunities afforded by the forest and continuity in the age-old community practices of drawing resources from the forest. However, with development and forest conservation policies, these rural communities have faced difficulties in accessing forest resources. The community forestry programme has bridged the needs of the community in a sustainable manner, also ensuring the conservation of forests in Bhutan. In 2012, there were roughly 14,000 rural households engaged and benefitting from the 340 or so CFs [GNHC, 2013b].

Bhutan, as a signatory to the Convention on Biological Diversity, requires the formulation and implementation of a National Biodiversity Strategic Action Plan, the most recent launched in 2014. At the same time, Bhutan recognises the importance of non-wood forest products as an opportune sector for poverty eradication. To this end, the Government allows for the collection of non-wood forest products by local people, subject to product specific regulations in the locality.

The RGOB in recent years has been driving the establishment of rural enterprises that promote and sustain the value of agriculture, livestock, and forest products. In 2014, the micro and small business tax exemption programme benefitted 11,122 rural business enterprises. In the same year, the Government's programme for boosting domestic production, import substitution, and employment generation, through the Business Opportunity and Information Centre, resulted in the registration of 589 new businesses and the creation of 905 jobs. Based on the EDP and the Foreign Direct Investment Policy (revised to allow investments in bio-prospecting and agro processing), the government is pursuing these sectors with the goal of product diversification/improvement and market access. To this end, the Government has been implementing skills development programmes and support for formation of farmers groups and cooperatives for improved market access.

6.3.3.3 Transportation

Although Bhutan is a net exporter of energy, the import of fossil fuels to power the transportation sector is a significant contributor to the drain on the national exchequer. In 2013, the country imported 7.882 billion

Bhutanese Ngultrum (BTN) (approximately EUR 112.6 million) worth of fossil fuels against power exports of BTN 11.2 billion (EUR 160 million), a major portion of which goes to the transportation sector. This was driven by the huge growth in the number of vehicles on roads, which in 2012 increased from approximately 40,000 vehicles to 67,500 vehicles [Kuensel, 2015]. To counter this, the country implemented a controversial “pedestrian day policy” — requiring all people to not drive their cars on Tuesdays in 2012, later rescinded in 2013 due to a lack of public support. However, to tackle this huge dependence on fossil fuel, the Government introduced a new tax bill in 2013, which increased the customs duty and sales tax of vehicles significantly; progressive tax rates based on the capacity of the engine [Kuensel, 2014]. The same bill also defined electric vehicles as tax-free and a lower tax regime for hybrid cars. The concept of a Green Tax was also introduced on fossil fuels (paid for by the consumer) citing the “polluter pays” principle. The green tax has been built into the taxes paid for when a vehicle is imported and also is progressive in nature.

6.4 Status of International Aid Cooperation for SCP

In Bhutan, most international agencies work directly with the RGOB, along the FYP activities that align with the donor agencies’ focus areas. The EU provides funds in the form of direct budgetary support to the government, while the EuropeAid SWITCH-Asia Programme provides funds through the not-for-profit track, such as academic institutions and international and national NGOs, and work in mutually agreed and targeted areas at all levels from the grassroots to policy interventions. To date, the EU has focused on intensive support for Bhutan’s efforts towards poverty reduction, food security, and democratisation. The development programme was worth EUR 14 million in the period 2007–2013, mainly providing support for renewable natural resources and enhancing good governance. The new EU–Bhutan cooperation programme, known as the Multi-annual Indicative Programme (MIP), amounts to EUR 42 million and runs from 2014 to 2020. The assistance to the RGOB will focus on moving towards Bhutan’s overall goal of achieving self-reliance and inclusive socio-economic development as identified in its 11th FYP [EC, 2014]. The identified priority sectors are (1) Civil Society and Local Authorities and (2) Sustainable agriculture and forestry.

6.4.1 *International aid-cooperation programmes in Bhutan*

Apart from the EU, Bhutan's major development partners and funders include the GOI, Danish International Development Agency (DANIDA), World Bank Group/IFC, ADB, various UN organisations participating in the "Delivering as One" programme (including the Food and Agriculture Organisation (FAO), UN Development Programme (UNDP), UN Population Fund (UNFPA), UN Children's Fund (UNICEF), World Food Programme (WFP) and World Health Organisation (WHO), Swiss Development Cooperation, Austrian Development Cooperation, Helvetas Interco-operation, Japan International Cooperation Agency (JICA)/Japan Overseas Cooperation Volunteers (JOCV), and SNV Netherlands Development Organisation. Development assistance in the form of grants and credits are given for various programmes and projects that align with both Bhutanese development priorities as well as the focus areas identified by donors. The GOI continues to be Bhutan's largest grant donor and most important development partner, accounting for 81% of all grant inflows in 2013–2014 DANIDA, with 3.6%, was the second largest grant donor for the year, followed by the EU at 2.6%. In 2013–2014, GOI was also Bhutan's largest creditor, followed by the ADB, the World Bank, and the Government of Austria.

6.4.2 *Current aid-cooperation landscape in Bhutan for sustainable development*

Hydropower, health and education, communications, and agriculture sectors have been the largest recipients of international grant assistance since the 1990s. However, over the years, there has been a discernible — albeit marginal — expansion in the direction of grant aid towards other sectors, such as trade and industry and autonomous agency activities, including information technology, environment, good governance, and women's empowerment programmes. Apart from the EU's support through the SWITCH-Asia Programme, there are no other international aid cooperation programmes directly supporting initiatives for SCP. However, since all aid-cooperation is granted against Bhutan's FYPs guided by the GNH

development philosophy, themes of sustainability are indirectly incorporated into most, if not all, development activities. The goal of current FYP is “self-reliance and inclusive green socio-economic development” which is very favourable for promoting SCP. While the most significant aid-cooperation to Bhutan is through support to the government, some international and regional agencies working in environment-related areas such as the World Wide Fund for Nature (WWF) and the International Centre for Integrated Mountain Development (ICIMOD) support various projects and programmes in Bhutan, which have aspects of sustainability built into them.

Due to Bhutan’s significant achievements thus far, development cooperation has begun to phase-out its support, such as the most-notable conclusion of support from Danish Government to RGOB. Bhutan is also enlisted in the UN as a potential country to graduate from the list of Least Developed Countries (LDCs) in the next 5–6 years. Although the graduation from LDCs is not certain, its considerable social, economic, and political progress in the last 50 years could mean that the scale, scope, and nature of international aid-cooperation will change. However, it is very important to note that as a small, landlocked country, Bhutan continues to face various development challenges. Examples of these are limited scope in economic activities, heavy import dependence on India for food and non-food items, vulnerability in the agriculture sector, rapid urbanisation coupled with inadequate urban planning, varying levels of opportunities in different districts and for different segments of society (which could lead to rise in inequality) and dependence on revenue generated from hydropower. While Bhutan’s vision, policies, and plans are very conducive to SCP, local capacity and expertise need to be strengthened in order to ensure development activities and economic growth adequately address both the social development needs at hand as well as the environmental conservation needs for sustainability.

6.5 Conclusions

While there is no stand-alone national SCP policy or framework currently being pursued in Bhutan, the recent agreement between UNEP 10YFP and the NEC Secretariat marks the interest and the will of the government

to streamline and integrate the compartmentalised pursuits of sustainability right across the Bhutanese economy. The introduction of activities under the UNEP 10YFP and the mainstreaming of SCP into national policies will allow for the integration of various sustainability initiatives that the RGOB has been pursuing under the umbrella of sustainable development. Over the last two decades, Bhutan has been consciously moving towards more sustainable policies for development, which is evident from the country's commitment to pursuing development based on GNH, which places environmental conservation at the centre of its development strategy. The GNH development model uses the GNH framework for both planning and evaluation in the form of a policy-screening tool and a GNH Index for evaluation. This in itself ensures that policies are formulated and evaluated along the lines of sustainability and provides a chance for correction after evaluation if desired outcomes are not being achieved. Thus, Bhutan's current policies, which focus on priority areas like hydropower, sustainable tourism, value-added agriculture products, and other environmentally friendly businesses, provide a firm foundation for SCP-based growth. Some key growth-related challenges facing Bhutan include macro-economic imbalances created by hydropower-led development, stagnation in agricultural productivity, rising youth unemployment, constraints to diversification of the economy, and increasing tensions between infrastructure development and environmental conservation. In the long term, the increasing vulnerability in the hydropower sector due to climate change could have serious implications for the Bhutanese economy. In order to address urgent growth needs while pursuing sustainability, SCP strategies in energy efficiency and transportation need to be complemented by other strategic policies and interventions. These include institutional reforms to improve the investment climate, infrastructure upgrading in particular, and increased availability of skilled labour. Policies for spending revenues from hydro exports and how tourism is expanded are key issues to be addressed in making growth more sustainable and inclusive. NEC is currently reviewing and updating the Middle Path document, which has been the primary document guiding sustainable development in Bhutan. The partnership NEC has with UNEP under the 10YFP will likely contribute to the revised Middle Path document, bringing SCP into national policies. While SCP is not necessarily mentioned

explicitly in Bhutan's national policy documents, all sectoral policies include sustainability at the core of their objectives and this is also reflected in Bhutan's 11th FYP with its vision of green growth and self-reliance. With the EU already promoting sustainable tourism and SPP in Bhutan through the SWITCH-Asia Programme, the transportation sector and energy efficiency sector provide major opportunities for Bhutan to further pursue its sustainable development through SCP measures.

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