

Chapter-1

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1.1: The Problem

The level and pattern of development in the countries of the world vary because they are individually endowed with distinct levels of natural and human resources as well as technological base. However, the countries all over the globe can be broadly divided into two broad categories-developed and underdeveloped. The so-called developed countries are blessed with very high levels of national and per capita income, high domestic-saving capacities, high capital formation, strong economic infrastructure, modern technological base and huge stock of human capital. On the contrary, the less developed countries are ridden with the sins of low levels of national and per capita income, very low level of domestic savings, high population pressure, pre-modern economic infrastructure, lower levels of technology, poor domestic resource base, improper human resource base, regional and income inequalities, excessive dependence on subsistence agriculture and the balance of payment crisis. Economic development is critically limited in the countries belonging to this category. One of such countries is Bhutan, a very small country of South Asia, with a population of only around 0.6 million.

Bhutan has a distinct historic, geo-political, economic and socio-cultural identity because it is a small, mountainous, landlocked and poverty-stricken country of South Asia. Bhutan emerged as a modern nation-state in 1907. Since then, hereditary monarchy has been the form of government. The history of socio-economic development bears distinct identity in that the country developed recently, silently and incomprehensively beyond the normal observations. However, recently the pace of socio-economic development has been steady. The quality of life of the Bhutanese people has substantially improved. It is a fact that, according to the Human Development Programme of the United Nations, such a backward country now deserves the status of Middle Human Development country¹.

This type of dramatic development of the country, after a long time confinement, has been possible because the country opened up to the

world economies, changed their traditional attitude towards various activities, good governance, absence of unemployment and corruption free environment. In course of the second half of the last century and the first decade of the new millennium, the country achieved a number of goals-economic, social, political and global. The seed of these was sowed when Bhutan took membership of the United Nations in 1971 by the India's sponsorship. The changes culminated into the implementation of multi-party democracy in 2008 without any civil rebellion.

Natural Resource Endowments

Bhutan shares boundaries with Sikkim in the west, West Bengal in the south-west, Assam in the south and south-east, Arunachal Pradesh in the east and Tibet in the north and north-east. The extension of the country is 300 km from east to west while the north-south extension is about 170 km. Environmentally, the country can be divided into four distinct regions—the Great Himalayas, the Inner Himalayas, Sub-Himalayan Foothills (the outer most ranges) and the Duars Plain. These environmental regions carrying distinct attributes exert critical impact upon the socio-economic development of the country. Both the population and cultural pattern of Bhutan have been influenced directly by these border countries. This is because mass migration from those adjacent countries particularly from Tibet and Nepal affected Bhutan's own cultural tradition and also brought in some new dimensions in economic patterns and activities.

Bhutan is endowed with a variety of natural and mineral resources. Forest-cover consists of more than 72 percent of its total land area. While forest-cover is decreasing all over the world, Bhutan is the only country where it has increased over time. Bhutan's forest cover has increased from 67 percent in 1990 to 72 percent in 1997. But Bhutan could not exploit these huge forest resources because of the scarcity of human and technical capital. Nevertheless, Bhutan earns a substantial amount of foreign

exchange through export of timber and timber products to the neighbouring countries like India. However, these forest resources are being utilized with a view to preserving the ecological balance of the country.

Bhutan is also rich in different types of mineral resources. Although exact magnitude of the mineral resources remained unknown, geological surveys indicate that the country is richly endowed with deposits of coal, limestone, dolomite, marble, gypsum, slate, zinc, lead, copper, tungsten, quartzite and gold. Of all of these mineral resources, coal, limestone, dolomite etc. are used for domestic requirements and also exported abroad. Bhutan is richly endowed with hydropower resources due to its steep mountainous terrain and steeply flowing rivers with galloping water streams. Hydropower is the main source of energy and the major source of foreign exchange. Part of this hydropower is consumed domestically and the rest is exported to India.

Tourism as an industry has a great prospect for Bhutan. Traditionally, tourists in Bhutan were severely restricted in the fear that they will disturb domestic cultural tradition and strong ecological balance of the country. However, recently the country has become forward looking and tourism has emerged as a fast growing industry. Bhutan's mountainous beauty, National Parks and domestic festivals are the key elements of tourism development. Very recently, private sectors as well as Multinational Companies with Foreign Direct Investment (FDI) are showing increasing interest in tourism development. In 2004, Bhutan earned \$12.5 million solely from the tourism industry, which was 1.6 percent of GDP.

Economic Diversification

The concept of economic diversification conveys different meanings at different levels. At the national level, it means movement of resources from one sector to other sectors of the economy i.e., from agriculture to industry or service sectors. It is one sort of structural transformation. Structural

transformation implies change in the structure of an economy towards industrialization or services from the state of subsistence agriculture.

Sectoral diversification reflects the shift of resources from one product to a larger mix of products. For example, diversification in the agricultural sector signifies shift of resources from a low value crop towards high value crops and livestock. Agricultural diversification results in a larger mix of diverse activities within agriculture². By and large, economic diversification implies expansion of economic activities within different sectors of the economy. When an economy becomes diversified, both the product items and the level of production are likely to increase with positive impact on its per capita income and standard of living of its population.

Economic diversification in Bhutan was impeded by the lack of available road facilities, telecommunications, transport service, modern electronic information systems and so on. Bhutan had no modern industries till 1960. The industrial sector used to be dominated only by a few small-scale industries. Internal trade was petty while foreign trade was limited to a fewer number of products. Foreign policies were inward-looking, governed by Buddhist tenets and traditions. Bhutan remained, therefore, unknown to the rest of the world. The socio-economic life of the Bhutanese people also remained dormant for long period.

With the industrial sector not being developed, Bhutan is based on subsistence agriculture. Most of the Bhutanese people earn their livelihood from this agriculture sector and primary activities. Slash and burn type cultivation is also observed. The most important agricultural crops include rice, wheat, barley, maize, millet, potatoes, sugar-cane, cardamom as well as different types of fruits including oranges, apples etc. Important livestock production includes horses, asses, cattle, pigs, sheep and goats. In 2003, growth rate of agriculture sector was registered at 4 percent while the share of agriculture was 33.2 percent of GDP³.

The economy of Bhutan experienced a landmark change in 1961, when the country embarked on the era of planned development. The

process of modernization in Bhutan began with the Five-Year Plan, which gradually diversified the economy towards different directions.

As a part of the process of modernization, the Royal Government (RG) adopted several measures for the development of basic infrastructure of the country. In the late 1950s, Bhutan's transport infrastructure embarked on development process with Indian aid. Infrastructure development was given primary importance in the First Five Year Plan (1961-66). Construction of five all-weather motorable roads was undertaken during that time and an airport known Druk Airline was set up in 1983. Bhutan Broadcasting Service was established in 1986. At present, Bhutan has been able to develop modern internet facilities and telephone exchange systems as well as cellular phone facilities. Thus, transport and communication sectors have been diversified under the planned development era.

Industrialization was emphasized during the planned development, especially since the Fourth Five-Year Plan (1971-1976). A few new industries such as hydroelectric projects like Chukkha Hydroelectric Project, Tala Hydroelectric Project and manufacturing industries like cement factories, food-processing industries, forest-based industries, chemical industries etc. were set up in course of time. Now, the power sector industries are playing an essential role in the process of overall economic development of the country.

In the initial stage of planned development, all the economic activities were undertaken by the public sector initiatives. However, after the achievement of some economic growth and diversification, the Royal Government took measures for the development of private sector, particularly since the Sixth Five Year Plan (1987-1992). The government has already withdrawn from the local transport system, local sales of food grains, some of the manufacturing industries, construction, tourism and so on, especially since the Sixth Five Year Plan (1987-1992).

Bhutan no longer exports only traditional, agricultural or forest-based products. Recently, the structure and pattern of Bhutan's foreign trade

have changed extensively. Bhutan is now exporting manufactured and mineral products, electricity and other novel items like philatelic products and coins. Thus, Bhutan's foreign trade sector has been diversified both in terms of the number of commodity items as well as trading partners. India is the vital trading partner for Bhutan. However, its external trade with other countries of the world is recently increasing. The interesting feature of external trade of Bhutan is that, even though the balance of trade has been unfavourable, due to unilateral transfers (external grants) from foreign countries, balance of payments has always remained favourable to the country. Bhutan has successfully strengthened interactions with the outside world through engagement in trade and receipts of aid. With the objective of more openness of the economy and increase in the volume of foreign trade, Bhutan is now getting prepared to join the WTO.

Bhutan has been able to set up a number of economic and related development institutions over the planning period. These institutions are rapidly extending their roles over the economic activities. Monetary sector of the economy has been substantially diversified. Royal Monetary Authority of Bhutan, Bhutan National Bank, Life Insurance Corporation of Bhutan, Bhutan Development Finance Corporation and Bhutan Provident Fund etc. constitute Bhutan's monetary system. In 1998, the financing, insurance and real estate sectors of Bhutan contributed 58 percent of GDP. The Royal Government now easily implements its monetary policies. Despite upgrading of the monetary sector, there still remains huge scope for farther diversification and modernization of these financial institutions.

Role of Foreign Aid

Capital formation is a vital pre-condition for economic diversification. Capital formation of a country takes place from two alternative sources- domestic savings and foreign savings. These savings are converted into productive investments. The countries which are unable to generate adequate domestic savings to finance investment for a targeted economic

growth, have historically sought resources from foreign countries. This gap between domestic savings and investment is known as the 'Savings-gap'. Developing countries resort to imports of equipments and other raw materials for feeding the ongoing industries. As a result, imports exceed exports, leading to the shortage of foreign exchange. This gap between import and exports is known as the 'Foreign exchange-gap' or 'Trade-gap'.

Foreign resources take the forms of foreign portfolio investment, Foreign Direct Investment (FDI), foreign aid and sometimes investment by the non-governmental organizations (NGOs). Theoretically, the concept of foreign aid encompasses all official grants as well as concessional loans, either in currency or in kind, aimed at transferring resources from developed to less-developed nations for development or income distribution purposes⁴. Most official aid on concessional terms are made available either as 'grants' or as 'soft' loans bearing lower interest rates and longer repayment period than would be available in private international capital market. All concessional loans are technically called Official Development Assistance (ODA) but are popularly known as foreign aid. Two major sources of foreign aid are: (a) public (official) assistance and (b) non-governmental organizations. Public (official) development assistance includes bilateral and multilateral grants, loans, and technical assistance.

Foreign aid are extremely essential for Bhutan due to the lower level of domestic savings and the collection of insufficient tax revenue to meet the increasing development expenditure. Because of the initiation of modernization process in the early sixties, the role of external aid increased manifold. Either 'Savings-gap' or the 'Trade-gap' of Bhutan was met by the available external aid from various sources. 'Trade-gap' was the inevitable aftermath of the implementation of development projects and programmes under successive Five Year Plans of Bhutan. Technical expertise from foreign countries was necessary to meet the shortage of domestic human capital. The Royal Govt. has shown substantial interests in raising domestic resources through the collection of taxes, monetization of the economy, use of idle money of financial intuitions and in some other ways.

However, these exertions of the government are critically limited.

Traditionally, Bhutan followed inward-looking policies regarding the international affairs and external relations. However, the inward-looking policies completely changed in 1958 when the Indian Prime Minister Jawaharlal Nehru, accompanied by his daughter Indira Gandhi, visited Bhutan in the same year. After thorough discussions between the His Majesty The King and the Indian Prime Minister, Bhutan agreed to open the economy and accept Indian assistance for development purposes.

As Bhutan introduced the Five-Year Plan in 1961, the entire plan expenditure of the First Five-Year Plan (1961-1966) of Rs. 107.20 was provided by India and the Planning Commission of India completely devised the plan model. In the Second Five-Year Plan (1966-71), total fund was also provided by the Indian assistance. In 1971, Bhutan became a member of the United Nations (UN). Since then, Bhutan has been receiving aid from various UN agencies. With the gradual change in foreign policies, Bhutan accepted aid from other bilateral and multilateral sources. World Bank, Asian Development Bank (ADB) and International Monetary Fund (IMF) are the major multi-lateral donor agencies. The most important bilateral agencies, other than India, include Switzerland, Austria, Japan, Denmark, U.S.A., Britain, France and some countries of the Middle East. As a result, the share of Indian aid is decreasing while that of other bilateral and multilateral agencies is increasing over time.

The Royal Government has initiated various development projects and programmes with the help of these foreign aid. Technical assistance seems to be especially important due to the lack of domestic human capital. Initiation of the Five-Year Plans, setting up of Chukkha and Tala Hydroelectric Projects, establishment of the Penden Cement Factory, construction of roads and rural electrification programmes all are immediate consequences of the receipt of foreign aid.

With the process of diversification of the economy, Royal Government of Bhutan has set up Gross National Happiness (GNH) as the sole objective of national development. Richness of human lives was emphasized than

mere economic growth. In fact, Gross National Happiness incorporates most of the environmental and cultural values along with economic growth. Therefore, the issues of sustainable development are extremely essential for Bhutan. Bhutan has already adopted various measures for the sustainability of the development process. It is also important from the viewpoint of self-reliance because the country is still dependent on huge external aid. Therefore, the RGOB is recently showing decreasing interests to receive foreign assistance for the achievement of self-reliance.

1.2: Objectives of the Study

A large number of theories and models for economic development with foreign aid have been developed by various scholars. Countries like Singapore, Taiwan, Hong Kong, Philippines, Indonesia and others have achieved substantial progress with the utilization of foreign aid. Those countries now export huge variety of goods and adopt export-led growth strategies. Different models have been developed on the basis of this development strategy. It is interesting to verify the applicability of these theories in case of Bhutanese economy for showing the effectiveness of aid. Our objective is to find the process, extent and nature of utilization of these scarce resources. Ultimately, we would like to verify the impact of this foreign aid on the diversification of the Bhutanese economy. The study would give an overall picture of the role of foreign trade in this diversification process. We propose to identify the impact of aid and trade upon the quality of life of the Bhutanese people and to probe into the question whether it is compatible with the concept of GNH. The objectives may be expressed in terms of the following points:

1. The rationale behind Bhutan's acceptance of external assistance.
2. Extent and efficiency in utilization of this foreign aid.
3. The role of aid in diversification of the economy.
4. Diversification of trade and its impact on the overall economic diversification of Bhutan.

5. The role of foreign aid in the formation of Bhutan's human capital.
6. Bhutan's benefit from regional/sub-regional grouping such as membership in SAARC.
7. The relevance of both external aid and trade to the sustainability of development.
8. Effect of foreign aid and trade on the ultimate development goal of Bhutan i.e. Gross National Happiness.

1.3: A Short Overview of Literature

Bhutan has recently emerged as one of the modern nation states and the country has merged to the global development process. Bhutan's special geographical and political identity in South Asia as well as gradual economic transition has attracted several researchers to conduct either theoretical or empirical studies on various economic issues and concerns of Bhutan. Even though, books, articles and reports on Bhutan are many, only a handful of studies are directly related to the modern trend of socio-economic changes of Bhutan.

Aris and Hutt⁵ in their historical study entitled *Bhutan: Aspects of Culture and Development* depicted a clear picture of Bhutan of the eighteenth to twentieth century. Their study shows that feudal socio-economic system was prevailing in Bhutan over these centuries and continued till the early twentieth century. The country was characterized by high degree of political instability. Rustamji⁶, a deputed Indian ICS officer in Bhutan, in his book *Bhutan: The Dragon Kingdom in Crisis* mentioned that some sort of development process started in Bhutan since the beginning of the Wangchuk dynasty. As soon as the Wangchuk dynasty came to power in 1907, Bhutan gradually achieved political stability and consolidation. Ram Rahul⁷ has shown that the real process of modernization and diversification of the economy began during the reign of the third king Jigme Dorji Wangchuk who reigned since 1952.

Bhutan's development strategy completely changed with the

introduction of the Five-Year Plans. Dharamdhasani⁸ pointed out that Bhutan accomplished development administration, communication and social infrastructure during the early phase of planned development. Bhardwaj⁹ has shown that the geographical factors substantially affected this development process, because it directly affected the distribution of population, land use, communication system, natural resources and so on. Sahu¹⁰ mentioned that the development plans and programmes of Bhutan should be consistent with the geographical problems like regional imbalance.

The World Bank¹¹ shows that remarkable development has been achieved in the agricultural activities under the planned development era. Since the inception of Five-Year Plan in 1961, Bhutan emphasized the agriculture sector because most of the Bhutanese people depended and still depends on agriculture. Irrigation facilities as well as agricultural extension services have increased substantially. As a result, production as well as export of agricultural commodities have increased. Tobgay¹² depicted a very good picture of agricultural situation in Bhutan. Dasgupta (1981) pointed out that the structure of land ownership system has also been changed. Land reform measures were introduced as early as in 1952. Ceiling on land holdings was fixed at 30 acres and the excess land was redistributed to the landless farmers. Awasthi¹³ added that because of these favourable changes in agriculture, exports of agricultural commodities included additional items and Bhutan exported a substantial amount of agricultural products.

Since, Bhutan was lacking modern industries even after the introduction of Five-Year Plans, setting up of modern industries was of utmost importance. Yadav¹⁴ in his *Indo-Bhutan Relations and China Interventions* pointed out that a delegation of geological survey of India was sent to Bhutan for its geological survey in 1961. A few large-scale industries were set up since the Fourth Plan onwards thereby diversifying the economy towards different directions. Karan¹⁵ in his book *Bhutan: Environment, Culture & Development Strategy* has discussed the

development of forest-based industries over the plan period. However, as per this book, extreme development was seen to be achieved in the production and exports of hydroelectricity. Biswas, Datta and Bhuimali¹⁶ point out that despite the major success in the production and exports of hydro-electricity, most of the domestic villages are still lacking electrification. They added that the development of the Bhutanese industries has been highly skewed. Thimphu and Chukkha districts are the largest and second largest industrial centres of the country.

Urban centres have been established during the planned development era. Thimphu is the largest town and capital of the country while Phuntsholing is the second largest. The highest percentage of urban population lived only in Thimphu city while least populated urban centre is Gasa only with 402 persons¹⁷. Other border towns like Samchi, Gaylegphug, Chirang, S. Jangkhar, Hatisar etc. are now providing with inhabitants for more than 50 percent of urban Bhutanese. Sinha¹⁸ shows that these newly established towns lack normal urban facilities like pure drinking water, proper electrification, road facilities, buildings, market infrastructure and so on. However, for the provision of these facilities, measures have been taken by the Bhutanese Government. As a result, urban population and urban facilities both are recently increasing.

Bhutan's international trade has been the subject matter of several studies. There were several trade centres in Sikkim, Bengal, Assam and Tibet. The most important centres were Titalya in Sikkim (Darjeeling at present). In Assam, these were located at Hajo, Udalguri, Khagrapara and Doimara¹⁹. The trend of Indo-Bhutan trade has shown fluctuating nature. The Duar War of 1865 substantially affected Bhutan's trade policy and Bhutan expressed reluctance to accept the free trade proposal from British-India²⁰. Misra²¹ pointed out that extensive trade relation between Bhutan and Tibet had existed before 1960s. Bhutan exported mainly rice to Tibet and imported salt from the latter. However, because of the unfair trade practices by Tibet, trade relations between the two had become weakened. Misra pointed out that as China occupied Tibet and seized eight

Bhutanese enclaves in 1959, the Royal Government of Bhutan imposed a total ban on trade with Tibet. Since then, Bhutan's trade with Tibet and China was almost absent and Bhutan moved towards India for extending trade relations. After the independence of India, Indo-Bhutan trade got a tremendous boost. Although Bhutan's most important trading partner is India, recently trade with the other countries is also increasing.

Over the decade 1980s, trade position of Bhutan has significantly improved. Despite the adverse trade balance of Bhutan, balance of payments situation was very often favourable due to the unilateral transfers of foreign aid²². Different types of export promotion measures have been adopted. For example, Mehrotra²³ mentioned that export-oriented projects had been undertaken. Another study by Adhikari²⁴ shows the important trends of Indo-Bhutan trade including exports, imports as well as the balance of payments.

Bhutan becomes a member country of SAARC in 1985. Biswas²⁵ pointed out that Bhutan has indeed benefited from this regional economic grouping, the major benefit being the diversification of economic relations and co-operations with other South Asian countries. Sabur's²⁶ study shows the consistent and steady development of Bhutan-Bangladesh relations. Kharat²⁷ stated that due to this improvement of relations, the position of trade between these two countries improved during 1980s and early 1990s. Thus, the structure, growth, and directions of trade substantially changed over the two decades. Still, Bhutan's foreign trade with Bangladesh, Nepal, Pakistan and Sri Lanka remains basically small.

Pankaj²⁸ pointed out that foreign trade has a very critical implication to the environmental contexts of Bhutan. The study shows that the ongoing globalization process, liberalization and openness of the world economies led Bhutan towards the threshold of some new challenges. In such a situation, Bhutan desires to become a member of WTO.

Most successful diversification has been achieved in the case of service sector. While there were only four hospitals and 2 doctors in the whole country in 1961, the number of hospitals and doctors increased to

30 and 171 respectively in 2008²⁹. Bhattacharya³⁰ opined that rapid increase in the social services has been achieved due to the diversification of education and health-care institutions. Canada advanced its assistance for strengthening Bhutan's education, and its first project (1992-1998) focused on strengthening Bhutan's two teacher training institutes, upgrading academic background of secondary school teachers and post-secondary lecturers, and enhancing the capacity of curriculum and professional support services and the Bhutan Board of Examinations³¹. As a result of these, literacy rates and life expectancy of the Bhutanese people as well as the quality of domestic labour have improved.

Chetri³² in his recent Ph. D. work pointed out that monetary services have been extended. Chetri's study shows the availability of credit facilities to the micro enterprises both from formal and informal sources and the problems associated with these credit facilities. After the establishment of the Royal Monetary Authority of Bhutan, its first commercial bank, the Bank of Bhutan was established in 1968 jointly owned by the Royal Government and the State Bank of India with an equity participation of approximately 75:25³³. The Royal Government of Bhutan now easily implements its monetary policies through the banking and non-banking financial institutions.

In order to carry out economic diversification, huge migration from India, Nepal and Tibet was encouraged by RGOB. A large number of Indian expatriate labour entered Bhutan due to evergrowing Indo-Bhutan cooperation. They are basically wage earners, peasants, merchants, petty shopkeepers and clerks³⁴. Domestic labour has grown gradually with the growth of literacy rate. The early emigrants, especially from Nepal, are becoming now a burden on Bhutan. It led to ethnic conflicts between the migrant Nepalese and the Dupka sects of Bhutan³⁵.

Development of the political institutions with administrative decentralization and people's participation in the decision-making process has taken place in Bhutan. These issues have been taken up by various authors like Labh³⁶ and Misra and Misra³⁷. According to them, those

institutional changes resulted in major change in Bhutanese foreign policy and relations. Gulati³⁸ in his *Rediscovering Bhutan* pointed out that the first two Five-Year plans of Bhutan were almost completely financed by Indian aid and the planning commission of India devised the plan models because there was no planning commission in Bhutan at that time. Starting from 1961, Bhutan has completed nine Five-Year Plans by 2007 and the Tenth Five-Year Plan (2008-2013) is in operation. Under this planned development regime, foreign aid has substantially contributed to the economic development of the state. The report *Country Assistance Plan* (2000-2002) published by the Asian Development Bank³⁹ gives an idea about the aid that Bhutan received from various donors.

There are a few dozens of empirical studies aimed at exploring the effectiveness of aid on savings or economic growth such as those of Chennery and Strout⁴⁰, Papanek⁴¹ both based on Harrod-Domar model, which show that aid is effective in raising economic growth. Burnside and Dollar⁴² in their highly influential study "*Aid, Policies and Growth*" showed that aid effectiveness depends on policy environment. For the economy of Nepal, a study by Srivastava and Choudhary⁴³ shows that the role of foreign aid on GDP growth rate is positive and statistically significant. Al-khaldi⁴⁴ showed that the impact of foreign aid on the economy of Jordan is positive. Mosley⁴⁵ incorporated lagged aid variables into his model and accounted for the potential endogeneity of aid. He found out a negative relationship between aid and growth, but the coefficients being statistically insignificant. Dalgard et, al.⁴⁶ found out that aid is effective with diminishing returns and is less effective in tropical regions. They also find that aid effectiveness does not depend on the policy environment.

Different agencies focused their aid activities on the development of specific sectors or sub-sectors of the economy. While Indian assistance was used for development of communication system, human resources were developed with the aid received from the World Bank, UNFPA, UNICEF, and WHO. Wangdi⁴⁷ reports that, recently, eleven new projects have been prepared for the agricultural sector, especially proper agriculture, lives-

stock activities and agricultural marketing with the help of Indian assistance. Penjor's report⁴⁸ shows that the assistance from Asian Development Bank has been channeled into the infrastructure development, urban sector development as well as rural electrification. One of the important attributes of these bilateral and multilateral agencies is that they tried to maintain mutual coordination for their development activities.

Singh⁴⁹ shows the pattern of allocation of aid funds accepted from India, other non-UN agencies as well as funds collected from domestic resources over the first six Five Year Plans of Bhutan. The same scholar has also studied the utilization of these funds for the modernization of the economy. The First Five Year Plan (1961-66) and the Second Five Year Plan (1966-71) were totally financed by Indian grants with the cost of Rs. 101.2 million and Rs. 200 million respectively.⁵⁰ Gross National Happiness (GNH) remained the central goal of the national development. Although GNH is a subjective identity with questionable measurability, Namgyal and Wangchuk have tried to provide a framework for the measurement of GNH⁵¹. Their model basically monitors the population status and changes. The provision of sustenance, basically food, shelter, potable water, energy etc. remain as the central variables of the model. Pankaj⁵² made the comment that self-reliance, decentralization, environmental conservation, preservation of cultural heritage etc. are the integral part of development goals.

Since rapid economic and social development as well as modernization are undermining Bhutanese cultural and environmental heritage, Bhutan follows a very cautious and careful approach for the preservation of its environmental and cultural heritage⁵³. The study shows that in the environmental front, RGOB has already implemented different measures to preserve the natural resources. Watershed management, Renewable Natural Resource (RNR) sector policy, maintaining a minimum forest cover of 60 percent of total land area, ceiling on the number of tourist arrivals, creation of national parks, wildlife sanctuaries and

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reserves etc. are the major initiatives towards the achievement of the proposed goal. The donor countries are substantially financing Public Environment Expenditure (PEE) of the government, concerning the impact of Bhutan's environment over the neighbouring countries or even the whole world⁵⁴. The UNDP/GEF Small Grants Programme (SGP) has been designed to support local community actions that address global environmental concerns such as biodiversity loss, adverse impact of climate change and land degradation⁵⁵.

An overview of the foregoing research works suggests that though research has been done on different issues and policies of RGB, there is no single and exclusive study that incorporates the roles of both foreign aid and external trade in the process of economic diversification process of Bhutan. Most of the studies are socioeconomic studies. Study on overall economic conditions of the country is non-available, excepting some government reports and the reports published by the international agencies like the UN, ADB and the World Bank. Therefore, the study of foreign aid and trade and their impact in the diversification process of the economy seems to be an urgent responsibility for bringing the matters into the limelight.

1.4: Research Questions

The basic questions that we would try to answer through this work are:

1. What is the reason of Bhutan's reliance on foreign aid and who are the major donors?
2. How does Bhutan utilize these aid funds and how efficiently?
3. Who are the major trading partners of Bhutan and what are the important trends of trade and the balance of payment?
4. To what extent has Bhutan's economy been diversified and was the role of foreign aid and trade in this?
5. What effects foreign aid and foreign trade had on the economic growth of Bhutan?

6. How did foreign aid and foreign trade affect sustainability of development?
7. How economic growth and GNH are related and to what extent is GNH affected by external aid and external trade?

1.5: Hypotheses to be Tested

In order to answer the above questions relating to diversification of Bhutanese economy with the help of foreign aid and trade, we would like to test the following hypotheses:

1. Technological and human capital gap, accompanied with 'Savings-gap' or 'Trade gap', tended Bhutan to accept external aid.
2. Bhutanese economy has been diversified and structurally transformed mainly through the use of external aid and engagement in trade.
3. Agricultural development and industrial development in Bhutan are mutually interdependent.
4. The relationship between external aid and sustainable development is positive while that between trade and sustainable development is negative in Bhutan.
5. External aid as well as external trade contributed to Bhutan's Gross National Happiness.

1.6: Database and Research Methodology

Various methodologies are used for the purpose of empirical research works. These methodologies vary from deductive methodology to inductive methodology, from analytical to quantitative, from general to case studies and so on. The research works may be either theoretical or empirical. An empirical research may also be based on either primary data or secondary data. This research is purely an empirical research where existing theories and models have been tested either through maximum possible evidences or by using available statistical techniques.

Both foreign aid and foreign trade are issues of international

economics, a special branch of macroeconomics. Hence, in some research studies the researchers use macro-economic parameters in their research works. In this research, we used macro-economic variables or the variables in aggregate. The principal task of this research investigation is to establish or check the relationship between some aggregate variables such as between foreign grants and economic growth, foreign grants and domestic savings and so on. Undoubtedly, this research is a case study of Bhutan.

Diversification of economy would encompass expansion of economic activities as well as product transformations under different sectors of the economy. Economic diversification leads to increase in production in different sectors of the economy, rise in national or per capita income as well as expansion of education and health care facilities. These impacts of economic diversification have been seen in Bhutan and finally, quality of life of the Bhutanese people has also risen. Quality of their lives would be considered in terms of either Human Development Index or Gross National Happiness. The measurement of HDI has been devised by the UNDP and is well accepted by the nations worldwide, while that of GNH is under process.

Since the concept of foreign aid encompasses several components, by foreign aid we would mean Official Development Assistance (ODA). For exploring the motives of aid, two models (a) 'Savings-gap' model and (b) 'Foreign-exchange-gap' model are widely used. In the 'Savings-gap' model, capital inflows (difference between imports and exports) add to investible resources (domestic savings). The savings-investment criteria can be written as:

$$I < F + sY \tag{1.1}$$

where F is the amount of capital inflows. If capital inflows (F) plus domestic savings (sY) exceeds domestic investment (I) and the economy is at full employment, a savings-gap is said to exist. In the "Foreign-exchange-gap" model, if LDC investment has a marginal import share, m_1 and the marginal propensity to import out of a unit of GNP is given by the

parameter m_2 , the 'Foreign exchange- gap' can be written as:

$$(m_1 - m_2) + m_2y - E < F \quad (1.2)$$

where E is the exogenous level of exports. If F , E , and Y are initially assigned exogenous current value, only one of the two inequalities is binding. Therefore, country can be classified according to whether the savings-gap or foreign-exchange gap is binding⁵⁶. Technical assistance is another approach to motives of aid by the recipient. This assistance fills both the technical and human capital-gap of the recipient. In the course of our study, the most suitable aid motives for Bhutan would be explored.

The role of trade in the diversification of the economy can be determined in terms of the inclusion of the items in the foreign trade, the number of trading partners and the change in the volume of exports and imports. Balance of payment would be very convenient tool for the analysis of the relationship between foreign aid and trade as the balance of payment of a country includes both the trade and the aid factors. Then, the effects of foreign trade on the economic growth of Bhutan would be investigated with the help of sophisticated econometric models. Sufficient statistical data would be presented in tabular form for understanding the nature of changes in the trade pattern.

In order to measure sustainable development, environmental accountings would be incorporated. Sustainable development can be measured with the help of the sustainable net national product (NNP) in terms of the following equation⁵⁷:

$$NNP^* = GNP - D_m - D_n \dots\dots\dots (3)$$

Where D_m = depreciation of manufacturing capital assets and D_n = depreciation of environmental capital assets. In a better measure of sustainable development, although difficult to calculate with the existing data collection methods, would be

$$NNP^* = GNP - D_m - D_n - R - A \dots (4)$$

Where NNP^* , GNP , D_m and D_n are as in equation (3), R =expenditure needed to restore environmental capital such as forests, fisheries and others and

A=expenditure needed to avoid destruction of environmental capital like air pollution, water and soil quality etc.

The economy of Bhutan broadly consists of three sectors viz. agriculture, industry and trade. All these three sectors consist of some sub-sectors. In the course of our study, we would like to explore the issues of diversification in each sector and sub-sectors of the economy. At the same time, the role of foreign aid in the diversification of each of these sectors or sub-sectors will be explored. The nature of relationship between agriculture and industry and the extent of their interdependence will also be investigated. For this purpose, OLS estimation or simultaneous equation estimations would be followed.

For the selection of samples, data have been collected from three sectors of the economy, which together make up the universe of the study. Sampling units have also been well defined. In case of industrial data, firms seemed to be the appropriate sampling unit. For agricultural production, the items like rice, wheat, sugarcane, potatoes, animal heads etc. were suitable sampling units. Appropriate sampling unit for export-import data was various traded commodities. Sampling units for foreign aid have been defined by a donor agency, either bilateral or multilateral. A particular sector was divided into a few strata consisting of the sub-sectors mentioned above. From these strata, items were selected with equal chance of being selected. Thus, the sampling design followed here is a stratified random sampling.

We had to depend upon various secondary sources for the collection of data. Enough secondary data are available in the various reports published by the Government of Bhutan as well as different international agencies like the United Nations, the World Bank and the Asian Development Bank. It is to be noted that most of the statistical data on Bhutan is basically collected by Bhutan's Central Statistical Organization (CSO) under the Planning Commission. Statistical Yearbook of Bhutan published by the CSO seemed to be a very important data source. Lot of care has been taken to collect quality data because all these form the

backbone of the empirical research that we have tried to undertake. For the collection of the secondary data, different libraries have been visited.

After collection and tabulation of data for our purpose, we have analysed them by using statistical techniques. In this stage, the following steps have been followed:

1. Getting a feel of the data
2. Recognition of the association/relationships between the variables and
3. Testing the hypotheses

Under the univariate data analysis, measurement of central tendency (different types of mean), dispersion etc. were required. Bivariate analysis was carried out for establishing association as well as causal relationship between any two variables. It is to be noted that correlation coefficient ascertained the degree of association while regression coefficient reflected the causal relationship between the variables. In case of time series data, time series econometric techniques such as stationarity test, Granger causality etc. have been applied.

Problems of Data Collection

A researcher on Bhutan is faced with some practical problems. This is because research work on Bhutan, in general, is restricted. In order to carry out research work, proper approval from the competent authority such as Ministry\Departments of Foreign Affairs is required. Primary data collection is completely restricted without permission from the government of Bhutan. In case of secondary data also, there are various constraints. Time series data are difficult to obtain because prior to 1981, Bhutan did not maintain any reliable statistical data. The available data are sometimes not consolidated. The data published by the RGOB and the international agencies are not identical. To give an example, even the population figure is a matter of conjecture. A few years ago, Bhutan's population was estimated ranging from 3,00,000 to 8,00,000 by different agencies. Encyclopedia

Britannica and Britannica Book of the year 1962 and 1963 had given the estimate as 623,000 and 680,000 respectively while the State Department Bulletin estimated the total population as 715,000 in 1963. However, actual population of Bhutan during that time was about 8,00,000⁵⁸. Therefore, proper adjustment of available data was essential for avoiding the ambiguities.

Since, quality of available secondary data is questionable, proper care have been taken before accepting them on their face value. Again, most of the government documents/data remain preserved in the government offices and are not easily accessible up to recent past. This type of prohibitive factors involved in the empirical data is a serious problem. As a consequence of this, the cost of data collection becomes very high. A researcher has to tolerate all these constraints and try to collect best possible data with most possible competence.

1.7: Short Overview of the Following Chapters

The second chapter is all about the economic history of Bhutan starting periodisation of the history and economic history of medieval Bhutan. Foreign aid and economic growth in Bhutan has been presented in chapter three. In this chapter, the theories and models on foreign aid and economic growth, empirical findings, foreign aid and economic growth in Bhutan have been analyzed. While describing foreign aid and economic growth in Bhutan, sophisticated econometric technique like VAR model has been employed in order to have clearer understanding on the issue. The aspect of infrastructural development in Bhutan has been discussed in chapter four starting financial sector reforms, development of transport and communication, urban sector development and the growth of social services and human resource development. Sectoral diversification of the economy of Bhutan has been exhibited in chapter five with an elaboration of agriculture sector, industrial sector, and services. Foreign trade in Bhutan is described in chapter seven with a discussion of its trade policy

initiatives undertaken during different five year plans. Bhutan's trade with India and other SAARC countries has been shown in terms of quantitative data. The composition and direction of Bhutanese trade with other non-SAARC countries are also explained in chapter six. The widely discussed issue i. e. the sustainable development aspect of the Bhutanese economy has been discussed in chapter seven. Chapter eight summarises, concludes and recommends.

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