

# **Chapter 4**

## **Integrating Economy and Environment: The Development Experience of Bhutan**

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### **4.1 Introduction: Growth, Poverty Alleviation and Sustainable Resource Management in Bhutan**

Bhutan, in comparison to other Himalayan regions, exhibits both major differences and significant similarities. With regard to current status, Bhutan is not experiencing the aforementioned problems in 'crisis' proportions. The country has been able to maintain steady growth rates and achieve reasonable improvements in indicators of human development. The natural resource base remains relatively intact, the resource pressure eased by a comparatively low population-land ratio and the heavy state regulation of industrial exploitation. Although, for many, life remains tough, cases of absolute poverty are rare, and current conditions enable the majority to maintain an acceptable standard of living. However, regarding future trends, it must be noted that there is little room for complacency. With increasing access to a modern infrastructure, Bhutanese society is changing rapidly, and with rapid population growth and urbanisation, achievement of equitable growth across the economy remains problematic. Also problems of degradation in the environment are emerging in different areas. Unless the underlying causes of this degradation are addressed properly, a situation of chronic deterioration will ensue.

Formal development began in Bhutan in the early 1960s, when its isolation ended. Since then the development approach adopted by the Royal Government has been

cautious and pragmatic because of the many problems that can be caused by uncontrolled development. The principle behind the government's development strategies is that gross national happiness (GNH) is of greater importance than gross national product (GNP), and the emphasis is, therefore, on balance, stability, and social equity. The state plays a paternalistic role in the development of the country. It is the principal actor in promoting and implementing a series of development and regulatory policy interventions. This has led to a substantial degree of success in health and education, physical and institutional infrastructure, and in achieving steady economic growth whilst maintaining a relatively uncompromised natural resource base. Yet, as the country undergoes transformation, the challenges faced will become increasingly complex and the policy decisions far from easy. It is in this context that Bhutan can benefit from policy analyses based on our own and our neighbours' experiences in order to formulate appropriate strategies and policies for the future.

This paper provides an introduction to the situation in Bhutan in respect of central issues such as economic growth, poverty alleviation, and sustainable resource management. The second section describes the country's resource base and economic structure. Section Three summarises the principal challenges faced and opportunities available. Section Four outlines the main approaches and programmes adopted by the Royal Government of Bhutan. Since this is only a general picture many of the issues have been described only briefly, leaving many questions to be answered in a more analytical framework. Section Five, therefore, highlights the emerging issues and options for the development strategy in the context of the accounts given in preceding sections.

## **4.2 Resource Base and Economic Structure**

### **Land**

The Kingdom of Bhutan covers 46,500 sq. km, roughly 150 km north to south and 300 km east to west. It is bordered in the north by the Xinjiang (Tibet) Autonomous Region of China and in the south by the Indian states of Sikkim, West Bengal, Assam, and Arunachal Pradesh. The topography is diverse although predominantly mountainous, rising sharply from 100 to 7,550 masl. Bhutan has three distinct relief and climatic zones, from the sub-tropical lowlands, through the temperate central valleys, to the alpine high Himalayas. The terrain is characterised by diversity, with a great variety of particular locales, possessing specific mixes of climate and terrain. Rainfall is concentrated in the monsoon season, mid-June to September, and precipitation can differ significantly within short distances because of rainshadow effects.

Bhutan has a wealth of natural resources. Water is abundant, and variations in altitude creating steep slopes provide excellent opportunities to use water for electricity generation. While the exact amounts of mineral deposits are unknown, geological mapping has indicated that there are coal, limestone, dolomite, talc, marble, gypsum,

slate, zinc, lead, copper, tungsten, and quartzite deposits. The country has a very rich and diverse ecology. Seventy-two per cent of the land is under forest cover and over 60% of the endemic species of the Eastern Himalayan region can be found in the country. These include over 165 species of mammals, 770 species of birds, 50 species of rhododendron, and 300 species of medicinal plants. Because of the number of endemic species Bhutan has been declared one of the ten global ‘hot-spots’ for the conservation of biodiversity, potentially the last chance for conservation in the Eastern Himalayas.

As seen in Table 4.1, only a small proportion of land area in Bhutan is currently used for productive pursuits. The reasons for this are threefold: the area suitable for agricultural production is very limited; industrial resource extraction is heavily regulated; and currently there is no heavy population pressure on fragile, marginal lands. Agricultural land use is predominantly restricted to traditional, isolated self-contained farming systems, combining crop and livestock production and use of forest products. Such systems are being gradually modernised to integrate new technologies where applicable and introduce the cultivation of cash crops. Furthermore, certain lands have been converted into orchards, principally for large-scale production of apples and oranges for domestic use and export. Such changes depend on more efficient use of existing agricultural lands, rather than on increasing land under cultivation. Twenty-six per cent of the total land area is protected for conservation of the nation’s biological heritage.

**Table 4.1: Land-use pattern (1995)**

Land type	Area (ha)	%
<b>Agricultural</b>	<b>314582</b>	<b>7.85</b>
Wetland	38760	
Dryland	97723	
Tseri (shifting cultivation)	88332	
Orchard	5741	
Mixed	84026	
<b>Forest</b>	<b>2578617</b>	<b>64.44</b>
Coniferous	1061621	
Broadleaf	1510570	
Plantation	6426	
<b>Scrub</b>	<b>325812</b>	<b>8.13</b>
<b>Pasture</b>	<b>155346</b>	<b>3.88</b>
<b>Settlements</b>	<b>3128</b>	<b>0.08</b>
<b>Other</b>	<b>628946</b>	<b>15.70</b>
Snow/glaciers	298859	
Rock outcrops	200753	
Land slips/eroded areas	95431	
Water spreads	30375	
Marshland	3528	
Total	4006431	100

Source: LUPP (1995)

## Society

Bhutan is one of the least populated countries in South Asia, with an estimated population of 600,000 (1996). The population density is the lowest of all the Himalayan countries. However, because of the small area of productive land, population size is a critical issue. Most of the population is concentrated in the fertile southern and central valleys, while large areas at higher altitudes are virtually empty

except for nomadic herders. Most people live in villages. Social organisation is based on an extended family system and the average size of households is 5.6. Bhutan is one of the least urbanised countries in the South Asian region, with only 15% of the population living in urban areas. Thimphu is the capital city, with an estimated population of 35,000. The other major urban settlements are Gelephu, Phuntsholing, and Samdrup Jongkhar, all in the south, where industrial activity is concentrated. Towns are developing in all 20 'dzongkhag' (district) headquarters. Forty-four settlements with a minimum of 500 inhabitants have been recognised as urban.

Bhutan has a territorial and social mosaic of communities where self-reliance favoured the emergence of localised institutions and knowledge. There was little systematic effort on the part of the state to interfere in the activities of agro-pastoral groups. Today, the state plays a proactive role in governance. The rural districts and sub-districts are all accountable to the central government and, in turn, the central government is responsible for introducing and implementing development interventions that are all overseen by ministries at the central level who report to the national legislature. From being a collection of communities of scattered highland farmers and nomads, Bhutan is emerging as a nation state. Nevertheless, social activities remain a blend of traditional and modern institutional arrangements, particularly in less accessible areas. The Royal Government of Bhutan emphasises human development, most notably in the fields of physical infrastructure, health, and education. A basic health system has been established, and there is now universal primary health care. The health of the population has improved dramatically, with life expectancy at 66 years (1999). Modern educational institutions provide educational opportunities from primary to tertiary levels, with the gross primary enrolment rate estimated at 72% (1999).

Eighty-five per cent of the population depend on agriculture and other traditional activities in the rural sector. Employment in the modern sector is currently limited, predominantly to public service and small-scale trade; and this is limited to 7,000 jobs, around half of them occupied by expatriates. Unlike many developing countries unemployment is not yet a big problem, and the traditional sector is providing adequate employment. However, the creation of productive employment for an expanding rural and urban population is a crucial issue. Despite the progress made in the development of a modern sector and in the field of education, many young Bhutanese are neither given appropriate opportunities nor equipped with the skills required to fulfil their increasing aspirations.

Bhutanese society is predominantly equitable, both between social groups and gender. Serfdom was formally abolished and the serfs were freed in 1956. Land reform in 1959 involving legislation on land ceiling and redistribution of surplus land and subsequent state policy interventions have determined that land and other resources are distributed throughout society. The state maintains ownership and control of most of the national resource base. Bhutanese women enjoy equality with men, both before the law and in informal social arrangements. They are actively involved in all

areas of economic, political, and social life, as farmers, entrepreneurs, decision-makers, professionals, and homemakers. Within traditional society, gender roles afford equal status, power, and freedom, and the predominant inheritance laws are particularly favourable to women who head most households. Perhaps the area where women are currently underrepresented is in formal decision-making processes, although this situation is undergoing changes in favour of women.

## Economy

Although considerable progress has been made in the development of the Bhutanese economy since the early 1960s, it remains rudimentary to date. The nation's economic structure is still predominantly agricultural, and the main inputs to economic growth come from the exploitation of hydropower potential and establishment of natural resource-based industries. The national per capita income stands at approximately US\$551 (1999), with the average growth rate of around 6.8% over the decade from 1985-95. A GDP sectoral breakdown and GDP by kind of activity are outlined in Tables 4.2 and 4.3. The government exercises prudent macro-economic management, with deficit financing limited to sustainable levels and fiscal and monetary policy emphasising stability and gradual evolution of the tax base and financial sector. The Bhutanese currency is the 'ngultrum'<sup>1</sup>, pegged to the Indian Rupee, which circulates freely, and interest rates are currently administratively determined.

The government has been and remains the driving force behind the country's economic development. In the non-farm sector, the state is both the principal producer and source of demand through infrastructural projects. Since 1987 there have been considerable initiatives to develop the private sector for future economic growth. Policies have been implemented to maintain macro-economic stability while

Table 4.2: GDP sectoral breakdown

	1985	1995	Growth (%)
Agriculture	54.9	38.0	2.9
Mining & quarrying	0.8	1.3	11.6
Manufacturing	4.9	9.1	13.5
Electricity	0.4	8.3	48.2
Construction	11.1	10.8	6.5
Trade	8.7	6.0	3.0
Transport & communication	5.2	8.2	11.8
Financial services	7.2	9.5	9.8
Community & social services	8.2	10.9	9.8
Less imputed bank service charges	-1.6	-2.1	-
Total	100	100	-

Source: Ministry of Planning (1996)

<sup>1</sup> There are 46.05 ngultrum to the US dollar - on a par with the Indian rupee.

Table 4.3: GDP at factor cost by kind of activity in 1980 prices

Sector	(in million Nu.)													Comp. Growth (%) 1985-95
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995			
1. Agriculture	834	881	926	940	963	993	1025	1006	1045	1066	1119	2.9		
– Agriculture proper	412	436	458	486	515	531	545	556	564	575	601	3.9		
– Livestock	169	177	185	192	202	212	229	202	227	232	246	3.8		
– Forestry & logging	254	267	283	263	247	250	250	249	254	259	271	1.0		
2. Mining & quarrying	13	22	22	19	22	19	27	24	26	30	38	11.6		
3. Manufacturing	75	71	105	110	129	158	187	209	217	224	268	13.5		
4. Electricity & gas	6	60	229	225	222	204	200	210	232	230	245	48.2		
5. Construction	169	142	152	129	136	137	116	157	182	280	317	6.5		
6. Wholesale and retail trade	132	143	142	129	134	135	145	161	164	170	178	3.0		
7. Transport, storage & communication	79	84	91	122	142	172	182	192	223	231	242	11.8		
8. Finance, insurance and real estate	110	126	136	141	163	212	209	215	238	245	281	9.8		
9. Community, social and personal services (government)	126	169	200	210	217	223	233	252	267	296	322	9.8		
Less: Imputed bank service charges	-25	-24	-30	-32	-41	-29	-21	-28	-45	-55	-63	-		
Gross domestic product	1520	1675	1973	1994	2087	2225	2303	2397	2549	2716	2946	6.8		

Source: Ministry of Planning (1996)

Nu = 1 Indian rupee

liberalising the financial system. Public sector industries have been privatised or corporatised. Industrial infrastructure is being developed in the form of estates and service centres. Special programmes have been set up to foster the development of cottage and small industries. However, in spite of such steps, the response from the private sector is below expectation.

Although Bhutan is considered among the world's poorest countries when measured in terms of GDP per capita, a UNDP Human Development Index rating of 0.510 (see Table 4.4) ranks the country within the medium human development bracket. Indeed, by the standards of the developing world, where the majority of the world's 1.1 billion poor are to be found, the Bhutanese case is unusual: underdeveloped, yet relative absence of visible forms of abject poverty and distribution of absolute poverty and unemployment. This has been possible largely because of a favourable population-resource ratio and community-based institutional arrangements. However the development process is likely to transform this situation, and it will become increasingly necessary to accommodate the needs of vulnerable and disadvantaged groups within the mainstream process of social and economic development.

**Table 4.4: Bhutan's human development index: 1984 & 1994**

	1984	1994
Life expectancy at birth (years)	47.5	66.0
Adult literacy rate (%)	28.0	46.0
Combined first, second and third level gross enrolment rate (%)	24.5	40.1
Real GDP per capita (PPP\$)	1,652	2,418
Life expectancy index	0.373	0.683
Adult literacy index	0.280	0.460
Combined enrolment index	0.245	0.401
Educational attainment index	0.268	0.440
GDP index	0.290	0.433
Human development index	0.310	0.510

Source: Ministry of Planning (1996)

## Infrastructure

The Bhutanese political system is monarchical. The King, H.M. Jigme Singye Wangchuck, is the head of state. The throne retains its status as the fulcrum of the system, although power and authority are shared with several other political and administrative institutions. Institutions of state are divided by function and responsibility into legislature (National Assembly), judiciary (courts), advisory (Royal Advisory Council), and executive (Cabinet of Ministers). Government administration consists of seven ministries (Foreign Affairs, Home Affairs, Trade and Industry, Agriculture, Health and Education, Finance and Communications), five commissions (Civil Service, Dzongkha Development, Planning, Environment and Cultural Affairs), army, police, bodyguard, and several autonomous bodies. Regional administration

is divided into 20 districts ('dzongkhags') under district administrators ('dzongdags') and further sub-divided into 196 blocks ('gewogs'), headed by elected community members ('gups').

Over the past decades, social infrastructure has expanded substantially (see Table 4.5) in keeping with the government's role as principal agent in the development process. High priority has been given to the promotion of a strong and professional civil service, and the transparency of a small community. Government interventions, in the form of regulatory and development policies, are administered through their respective ministries. Although the government now meets its recurrent expenditures, the financing of development programmes has been to a great extent dependent on external assistance. A system of decentralisation has been developed as an ongoing process, based around local institutions and customs, linking the central level to the local level in the decision-making process (Ministry of Planning 1993).

**Table 4.5: Selected development indicators (1977) and most recent estimates (MRE)**

Indicator	1977	MRE (1999)
Crude birth rate (per thousand)	43.6	39.9
Crude death rate (per thousand)	20.5	9.0
Life expectancy (years)	46.1	66.1
Immunisation coverage (%)	N/A	90
Infant mortality rate (per 1,000 live births)	N/A	70.7
Maternal mortality rate (per 100,000 live births)	N/A	3.8
Under-5 mortality rate (per 1,000 live births)	162	96.9
Number of hospitals	10	28
Number of dispensaries	38	N/A
Number of basic health units	31	145
Number of doctors	52	101
Number of primary schools	92	250
Number of junior high schools	14	44
Number of high schools	6	18
Number of tertiary and training institutions	N/A	10
Primary school enrolment rate (%)	N/A	72
Number of students in school	14,553	100,198
Students in tertiary education	866	2,004
Number of teachers	922	2,785
Adult literacy rate (pilot) (%)	17.5	54
Population served with electricity	N/A	31,639
Population (rural) with access to potable water (%)	31	58
Population (rural) with access to safe sanitation (%)	NA	80
Number of telephone exchanges	15	26
Number of telephone lines	N/A	9,314
GDP per capita (US\$)	100	551
Human Development Index	N/A	0.510

Source: Planning Commission (1999)

Bhutan's total road network measures about 3,200 km, the main routes consisting of an east-west highway and four north-south highways connecting all the districts and the major towns. However, inhibited by the mountainous terrain, certain regions and the majority of villages remain unconnected. These can only be reached by foot-trails, mule tracks, and cantilever and suspension bridges. In such conditions, horses, yaks, and oxen are used for transportation. The country has one airport, at Paro in western Bhutan, from where the national airline, Druk Air, provides regular services to Delhi, Calcutta, Kathmandu, Dhaka, and Bangkok. Telecommunication services, viz., telephone, telegraph, telex, fax, e-mail, and internet access, are available in the main urban centres and all but a few dzongkhag headquarters. Civil wireless facilities are available in all the dzongkhags. Electricity is now much more widely available, with the development of more than 20 hydroelectric schemes as well as the installation of diesel generators. Thirty-nine towns now receive electricity and five per cent of the population has access to electricity.

### 4.3 Challenges and Opportunities

#### **Administration**

##### ***Planning and policy***

The nation has almost completed the first stage of social and economic transformation. Although the Royal Government has adopted a pragmatic policy of gradual and suitably controlled development and change, much has been accomplished in previous decades, as is illustrated in Tables 4.2 to 4.5. Nevertheless, although a strong foundation for the kingdom's future development has been built, past achievements must not divert attention from future challenges. Indeed, as the nation moves to the next stage of development, in which the processes become increasingly complex and efficiency becomes a priority, new issues surface that pose significant threats to the ongoing achievement of balanced and sustainable development, requiring trade-offs and compromises between competing and contrasting priorities.

The achievement of successful modernisation will require substantial state investment in the provision of a suitable enabling environment. The physical and social infrastructure still need significant improvements, and projects are extremely important as catalysts in the facilitation of the development process. Furthermore, in its dual role as developer and protector of the environment, the state's capacity to regulate the activities of society is of great importance. Bhutan currently relies heavily on external assistance for the financing of infrastructural and development projects. Domestic resource mobilisation is essential in order to reduce dependence, the advancement of self-reliance, and the promotion of a sustainable system. To this end, the Royal Government possesses the considerable advantage of central income generating possibilities from the nation's currently untapped hydropower potential. However, while the government now meets all of its recurrent costs, it will be some time before it will be able to finance development interventions entirely from its own resources. It will be necessary to strengthen the capacity for aid and financial

management, providing additional evidence to development partners and society that available assistance and government revenue will be used effectively and managed to the nation's best possible advantage (UNDP 1998).

Bhutan is now experiencing a period of restless change, ensuing from the development process, and this carries with it concomitant challenges, opportunities, and risks. Perhaps the greatest development opportunity afforded to Bhutan has been timing. The nation's delayed integration within world systems has allowed it to commence the process of transformation in which it can benefit substantially from observing the experiences of other countries and learning from their successes and failures. Furthermore, the current global climate appears far more sympathetic to the Bhutanese situation. Successful development is regarded as mutually beneficial to Bhutan and those helping its development, and the rise in ecological and spiritual awareness places increased value on some of Bhutan's current resource endowments.

## **Society**

### ***Social change***

Bhutanese society has undergone significant change over the past decades with dramatic improvements in health and education and the ongoing development of a modern infrastructure (see Table 4.5). However, such progress carries with it several potentially negative side effects. One of the greatest challenges facing the nation is the rapid rate of population growth. If the current growth rate of 3.1% per annum remains unchecked, then the population will double in 23 years. The country's demographic transition, with 43% of the population currently under 15 years of age, will mean that growth in the demand for jobs will far exceed population growth. Indeed, it is estimated that a total of 267,000 jobs needs to be created in the next 20 years, even under the most favourable demographic assumptions. The requirements of a rapidly expanding population could have a destabilising effect with the need to support their changing ambitions, placing unsustainable pressures on the natural resource base.

With the development process comes increased expectations, potentially producing unsustainable pressures for future development. Rural-urban migration has been increasing rapidly, particularly to the principal urban centres, with some estimates suggesting that the population of Thimphu is increasing at 10% per annum. If the present trend continues, the nation's urban population could approach 400,000 within the next 20 years. Although rural-urban migration is a natural corollary of development and modernisation, such increases pose a great threat to stability. Many urban areas located in narrow valleys, are physically unable to absorb large numbers of new inhabitants, and do not possess the necessary physical and social infrastructure. Furthermore, rapid urbanisation could be environmentally and socially destructive, with unsustainable levels of localised natural resource use and many migrants unable to find the work they seek. The creation of suitable employment is already a critical issue, with an excess demand for jobs in the modern sector and a shortage of farm

labour. Urbanisation moves the challenge of sustainable development from rural to urban areas. It will become necessary to address both pull and push factors to achieve a suitable balance between rural and urban populations.

Bhutan used to be made up of a collection of dispersed and isolated communities living in diverse environmental settings. Such separation promoted self-reliance and sophisticated human adaptation mechanisms such as informal institutions and indigenous knowledge. If harnessed prudently, the elements embodied in such systems might constitute a valuable development resource. Indeed, where formal state institutions are still in the process of development, the perpetuation of such informal arrangements will help maintain stability and provide additional opportunities. Furthermore, in catering for the specific conditions of a particular community, a synergy of traditional and modern techniques could help generate appropriate localised strategies. Nevertheless, the relationship between traditional and modern systems is not necessarily mutual and can often be competing and contradictory, leading to supplanting the old with the new. The introduction of a partially developed, modern institutional infrastructure can have a disorientating and destabilising impact on traditional institutional arrangements with consequential implications on related social behaviour. Institutional changes, therefore, need to be carefully planned in order to ensure the incorporation of positive elements of both the new and the old.

### ***Equity***

Equity issues pose fundamental challenges for the efficient and effective development and stability of the nation. Income differentials are a natural product of modernisation, but it is important that these remain within acceptable boundaries, and that access to resources and related opportunities are distributed fairly. Redistributive and regulatory policies, such as a progressive system of taxation, will help promote this. Furthermore, fair, suitable, and universally accessible infrastructural arrangements will help maintain an equitable society. Although the physical and institutional infrastructures have improved dramatically, and the vast majority of the population has benefited in very tangible ways, the benefits have thus far not been distributed equally between social groups and regions. In remote and isolated areas, in particular, lifestyles remain characterised by vulnerability, uncertainty, and drudgery, and legitimate expectations and aspirations are not being met. Ensuring that such vulnerable and disadvantaged groups are able to benefit from the process of economic and social development is a challenge that must be met in the years ahead.

Although gender equality is the norm within traditional Bhutanese society, there is the possibility that this situation might change under the different working environments brought about by modernisation. Traditionally the different roles allocated by the sexual division of labour afforded equal status and importance to men and women. However, in changing circumstances, there is the possibility that women's roles remain the same, whereas men's roles are altered. Such a change might have an impact upon the division of power within the household, and thereby compromise gender equality in the future. Moreover, given the shortage of labour

(particularly skilled labour), it would be socially disadvantageous if valuable contributions to national development initiatives were excluded on the basis of gender. It will be important to monitor gender roles in society, ensuring that these remain equitable and opportunities are distributed evenly.

### ***Culture and development***

Bhutan has a rich socioreligious heritage that has maintained its integrity because of the small, isolated, and homogenous communities who share firm common beliefs and a common identity. Bhutanese culture, therefore, plays a crucial role in the provision of spiritual and emotional needs, the maintenance of social stability, and the ongoing sovereignty of the nation state. However, assets and values are never static, but are always subject to a continuous process of redefinition as they adapt to the needs and aspirations of a society in development. The modernisation process is both a powerful creator and destroyer of values, typically substituting the traditional and indigenous with the modern and universal. It will be a formidable challenge to distinguish between positive and negative changes and preserve those traditional values that are recognised as precious to the majority.

## **Economy**

### ***Growth***

The achievement of balanced and sustained economic growth presents a major challenge. Indeed, it is growth that underpins the modernisation process and is the critical factor for successful transition. Reasonably high growth rates have been achieved to date, and Bhutan's economy has undergone a major transformation, no longer entirely dependent on basic agricultural production. The key to this growth has been the prudent harnessing of the natural resource base, especially for the generation of hydropower, and considerable potential remains for further development of these resources. Of the 16,280MW of the hydropower potential that can be technically exploited to economic advantage, only 355MW have currently been tapped, dominated by the 336MW Chukka scheme. This situation is changing rapidly with the construction of the Kurichu (45MW), Basochhu (60.8MW), and Tala (1020MW) hydroelectric projects. Mineral extraction remains relatively limited, with only 30% of the country geologically mapped and much of the potential commercial exploitability yet to be determined. The industrial extraction of timber for export in an unprocessed form is emphatically discouraged because of the risks to the environment. The availability of a cheap and reliable supply of energy will facilitate establishment of efficient, processing industries based on natural resources.

Given its landlocked and mountainous character many forms of enterprise are at a competitive disadvantage in Bhutan. However, the uniqueness, wealth, and diversity of the ecological and cultural environments in Bhutan open up the possibility of developing products that cater to specialised markets. Niche markets for low-volume-high-value trade suited to a situation in which transaction costs are high can be explored. Examples include markets in genetic resources and rare foods. Perhaps

the area of greatest potential is the tourism industry. Concern for the preservation of ecology and culture has led to the careful and gradual exploitation of this considerable asset. However, given appropriate investments in infrastructure, the expansion of the industry and the promotion of such markets as eco-tourism and cultural tourism would be entirely consistent with other development objectives.

### ***Economic structure***

While significant progress has been made, the nation's economic structure remains underdeveloped and overly dependent on a few sources of income. It is of great importance that opportunities are provided and promoted that are applicable to all segments of society. Furthermore, given the potentially destabilising trends in population growth and urbanisation, all available employment opportunities need to be explored and promoted. In this respect the development of the traditional rural sector is of fundamental importance for the achievement of balanced growth. In the agricultural sector a far-reaching system of agricultural services has made increases in yields and diversification of production possible, particularly in the context of cash crops. However, the potential for increases in productivity within this sector is somewhat limited compared to the other sectors, implying the need for gradual and fundamental restructuring. There is a risk of a dual economy emerging, with a small modern, export-oriented enclave set in a sea of micro-enterprises producing low-value products with simple technologies for the domestic market, with few interactions between them.

The continued emergence of the private sector in both rural and urban areas will be of fundamental importance, integrating the population as stakeholders in the development process, increasing options and opportunities, and creating channels for the fulfillment of changing aspirations. Efforts to improve the nation's economic structure are confronted with formidable obstacles. These include lack of semi-skilled and skilled labour, the small and still fragmented domestic market, the poor purchasing power of the population, and severe diseconomies in production and distribution, translating into high production costs. The development of entrepreneurial skills and the creation of an environment conducive to productive business ventures are of critical importance to the expansion of domestic and export markets and the restructuring of the economy according to comparative advantage. Indeed, the harnessing of individual initiative will be a sine qua non for successful economic development.

## **Environment**

### ***Resource pressures***

Bhutan has thus far been relatively successful in meeting the imperative for sustainable resource management, being able to resist current impulses for either large-scale industrial resource extraction for industrial use or consumptive needs of an increasing population. Nevertheless, although Bhutan's natural resource base remains largely intact, this cannot be taken for granted. Future pressures on the natural environment

will be fuelled by a complex array of forces, arising from both the traditional and modern sectors. As a product of both development and underdevelopment, these include population growth, unemployment, agricultural modernisation, hydropower and mineral development, industrialisation, urbanisation, tourism, competition for available land, road construction, and the provision of other physical infrastructure associated with social and economic development. The commercialisation of the economy is also having an impact on traditional land management systems, based on the principles of participation and cooperation.

Localised unsustainable resource pressures are already emerging and are threatening environmental stability. In certain vicinities extraction rates for fuelwood, timber, and other forest products are already approaching unsustainable levels. In areas close to population centres an estimated 10% of the forest area is degraded as a result of heavy natural resource use. The progressive removal of vegetation cover, especially in critical watershed areas, is beginning to affect the hydrological balance, leading to the localised drying up of perennial streams and flash flooding (National Environment Commission 1998). The determination of the inevitable trade-offs required will be of fundamental importance to the achievement of an acceptable degree of sustainable resource management in future. The pressures will certainly increase, and these increases will occur in one of the most fragile ecosystems to be found anywhere in the world.

### ***Resource management***

Bhutan enters the 21<sup>st</sup> Century with an immense wealth of natural resources. The reasons for this are fourfold: traditional resource management systems, underpinned by Buddhist values, have encouraged long-term sustainable resource use; a low population-land ratio has led to avoidance of excessive resource pressure at the grass roots; delayed integration within global processes and gradual development, thereafter, have forestalled intensive pressures for resource extraction; and government commitment to sustainability has mitigated the temptation to indulge in short-term economic gain. Bhutan, therefore, undertakes the ongoing challenge of sustainable development with the considerable advantages of a relatively uncompromised natural resource base and currently sustainable practices, coupled with the continued commitment and emphasis of the government on sustainability. If harnessed wisely, such opportunities could greatly facilitate effective resource management.

## **4.4 Approaches and Programmes**

### **Approach**

#### ***Gross national happiness***

Guiding principles for the future development of the nation are complemented by a single unifying concept of development that enables the identification of future directions that are preferred above all others. The unifying concept for the nation's long-term development is the distinctly Bhutanese notion of maximising 'Gross National Happiness'. Although first propounded by His Majesty the King in the late

1980s, some of the principles have guided the nation's development over a much longer period, being rooted in the country's cultural heritage. In Bhutanese culture the original definition of development was based on the acquisition of knowledge. In a similar vein, the process of communal enrichment was based on a process through which those who possessed superior knowledge imparted that knowledge to others. In the Buddhist religion this concept of personal development was further refined to entail overcoming the delusions arising from ignorance, aggression, and the desire for consumption and acquisition.

The concept of Gross National Happiness (GNH) was articulated to indicate that development has many more dimensions than those associated with Gross National Product, and that it should be understood as a process that seeks to maximise happiness rather than economic growth. Although economic growth remains a precondition for the achievement of self-reliance, improved standards of living, and enlarged opportunities and choices, Gross Domestic Product is perceived as insensitive to issues such as personal disenchantment, social problems, and natural resource depletion. For Gross National Happiness, the individual is placed at the centre of all development efforts, recognising that people have material, spiritual, and emotional needs. It asserts that spiritual and emotional development cannot and should not be defined exclusively in material terms. The aim of maximising Gross National Happiness, as a Bhutanese basis for development planning, promotes several important values. However, to provide direction to the Kingdom's long-term development, the concept must be translated into tangible goals. Towards this end, five thematic headings are identified, providing powerful objectives for steering the process of change: human development, the promotion and preservation of culture and heritage, balanced and equitable socioeconomic development, good governance, and environmentally sustainable development.

Human development aims to maximise the happiness of the population, enabling the fulfilment of its innate potential. Concerted efforts to produce sustainable improvements in the standard of living, quality of life, choices, and opportunities need to take place within a framework of traditional values and ethics. The benefits of development should be shared equitably between different income groups, genders, and regions, in ways that promote social harmony, stability, and unity and contribute to the maintenance of a just and compassionate society. The system of governance needs to be developed to reduce dependence on others, to manage an increasingly complex process of development, and to increase opportunities for people at all levels to participate more fully and effectively in decisions that affect them. Development choices must embody the principle of environmental sustainability, protecting the biological productivity and diversity of the natural environment in the interests of present and future generations. The continuing challenge resides in the articulation of an ongoing balance between material and non-material components of development, incorporating new ideas and principles, where appropriate, to give still firmer substantive content to the concept.

## ***Policy interventions***

The Royal Government of Bhutan remains the lead agent in the development of the country, and a pragmatic approach is evident in the nature of development policy. The state maintains tight control over the national natural resource base, with the 1969 Forest Act and 1979 Land Act, defining all land not owned privately and all forests as the property of the state. Policy interventions, essentially paternalistic, can be split into development and regulatory policy. Whereas development policy is predominantly focused on the majority, rural agrarian population and the development of physical and institutional infrastructure, regulatory policy is generally aimed at limiting the activities of the more modernised urban and business communities. Regulatory policy styles may be interpreted as either hard or soft, generally regarding urban and rural populations respectively, and corresponding to the state's different priorities and capabilities for policy intervention. The role of the state has and is being redefined from that of provider to that of enabler, thereby focusing on conditions that mobilise the energies and imagination of the people. This is evidenced in the 1995 Forest and Nature Conservation Act, shifting the emphasis from the policing of state-owned property to the development of social resource management systems (Ministry of Trade, Industries and Forests 1969; ROGB 1979; ROGB 1995).

Since 1961, the government has initiated the development process through a series of Five-Year Plans, outlining broad objectives and then specifying sectoral strategies and policies. The first three Five-Year Plans (1961/2-1975/6) emphasised the development of basic physical infrastructure, with other significant disbursements being in the provision of social services (notably education and health facilities) and agricultural inputs. In the Fourth and Fifth Plans (1976/77-1986/7) the distribution of outlay became more balanced, with a greater emphasis on the development of industry, and the objectives of national and regional self-reliance and decentralisation. The Sixth Plan (1987-92) introduced the objective of the preservation of national identity, and the Seventh Plan (1992-97) that of sustainability (Ministry of Planning 1991). The broad objectives of the Eighth Plan (1997-2002) are as follow.

- (a) Self-reliance
- (b) Sustainability
- (c) Preservation and promotion of cultural and traditional values
- (d) National security
- (e) Regionally balanced development
- (f) Improving quality of life
- (g) Institutional strengthening and human resource development
- (h) Decentralisation and community participation
- (i) Privatisation and private sector development

Plan objectives represent the major macro-level preoccupations of policy-makers in response to the situation within the country and frame all policy interventions where applicable. Although they only provide a partial insight into the actual policy practices that shape material outcomes, they are enlightening with regard to the issues perceived

as being of principal importance to the continued successful development of the nation. These objectives are pursued through a series of sectoral strategies and policies. Table 4.6 outlines the principal areas of development policy interventions and their respective shares in budget outlay for the Eighth Five-Year Plan period. This highlights the large share of infrastructural projects and social service provision in government expenditure. The state is judicious in its acceptance of donor assistance, anxious to promote long-term self-reliance. Of the total government expenditure of Nu 35,169.28 million, Nu 20,893.32 million is donor financed, of which the Government of India provides Nu 10,178.34 million.

**Table 4.6: Projected eighth five-year plan budget outlay (million nu)**

Organisations	Recurrent	Capital	Total	%
His Majesty's Secretariat	35.17	1.47	36.64	0.1
National Assembly of Bhutan	31.28	3.06	34.34	0.1
Royal Advisory Council	21.39	0.53	21.92	0.1
Council for Ecclesiastical Affairs	259.98	32.49	292.47	0.8
Special Commission for Cultural Affairs	81.63	207.99	289.62	0.8
Judiciary	123.16	118.19	241.35	0.8
Royal Audit Authority	61.78	21.02	82.80	0.2
Royal Civil Service Commission	40.79	2035.18	2075.97	5.9
Bhutan Olympic Committee	26.49	43.72	70.21	0.2
Dzongkha Development Committee	13.96	3.11	17.07	0.0
National Environment Commission	5.25	120.17	125.42	0.4
Police, Jail & Fire Services	688.29	355.01	1043.30	2.9
Ministry of Home Affairs	208.09	366.65	574.74	1.6
a. Secretariat	63.17	335.65	398.82	1.1
b. Registration Division	36.32	0.00	36.32	0.1
c. Survey & Land Record Division	108.60	31.00	139.60	0.4
Ministry of Finance	5498.69	552.10	6050.79	17.2
a. Secretariat	693.10	236.20	929.30	2.6
b. Debt Financing	2149.53	0.00	2149.53	6.1
c. Common Public Services	406.06	315.90	721.96	2.0
d. Reserve for Pay Revision	2250.00	0.00	2250.00	6.4
Ministry of Foreign Affairs	734.01	22.42	756.43	2.1
Ministry of Health & Education	3662.79	2607.49	6270.28	17.8
a. Secretariat	49.70	0.45	50.15	0.1
b. Education Services	2089.00	1203.65	3292.65	9.4
c. Health Services	1524.09	1403.39	2927.48	8.3
Royal Institute of Management	50.41	137.08	187.49	0.5
Ministry of Agriculture	1453.98	2844.95	4298.93	12.2
a. Secretariat	163.39	137.05	300.44	0.8
b. Research, Extension & Irrigation Division	263.66	535.80	799.46	2.3

Table 4.6 Cont....

a. Crop & Livestock Services Division	226.16	420.87	647.03	1.8
b. Forest Services	275.70	794.99	1070.69	3.0
c. Area Development Projects	525.07	956.24	1481.31	4.2
Ministry of Trade & Industry	1077.40	3638.12	4715.52	13.4
a. Secretariat	30.65	9.38	40.03	0.1
b. Tourism Authority of Bhutan	12.29	24.50	36.79	0.1
c. Trade Division	67.66	39.93	107.59	0.3
d. Geology & Mines' Services	70.37	40.49	110.86	0.3
e. Power Services	896.43	3397.59	4294.02	12.2
f. Industries' Division	0.00	126.23	126.23	0.4
Ministry of Communication	1451.09	5664.04	7115.13	20.2
a. Secretariat	55.34	16.84	72.18	0.2
b. Postal Services	203.89	36.08	239.97	0.4
c. Telecommunication Services	273.14	1149.58	1422.72	4.3
d. Roads' Services	650.46	3218.26	3868.72	11.0
e. Works & Housing Services	228.38	1099.78	1328.16	3.5
f. Civil Aviation	24.29	35.54	59.83	0.2
g. Surface Transport	15.59	42.93	58.52	0.2
h. Thimphu City Corporation	0.00	65.02	65.02	0.4
Ministry of Planning	55.47	61.86	117.33	0.3
Dzongkhag Administration (Civil)	495.84	255.69	751.53	2.1
Total	16076.94	19092.34	35169.28	100

Source: Ministry of Planning (1996)

## Governance

The Bhutanese state evolved from the traditional institution of monarchy, with its implied hierarchies, reciprocity, and top-down style of rule. Although such a system has proved particularly appropriate for the initial stages of transition, it is accepted that fundamental changes in the requirements of society and correspondingly the responsibilities of the state necessitate a dynamic and increasingly inclusive style of governance. Policy interventions essentially attempt to facilitate and gradually accommodate change within a functioning system. In 1998 major changes occurred in the constitutional set-up, including the following important alterations: ministers are to be elected for a term of five years by the National Assembly (previously they were appointed by the King for an indefinite period); the Cabinet of Ministers is vested with full executive powers, and the Chairman of the Cabinet (on a one-year rotation among elected Ministers) functions as the Head of Government (before the King was Head of Government and Chairman of the Cabinet); and the National Assembly can register a vote of no confidence in the King.

Table 4.7 outlines the principal approaches and programmes adopted by the Royal Government. A fair, effective, and trusted legal infrastructure underpins the system of governance. On the technical level, appropriate planning procedures might be encouraged through developing capabilities and capacities within state and society.

**Table 4.7: Approaches and programmes – governance**

<b>Priority area</b>	<b>Management of development</b>
Policy	Ongoing capacity building and adaptation of development management practices to accommodate to the changing needs implied by the development process
Main policy instruments	Revised Decentralisation Guidelines (proposed) Human Resources' Development Master Plan (existing) Long-term Manpower Development Plan (proposed)
Selected 8 <sup>th</sup> FYP programmes	Institutional strengthening and capacity building Human resource development Decentralisation
Future direction	Reduction in the role of the state Devolution of new powers and responsibilities to regional and block levels Strengthen capabilities for development management within state and society Development of new planning and management instruments Promotion of a professional and talented civil service Improved information systems for informed decision-making Sensitise development planning procedures to correspond more effectively to maximisation of Gross National Happiness
<b>Priority area</b>	<b>Human resource development</b>
Policy	Development of appropriate skills, targets for establishment of institutional facilities
Main policy instruments	Human Resources' Development Master Plan (existing) Long-Term Manpower Development Plan (proposed)
Selected 8 <sup>th</sup> FYP programmes	Establishing national manpower planning capabilities Career counselling Institutional development Scholarships and training opportunities
Future direction	Overseas' training opportunities in strategic areas Factoring in demand-side considerations in training programmes Manpower planning based on a long-term vision of the nation's development Development of national educational institutions
<b>Priority area</b>	<b>Decentralisation and participation</b>
Policy	Targets for increased capacities of regional and local institutions, operationalising of local development funds, establishment of monitoring and evaluation systems
Main policy instruments	DYT (district development committee) Chatrim, 1981 (existing) GYT (block development committee) Chatrim, 1992 (existing) Decentralisation Guidelines, 1993 (existing) Revised decentralisation guidelines (proposed)
Selected 8 <sup>th</sup> FYP programmes	Human resource development and capacity building Institutional strengthening and procedures

Table 4.7 Cont.....

Future direction	Enlarged autonomy and strengthened capacity at district and block levels Reorientation of line ministries to support the process of decentralisation Devolution of financial responsibilities to district and block levels Transfer of administrative and financial powers to districts Strengthening the office of the gup (local administrator) Mechanisms to enlarge the development issues, decision-making powers of GYT's on local mechanisms developed to eventually enable local communities to take charge of the development process Ongoing review of main policy instruments
<b>Priority area</b>	<b>Resource mobilisation and development financing</b>
Policy	Increased self-sufficiency and domestic resource mobilisation, sound and sustainable economic, financial, and aid management
Main policy instruments	N/A
Selected 8 <sup>th</sup> FYP programmes	Fiscal and monetary policies External assistance Management of public finance
Future direction	Enhanced capacities for domestic resource mobilisation Tax reform Privatisation of certain public services Further development of relationships with development partners
<b>Priority area</b>	<b>Law and jurisprudence</b>
Policy	Further development of national law and the judicial system
Main policy instruments	N/A
Selected 8 <sup>th</sup> FYP programmes	Human resource development and capacity building Research and analysis
Future direction	Maintain independence of the judiciary Continued evolution of systems of law and jurisprudence Proactive, as opposed to retroactive, response to changing needs Guiding principles: equal and unimpeded access to the law and the legal process swift and efficient dispensation of justice professionalism within the judiciary law accepted by the population as being fair, responsive, and relevant

Sources: Ministry of Planning (1996), Planning Commission (1999)

Regarding politics, the decentralisation of state functions to the local and district levels, affected in 1981 and 1991 respectively, will mitigate a possible polarisation of power, help formulate and implement appropriate policies, and allow the population to retain control over decisions that affect their lives. The prudent financing of development interventions will give state and society the ability to maintain their options and room to manoeuvre in development strategy.

## Social

### ***Human development***

Guided by the unifying concept of Gross National Happiness, the Royal Government emphasizes human development. Since the inception of planned development, policy interventions have focused on the provision of social services and physical infrastructure. The vast majority of the population have thus benefited from modernising processes in very tangible ways. However, to successfully transform society, individuals will require the appropriate opportunities and the necessary capacities and capabilities to fulfil their innate potentials and meet their perceived needs.

Table 4.8 highlights the principal approaches and programmes in the field of human development. These seek to create an enabling environment, whereby individuals within society are afforded opportunities and equipped with the appropriate skills.

**Table 4.8: Approaches and programmes – human development**

<b>Priority area</b>	<b>Population</b>
Policy	Targets for the reduction of population growth
Main policy instruments	Royal Decree of Population, 1995 (existing) National Population Policy (proposed)
Selected 8 <sup>th</sup> FYP programmes	Raising awareness Supply/access to contraceptives Strengthening of existing maternal and child health services Quality of care Supporting special programme for adolescents Beyond family planning measures (educational attainment and population growth) Greater participation of the community Legal measures (vital registration) Multi-sectoral approach (define role of each sectoral ministry) Institutional framework (coordination committee) Research Human resource development Data collection
Future direction	Policies extended to cover the whole country Increased coverage of population education programmes Target districts with high population growth rates Target males and adolescents as well as women Positive synergies with policies and programmes in other areas
<b>Priority area</b>	<b>Education</b>
Policy	Targets for enrolment, adult literacy, curricula, and institutional development
Main policy instruments	Education Sector Master Plan (proposed) Youth Welfare Trust Fund (launched)

Table 4.8 Cont.....

Selected 8 <sup>th</sup> FYP programmes	Enhancing educational coverage (primary and secondary) Curriculum development Improving educational facilities Improving the education process Higher education Technical and vocational education and training Education for the disabled Rigney (dzongkha grammar and traditional arts) education Monastic schools and Sanskrit pathshala Non-formal education
Future direction	Improved access to education Improved quality and relevance Teacher-centred approach Technology and educational innovation Reduction in the costs of education
<b>Priority area</b>	<b>Health</b>
Policy	Targets for mortality rates, life expectancy, doctor/population ratio, technological introduction, private health care development
Main policy instruments	Health Trust Fund (launched) Health Sector Master Plan (launched)
Selected 8 <sup>th</sup> FYP programmes	Health infrastructure (hospitals, basic health units, outreach clinics) Disease control (immunisation, tuberculosis, acute respiratory infection, diarrhoeal, leprosy, eye care, STD/AIDS, malaria) Non-disease programmes (information, education and communication, reproductive health and population development, transport and communication, human resource development, community-based rehabilitation, nutrition, laboratory and institutional development)
Future direction	Improved access to primary health care services Improved quality Respond to the needs of special groups (disabled, elderly, mentally ill) Role for traditional medicine Issues requiring multi-sectoral solutions Future requirements: financial sustainability manpower development technology and innovative practices
<b>Priority area</b>	<b>Transport, communications and information</b>
Policy	Targets for infrastructural development (construction, access and improvement to roads, 'dry port' construction, domestic and external air services, intranet, internet, e-mail, television and post office access)
Main policy instruments	Telecommunications' Master Plan (existing) Postal Services' Master Plan (existing) Road Sector Master Plan (in preparation) Surface Transport Master Plan (in preparation) Civil Aviation Master Plan (proposed)

Table 4.8 Cont.....

<p>Selected 8<sup>th</sup> FYP programmes</p>	<p>Communication sector:  digital micro-wave network development  rural communication  institutional capacity building (reliability, sustainability, efficiency)  provision of value-added services  Road sector:  new road construction  road maintenance (resurfacing)  routine maintenance/monsoon damage restoration  widening and improvement  realignment  bridges  institutional capacity building  mechanisation of road works  privatisation of road works  Surface transport sector:  creation of physical infrastructure  institutional capacity building (expansion of National Driving Training School,  computerisation, training)  Introduction of Thimphu city bus service  Civil aviation sector:  institutional capacity building  maintenance of existing infrastructure  Postal services' sector:  create mail transport network  set up sorting centres  purchase postal equipment  human resource development</p>
<p>Future direction</p>	<p>Further development of the network of national trunk roads  Further development of district and feeder roads  Expansion and improvement of public transport  'Dry port' development  Environmental and social impact assessments  Cooperation with neighbours  Development of domestic air services  Improvement and strengthening of international airport facility  Improved access to telecommunication services  Promotion of IT</p>

Sources: Ministry of Planning (1996), Planning Commission (1999)

### **Equity**

The social change effected by policies aimed at human development is both inevitable and necessary. However, such changes, if not effectively managed, might prompt potentially destabilising trends. Whereas development policies seek to expand the opportunities available to the individual and society, it is also necessary to regulate such opportunities within acceptable boundaries. Poverty is the product of a lack of

access to sufficient resources. Past policies have aimed at maintaining the equitable access to resources within an environment of changing opportunities. Tight regulation of the modern sector and the nationalisation of much of the country's resource base aims at placing limits on the opportunities open to an emerging elite. Furthermore, the 1979 Land Act forbids the household ownership of in excess of 25 acres of land (orchard land is exempted) and the sale of landholdings of less than five acres. Although gender equality is currently in evidence, the equal access to resources between genders is monitored and promoted, and the National Women's Association of Bhutan and the Bhutan Development Finance Corporation place a particular emphasis on women's needs.

Towards the maintenance of an equitable society, the Royal Government aims at particularly addressing certain pertinent issues, as illustrated in Table 4.9. Policies aim at maintaining the relatively even distribution of the facilities contributing to human development and where necessary specifically target certain groups or environments that are seen to be particularly vulnerable.

### ***Culture***

The concept of Gross National Happiness emphasises the critical role played by the nation's cultural heritage in the provision of the non-material needs of society. Furthermore, in advocating a compassionate climate, responsible practices, and a sense of unity, the continued adherence to traditional values may be purposefully translated into the achievement of balanced and sustainable development. Culture might prove highly efficacious in the promotion of good governance, environmental management, and poverty alleviation. The Royal Government has been particularly aware of the potential undermining of cultural practices. This is reflected in past policies that place limits on the numbers of tourists entering the country and encourage adherence to traditional practices and values. Table 4.10 summarises the approaches and programmes adopted towards the conservation and promotion of Bhutan's rich cultural heritage.

### **Economic**

#### ***Modern sector***

Although development cannot be gauged entirely by the ability to achieve steady national economic growth rates, growth is an inherent part of human development and undeniably a precondition for successful transformation. Indeed, changes in the social environment need to be translated into concomitant increases in economic mobilisation, productivity, and, thus, growth. Past policies have emphasised across the board human development. This is reflected on the gradual expansion of key industries and the significant limitations placed on the activities of the modern sector. However, social pressures necessitate the promotion of an enabling environment to expand economic opportunities, spur sustained growth, and create suitable employment.

**Table 4.9: Approaches and programmes - balanced and equitable socioeconomic development**

<b>Priority area</b>	<b>Urbanisation</b>
Policy	Targets for a growth centre strategy and urban development plans
Main policy instruments	Long-term Human Settlement Development Master Plan (launched)
Selected 8 <sup>th</sup> FYP programmes	Urban development and housing (urban management, housing, private sector participation, municipalities, city corporations) Drinking water supply and sanitation (rural and urban water supply and sanitation, water resources' management master plan) Suspension bridges and mule tracks Institutional strengthening and human resource development
Future direction	Prepared to meet the challenge posed by rapid urbanisation Measures that respond imaginatively to push and pull factors Identify alternative urban growth centres
<b>Priority area</b>	<b>Equitable access to basic services and infrastructure</b>
Policy	Targets for the enlarged access to basic services and infrastructure
Main policy instruments	Royal Decree on Water and Sanitation, 1992/3 (existing) Rural Electrification Master Plan (proposed)
Selected 8 <sup>th</sup> FYP programmes	Integrated approach
Future direction	Increased infrastructure coverage Appropriate representation
<b>Priority area</b>	<b>Vulnerable and disadvantaged groups</b>
Policy	Specific targeting for vulnerable and disadvantaged groups
Main policy instruments	N/A
Selected 8 <sup>th</sup> FYP programmes	Integrated approach
Future direction	New initiatives to specifically target vulnerable and disadvantaged groups Potential resettlement for small and isolated groups Appropriate representation
<b>Priority area</b>	<b>Inequalities</b>
Policy	Preventing the growth of inequalities
Main policy instruments	Personal income tax (launched)
Selected 8 <sup>th</sup> FYP programmes	Integrated approach Taxation Gender and development: integrated approach National Women's Association of Bhutan
Future direction	Maintenance of an equitable society Development of a progressive system of income tax that contains the growth of inequalities without discouraging the most able and talented entrepreneurs Awareness of unintended outcomes of other policies Maintain traditions and customs promoting and rewarding alternative values

Sources: Planning Commission (1999), Ministry of Planning (1996)

**Table 4.10: Approaches and programmes – culture and heritage**

<b>Priority area</b>	<b>Inventory of Bhutanese culture and heritage</b>
Policy	Target for and inventory of culture and folklore of Bhutan
Main policy instruments	Heritage Fund (launched)
Selected 8 <sup>th</sup> FYP programmes	Inventory and photographic documentation
Future direction	Recognising the value in the diversity existing within the nation Listen to laymen and take stock of location-specific knowledge Inventory, understand, and learn from what has been lost or is in danger of being lost
<b>Priority area</b>	<b>Conservation and promotion of culture and heritage</b>
Policy	Targets for the preparation of a Culture and Heritage Act and Construction Code
Main policy instruments	Heritage Fund (launched)
Selected 8 <sup>th</sup> FYP programmes	Consolidate and strengthen Ka-Nying Zung Drel spiritual tradition Promote Driglam Choesum and its relevance to contemporary national life Monastery and temple renovation Preserve ancient documents and literature and computerise records Strengthening cultural centres and institutions Promote culture through shared knowledge, publications, activities, seminars, and workshops
Future direction	Education of cultural custodians (youth) Making heritage accessible Conservation and protection of Bhutanese heritage Promotion of traditional arts and crafts Culture conscious institutional adaptation Promotion of traditional architectural styles
<b>Priority area</b>	<b>Promotion of dzongkha</b>
Policy	Continued promotion of the national language
Main policy instruments	N/A
Selected 8 <sup>th</sup> FYP programmes	Integrating dzongkha within educational systems (development of school curricula, teacher training) Translation of acts, rules, and regulations Writing of dictionaries and developing computer systems Research into local languages of Bhutan
Future direction	Continued promotion, ensuring that it is responsive to the future as well as the past
<b>Priority area</b>	<b>Monastic bodies and other religious institutions</b>
Policy	Promote religious institutions as distinctive and indispensable contributors to national happiness, well-being and peace
Main policy instruments	N/A
Selected 8 <sup>th</sup> FYP programmes	Uphold liturgical practices and maintain purity of monastic discipline, practices, and studies Improving accommodation, health and sanitation facilities Enhancing monastic welfare schemes Encouraging the participation of the monk body in the development process Improving the living quarters of the central monk body
Future direction	Continued promotion of religious institutions Strengthening of the fabric that weaves together monastic institutions, secular organisations and civil society

Sources: Ministry of Planning (1996), Planning Commission (1999)

Table 4.11 outlines the approaches and programmes adopted by the Royal Government for the achievement of economic growth within the modern sector where the greatest opportunities for expansion and increases in productivity exist. Towards this end, certain strategic industries are identified that possess the greatest potential for development. Furthermore, the continued emergence of a private sector is viewed as critical to the necessary transformation in economic structure and the efficient and effective harnessing of the available opportunities.

**Table 4.11: Approaches and programmes – modern sector**

Priority area	Economic growth and development
Policy	Targets for installation of hydropower, increased shares of tourism and manufacturing in GDP
Main policy instruments	Hydropower Development Master Plan (existing) Tourism Master Plan (in preparation) Industrial Development Master Plan (in preparation)
Selected 8 <sup>th</sup> FYP programmes	Trade and Industries' Sector: institutional strengthening trade development (training, export services, Bhutan Chamber of Commerce and Industry) international trading environment (preferential trade relationships, WTO, SAARC) improved trade and transit facilities consumer protection de-monopolisation small industries' development industrial development industrial monitoring industrial estate development development of essential oil industry Tourism Sector: Master Plan for Tourism Development training facilities (hotel management and tourism) Mineral Sector: geological mapping institutional development (capabilities for mines' planning and design, environmental management, inspection, evaluation and regulation) Energy Sector: power generation (construction) power transmission line (improvement, upgrading and new lines and sub-stations) dzongkhag power distribution (rural electrification, urban electrification, improvement of existing supply) hydropower feasibility studies institutional development

Table 4.11 Cont.....

Future direction	Taking account of the nation's comparative advantages -- the production of hydropower natural resource-based processing industries niche markets small and cottage industries tourism Industrial development strategy projecting an image of 'sophistication and civilisation' (sophisticated economic activity from a distinctive and unique cultural and ecological environment)
Priority area	<b>Private sector development</b>
Policy	Private sector to become a more active partner in the nation's future development
Main policy instruments	Long-term Strategy for the Development of the Private Sector (proposed)
Selected 8 <sup>th</sup> FYP programmes:	Enabling environment: access to credit (access and competitive interest rates) foreign investment (20% for joint venture projects) labour requirements (expatriates) human resource development incentives (share allotment schemes, subsidised credit) fair and equitable tax structure improved power supply further divestment of public sector enterprises where appropriate Financial sector: institutional development interest rate liberalisation reduce non-performing assets further development of the capital market gradual elimination of foreign exchange restrictions when appropriate
Future direction	Removal of impediments to private sector growth (legal framework) Increased attractiveness of private sector to the young Expanded opportunities for small businesses Encourage long-term outlook Increased access to capital, technology and know-how Continued cautious approach to foreign direct investment

Sources: Ministry of Planning (1996), Planning Commission (1999)

### ***Traditional sector***

The vast majority of Bhutanese earn their living within the traditional sector of the economy. Although the continued expansion of the modern sector will facilitate a gradual change in the employment structure, this situation is unlikely to change in the near future. Balanced development and stable transition necessitate the achievement of steady growth rates within this sector, and its continued modernisation and evolution. Indeed, as the lowest common denominator, such progress fulfils important economic and social roles, providing the majority of the population with a basic living. Past policies have aimed at developing the physical and institutional

infrastructure, introducing new technologies, skills, and thereby creating an enabling environment for sustained improvements. Given the nature of the landscape, potential opportunities for increases in productivity lag behind those in other areas of the economy. However, most increases will have an impact on people in the less developed sectors of society and potentially raise the welfare base.

Table 4.12 outlines the approaches and programmes for achieving economic growth and development within the traditional, primarily agricultural, sector. Possessing a particular renewable natural resource focus, policies seek to facilitate the gradual evolution of agricultural practices and the development of small and cottage industries.

**Table 4.12: Approaches and programmes – traditional sector**

Priority area	Economic growth and development
Policy	Targets for growth in farmers' income and horticultural development
Main policy instruments	Horticulture Master Plan (existing) Master Plan for Cottage, Small and Medium Industries (existing)
Selected 8 <sup>th</sup> FYP programmes	Renewable Natural Resource Sector: Management and planning services (programme management, policy and planning activities, budgeting and financial management) farm systems development (research, irrigation, extension) crop and livestock production services (animal health, livestock breeding, artificial insemination, agricultural inputs, mechanisation, agricultural credit, agricultural marketing) Forest management services (sustainable forest management, nature conservation and protected area management, social forestry and forestry extension) Export horticultural development Human resource development
Future direction	Taking account of the nation's comparative advantages: horticulture off-farm employment and rural industrialisation niche markets small and cottage industries

Sources: Ministry of Planning (1996), Planning Commission (1999)

## **Environmental**

### ***National environmental strategy***

In 1998 the National Environment Commission released a National Environmental Strategy for Bhutan, clarifying a development path to minimise potentially negative environmental impacts. The National Environmental Strategy outlines three main avenues for sustainable development - hydropower expansion, increased self-

sufficiency in food production, and industrial development — all framed by concerns about environmental and cultural preservation. It is noted that environmental degradation may occur in conditions of extreme poverty and through the exploitation of natural resources for the generation of significant wealth. Furthermore, the environment possesses economic, social, cultural, and inherent values that may differ between social groups. The strategy aims at pursuing a ‘Middle Path’, understanding that accomplishing goals within different sectors will involve necessary compromises (National Environment Commission 1998).

The state is to play a central role in the sustainable development of the nation and in the regulation of the behaviour of different social groups, and particular emphasis is given to the preservation of the country’s rich and diverse ecology. The cross-sectoral nature of environmental issues is reflected in the responsibilities within individual ministries for the sustainability of their development initiatives. Most direct environmental policy aims to strengthen the capabilities of government institutions and state-society relations. To this end, five key cross-sectoral needs are identified.

- (a) Information systems and research
- (b) Institutional development and popular participation
- (c) Policies and legislation
- (d) Training and education
- (e) Monitoring, evaluation and enforcement

Through the promotion of an efficient and inclusive system of environmental governance, informed decisions may be effected that adequately represent popular environmental values and successfully resolve potential conflicts. Solutions will eventually depend on the form of future social pressures and the nature of popular sentiment.

### ***Sustainable resource management***

The National Environmental Strategy serves to highlight the complex interplay of forces that could potentially compromise the goal of environmentally sustainable development. Of the three avenues of development, there is a focus on both the traditional and modern sectors of the economy, reflected in the emphases on food production and industrial development respectively. Clearly revealed are the inter-sectoral nature of environmental pressures and the need for an integrated approach towards resource management. Past policies have placed an emphasis on top-down conservation measures, reflected in the demarcation of an extensive network of protected areas and a conservative approach to industrial resource extraction. However, as the margins narrow, with pressures from both the traditional and modern sectors, it will be increasingly important to develop a participatory and representative style of governance and refine the systems of environmental information and analysis. Table 4.13 refers to several approaches and programmes that are seen as key to the achievement of environmentally sustainable development.

**Table 4.13: Approaches and programmes-environmentally sustainable development**

<b>Priority area</b>	<b>Forest regeneration and biodiversity</b>
Policy	The promotion of ecologically sensitive approaches to forest management
Main policy instruments	Forest and Nature Conservation Act, 1995 (existing) National Forestry Master Plan (existing) National Biodiversity Action Plan (existing) National Environment Strategy (existing) National Environmental Action Plan (in preparation)
Selected 8 <sup>th</sup> FYP programmes	N/A
Future direction	Increased sensitivity to the maintenance of biodiversity Informed trade-offs
<b>Priority area</b>	<b>Greening national accounts</b>
Policy	The greening of Bhutan's system of national accounts
Main policy instruments	N/A
Selected 8 <sup>th</sup> FYP programmes	N/A
Future direction	Account of the value to the economy of the environment and ecological services Quantitative indicators on the importance of the environment to the economy Contribution to the quantification of Gross National Happiness
<b>Priority area</b>	<b>Institutionalising capacities for environmental impact assessment (EIA)</b>
Policy	Environmental Impact Assessment institutionalised and extended to the district and block levels
Main policy instruments:	EIA legislation (proposed)
Selected 8 <sup>th</sup> FYP programmes	N/A
Future direction	EIAs to help ensure: development projects are environmentally and economically sound in the long run the minimisation of environmental, economic, cultural and social impacts of development projects prior evaluation of environmental impacts on ecologically fragile systems systematic assessment of the effects of development pressures on the natural resource base, communities and culture

#### **4.5 Conclusion: Emerging Issues and Options in Development Strategy**

Bhutan enters the 21<sup>st</sup> Century with a cautious sense of optimism for the ongoing achievement of growth, poverty alleviation, and sustainable resource management. The resource base remains relatively uncompromised, and there are considerable

Table 4.13 Cont.....

<b>Priority area</b>	<b>Watershed management</b>
Policy	Preparation of master plans for all watershed areas
Main policy instruments	Watershed master plans
Selected 8 <sup>th</sup> FYP programmes	N/A
Future direction	Effective systems of watershed management as a key tool to: maintain biodiversity, soil fertility, biological productivity of natural systems, combating erosion and other forms of degradation Impacts of policies on: hydropower development, farming, livestock, settlement, timber and logging
<b>Priority area</b>	<b>Environmental legislation</b>
Policy	Consolidate and build upon existing legislation and provide new enforcement measures
Main policy instruments	Forest and Nature Conservation Act, 1995 (existing) National Environmental Protection Act (proposed)
Selected 8 <sup>th</sup> FYP programmes	N/A
Future direction	Development of accepted environmental standards Balance between modern legislation and informal social arrangements
<b>Priority area</b>	<b>Conservation and development</b>
Policy	Complete full inventory of the country's biodiversity resource base
Main policy instruments	N/A
Selected 8 <sup>th</sup> FYP programmes	N/A
Future direction	Inventory of biodiversity resource base Exploring potential comparative advantages

Sources: Ministry of Planning (1996), Planning Commission (1999)

opportunities for an expansion in productive resource use. Society has maintained stability, whilst accommodating significant modernising changes in social and physical infrastructure. The economy has realised steady and balanced growth rates that have been distributed relatively equitably and achieved without generating significant, unsustainable resource pressures. Furthermore, the nation possesses a strong and well-functioning state system that has managed the modernisation process through forty years of planned development.

As Bhutan looks to the future, however, and seeks to effect the necessary transformations in economy and society, challenges emerge to the ongoing achievement of balanced and sustainable development. Social pressures deriving from a society in transition are seen in terms of rapid population growth, urbanisation and inequality, and the gradual erosion of informal institutional arrangements and cultural practices. Although the nation has valuable opportunities for growth in the expansion of natural resource-based industry and the development of niche markets, the economy requires restructuring to correspond to the country's comparative

advantages, increase private initiative, and bridge the gap between traditional and modern sectors. Localised unsustainable resource pressures are appearing, which, if not properly addressed, may exacerbate. Indeed, as the nation enters the next stage of transition, there is little room to manoeuvre, and delicate balances and trade-offs will be required between alternative interests, priorities, and needs. To generate appropriate policy interventions, the system of governance requires ongoing evolution to accommodate the changing requirements of society.

The Royal Government of Bhutan has assumed the lead role in the development of the nation, and the maintenance of a stable, equitable, and sustainable system. Guided by the concept of maximising Gross National Happiness, policies aim to achieve a balance in the plethora of forces and related issues embodied in complex modernising processes. State interventions are characterised by pragmatism and gradualism, seeking to effect measured development and change at a pace that society is able to suitably accommodate. Approaches and programmes are distributed over the fields of human development, the promotion and preservation of culture and heritage, balanced and equitable socioeconomic development, good governance, and environmentally sustainable development. These seek to facilitate a trajectory for the transformation of society through which the continued achievement of growth is tempered by responsible social, cultural, and environmental practices. This style of development management has thus far proved relatively successful in meeting its stated objectives, and the government continues to receive popular support. However, as the nation proceeds along its new development path, issues emerge in development policy of an increasingly complex and potentially conflicting nature.

The Royal Government of Bhutan basically pursues an integrated approach towards development. Activities are spread over a broad range of relevant areas. Development planning has sought to proactively mitigate certain undesirable outcomes, rather than to react to them. However, as society evolves, potentially destabilising trends inevitably emerge and sectoral pressures increase, the efficient and effective use of available resources will become increasingly important. Furthermore, the identification of suitable trade-offs between respective complementary and competing objectives will become more complex and critical. In response to such changing requirements it will be of fundamental importance that technical capabilities are developed and refined within both state and society in order to generate the most well-informed decisions at all levels of policy. For the guiding concept of Gross National Happiness to develop beyond a rhetorical device, it requires ongoing articulation and translation from the abstract to the material domain, so that it may inform policy decisions. This will involve the problematic issue of the quantification of non-material elements and the specification of necessary compromises. The evaluation of the returns to various interventions and the potential externalities will generate significant theoretical and practical difficulties. Furthermore, assessing the efficiency of the alternative policy instruments available to address stated objectives remains a complicated challenge.

The future of development in Bhutan resides in the manner in which decisions are made and implemented, and therefore in the nature of power relations. Thus far, a 'paternalistic' government has sought to internalise politics within the state apparatus. However, although a relatively effective system of representation has been achieved, as policy decisions become increasingly complex and clear-cut technical solutions more elusive, it will become critical for all segments of society to become actively involved in the decisions that will have a direct bearing on their lives. Furthermore, there are significant limitations on the power of the state to successfully implement all policy decisions. Poverty is the product of a lack of power and access to sufficient resources. Unsustainable practices generally result from either insufficient or excessive and under-regulated access to resources, and thus an imbalanced power structure. Therefore, the outcomes of the ongoing initiatives at decentralisation, participation, and empowerment will play a decisive role in the continued achievement of balanced and sustainable development in Bhutan.

## References

- LUPP (1995) *Area Statistics: Land-cover Figures for Bhutan*. Land Use Planning Project, Royal Government of Bhutan
- Ministry of Planning (1991) *Seventh Five-Year Plan (1992-1997)*. Vol. 1 Main Plan Document. Thimphu: Royal Government of Bhutan
- Ministry of Planning (1993) *Guidelines for Decentralisation*. Thimphu: Royal Government of Bhutan
- Ministry of Planning (1996) *Eighth Five-Year Plan (1997-2002)*. Vol. 1 Main Plan Document. Thimphu: Royal Government of Bhutan
- Ministry of Trade, Industries & Forests (1969) *The Bhutan Forest Act*. Thimphu: Royal Government of Bhutan
- National Environment Commission (1998) *The Middle Path: National Environment Strategy for Bhutan*. Thimphu: Royal Government of Bhutan
- Planning Commission (1999) *Bhutan 2020: A Vision of Peace, Prosperity and Happiness*. Thimphu: Royal Government of Bhutan
- RGOB (1979) *Land Act*. Thimphu: Royal Government of Bhutan
- RGOB (1995) *Forest and Nature Conservation Act of Bhutan*. Thimphu: Royal Government of Bhutan
- UNDP (1998) *Bhutan: Development Cooperation*. Thimphu: United Nations Development Programme