Public Disclosure Authorized

BHUTAN

Private Sector Survey

24975

FILE COPY

June 14, 2002

Currency Equivalents

Currency Unit = ngultrum (Nu)
1 ngultrum = US$0.02083
US$1 = ngultrum 48.00
(December 2001)

Fiscal Year

January 1 to December 31

Abbreviations and Acronyms

AsDB	Asian Development Bank
BCCI	Bhutan Chamber of Commerce and Industry
BCCL	Bhutan Carbide and Chemicals Limited
BDFC	Bhutan Development Finance Corporation
BEPC	Bhutan Export Promotion Center
BFAL	Bhutan Ferro Alloys Limited
BNB	Bhutan National Bank
BoB	Bank of Bhutan
BBPL	Bhutan Board Products Limited
C&F	Carriage & Freight
CCP	Critical control points
cft	Cubic foot
Cu.m.	Cubic meter
DIT	Department of Information Technology
DoI	Department of Industry (Ministry of Trade and Industry)
DRC	Department of Revenue and Customs (Ministry of Finance)
EDP	Entrepreneurship Development Program
FDC	Forestry Development Corporation
FDI	Foreign Direct Investment
FIAS	Foreign Investment Advisory Service
FIE	Foreign Invested Enterprise
FMU	Forestry Management Unit
fob	Free on board
FSC	Forestry Stewardship Council
GDP	Gross domestic product
HACCP	Hazard Analysis Critical Control Points
HRD	Human Resource Development
ICOM	International Council of Museums
ISP	Internet Service Provider
IT	Information Technology
kBbps	Kilobytes per second
Kg	Kilogram
LDC	Less developed country
MoA	Ministry of Agriculture
MoF	Ministry of Finance
Mb	Megabyte
MGS	Matching Grant Schemes
MT	Metric tons
MTC	Ministry of Transport and Communications
MTI	Ministry of Trade and Industry
NEB	National Employment Agency
NFYDP	Ninth Five-Year Development Plan

NGO	Nongovernmental organization
NPPFB	National Pension and Provident Fund Bureau
NTTA	National Technical Training Authority
Nu	ngultrum
PCAL	Penden Cement Authority Limited
PPD	Policy and Planning Department
QCRS	Quality Control and Regulatory Service
RAA	Royal Audit Authority
R&D	Research and Development
RGOB	Royal Government of Bhutan
RICB	Royal Insurance Corporation of Bhutan
RMA	Royal Monetary Authority (the central bank)
Rs	rupees
SAARC	South Asian Association for Regional Cooperation
SNV	Netherlands Development Organization
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific & Cultural Organization
UNICEF	United Nations Children's Fund
USD	United States dollar
WTM	World Travel Market

Acknowledgments

The report was undertaken on a fully collaborative basis with the Ministry of Trade and Industry, the Bhutan Chamber of Commerce and Industry (BCCI), the United Nations Development Program (UNDP) and the World Bank. The World Bank team consisted of Simon Bell (Task Leader), John Nasir, Asya Akhlaque (World Bank), Andrew Proctor (Foreign Investment Advisory Service – FIAS), Gerald Tyler, Christopher Oates (generously financed by the UNDP), and Cian O'Carroll (consultants). Representatives from the Ministry of Trade and Industry involved in the survey included: Sonam Wangdi (Director of the Policy Planning Department, Ministry of Trade and Industry), Karma Tsering (PPD, MTI), Tshewang Dorji (PPD, MTI), and Jambay Yeshi (DoI, MTI). The representative from the Bhutan Chamber of Commerce and Industry was Tashi Tshering. The survey work was also supported by a team of four accountants including Nim Sherpa (Sherpa Consultancies), Alok K. Mitra, Jayanta Banik, and Ujjwal Kumar Basu (N.C. Mitra and Co., Calcutta, India). The work of the mission was ably assisted by Dawa Sherpa from Sherpa Consultancies. Initial background work was done on this survey by both Karma Tshiteem and Tshewang Norbu (from the Ministry of Finance, Bhutan) when they were interns with the World Bank.

The survey data was entered, in country, into a Microsoft (MS) Access data file by a Bhutanese firm – Visual Information Technology – recruited for this purpose. The survey team benefited greatly from two interaction sessions at the end of the mission. One was with the Higher Level Committee on Private Sector Development, which was recently constituted by the Royal Government of Bhutan under the leadership of the Secretary of Finance – specifically to address issues pertaining to private sector development. The second meeting was with working-level representatives of the Ministry of Trade and Industry and the Bhutan Chamber of Commerce and Industry.

The survey team would specifically like to register its deep appreciation to the almost 100 firms that gave freely of their time and insights during the period of the survey. This report would not have been possible without their excellent cooperation – and the important information that they willingly provided.

This study was peer reviewed by Benoit Blarel (IFC) and Geeta Batra (World Bank). Marilou Uy was the Sector Director (Private Sector Finance) and the Country Director for Bhutan – responsible for oversight of this report. The Vice President for the South Asia Region is Mieko Nishimizu.

TABLE OF CONTENTS

EXECUTIVE SUMMARY ..... i to xi

Chapter One
INTRODUCTION 1

Chapter Two
GROWTH AND STRUCTURE OF THE PRIVATE SECTOR 5

1. Macroeconomic Overview 5
2. Bhutan's Private Sector – An Overview 6
3. Financial Sector 12
4. Privatization 13
5. Bhutan's Trade Regime 14
6. Foreign Investment 15
7. Infrastructure 16
8. Labor and Employment 16
9. Conclusion 19

Chapter Three
AGROPROCESSING INDUSTRIES 23

1. Present Situation 23
2. Costs and Competitiveness 27
3. Impediments to Growth 33
4. Potential 36
5. Recommendations for the Sector 38

Chapter Four
WOOD AND WOOD-BASED INDUSTRIES 41

1. Present Situation 41
2. Costs and Competitiveness 44
3. Impediments to Growth 47
4. Potential 53
5. Recommendations for the Sector 55

Chapter Five
TOURISM 58

1. Present Situation 58
2. Costs and Competitiveness 63
3. Impediments to Growth 66
4. Recommendations for the Tourism Sector 71

Chapter Six
INFORMATION TECHNOLOGY 74

1. Current Situation 74
2. Opportunities 76
3. The Way Forward 78
4. Conclusion 80

Chapter Seven
FOREIGN DIRECT INVESTMENT (FDI) 81

1. The Need for FDI in Bhutan's Private Sector Development 81
2. Current Constraints to FDI in Bhutan 83
3. Essential Elements of the Currently Proposed FDI Regime 85
4. Remaining Issues to be Addressed 89

Chapter Eight
CROSS-CUTTING ISSUES 90

1. Introduction 90
2. The Biggest Business Problems for the Private Sector 91
3. Labor Issues 91
4. Technology Issues 98
5. Financial Sector Issues 101
6. Land Issues 108
7. Taxation/Auditing and Accounting Issues 108
8. Infrastructure 111
9. The Regulatory Environment 113
10. The Trade Regime 116
11. Institutional Issues 117
12. Benchmarking Bhutan 119
13. Alternate Development Tracks 120
14. Privatization 123

Chapter Nine
CONCLUSIONS AND RECOMMENDATIONS 124

1. Cross-Cutting Issues and Conclusions 124
2. Sector-Specific Conclusions 132
3. Vision for the Development of the Private Sector in Bhutan 134
4. Main Recommendations 135

Annexes 137

Annex One
List of Registered Companies in Bhutan, 2001 138

Annex Two
Tax Regime/Policies 141

Annex Three
Yields of Major Crops in Less Developed Countries and Other Developing Countries 144

Annex Four
Bhutan – Cash Crop Report, 1995 to 1998 145

Annex Five
SWOT Analysis of the Tourism Sector 146

Annex Six
Pilot Visitor Survey 147

Annex Seven
Tourists Entering Bhutan, by Nationality 149

Annex Eight
Tourist Arrivals, by Month and by Tour Operator 150

Annex Nine
Tourist Arrivals, 1984 to 2000 152

Tables, Charts, and Boxes

Tables

Three Biggest Business Problems vi

Table 1.1 Size of Firms Surveyed 2
Table 1.2 Firms Interviewed by Sector, Size, and Location 3
Table 1.3 Mean and Medium Annual Employment Growth Rates by Sector and Group 3
Table 1.4 Employment and Share of Non-National Labor Force, by Location and Group 4

Table 2.1 Bhutan: Annual Licensed Business Establishments by Sector, 1987-1997 7
Table 2.2 Public Ownership in Listed Companies 13
Table 2.3 Total Work Force – Graduates and Dropouts, 2000-2010 18
Table 2.3 Bhutan: Selected Economic and Financial Indicators, 1995/6-2000/1 22

Table 3.1 Typical Agroprocessing Early Entrants in Developing Countries 24
Table 3.2 Profile of Survey Respondents 26
Table 3.3 Summary Price Competitiveness of Agricultural Subsectors 28
Table 3.4 Agroprocessing – Can Bhutan be Competitive? 29
Table 3.5 Labor Productivity 32

Table 4.1 Forestry Development Corporation Disposal of Timber, 1998 to 2000 41
Table 4.2 Comparative Timber Log Prices 45
Table 4.3 Comparative Output and Costs Between Countries in Typical Firms 46
Table 4.4 Comparative Timber Yield Figures 46
Table 4.5 Wood Exports from Ghana per Product Type, 1999-2000 47
Table 4.6 Typical Timber Lot – Price Paid by Firm and Actual Value to Firm 48
Table 4.7 Time Taken for Technology to be Transferred to Bhutanese Firms 51

Table 5.1 Employment in the Tourism Sector 60
Table 5.2 Tourism Arrivals, Gross Earnings, and Government Revenues, 1999 to 2000 62
Table 5.3 Comparative Costs of a Seven Day Tourism Package to Five Countries, 2001 63
Table 5.4 Cost of a Seven-Day Visit to Bhutan 64
Table 5.5 Location of Overseas Travel Agents 65

Table 6.1 Mean Earnings for Sales and Office Workers 77
Table 6.2 Monthly Fees for Leased Lines 78

Table 8.1 Three Biggest Business Problems 91
Table 8.2 Average Monthly Salary By Region and Ethnicity 93
Table 8.3 Mean Value Added Per Worker Per Year 94
Table 8.4 Percentage of Indian and Bhutanese Workers in Sample by Type 94
Table 8.5 Percentage of Firms Training and Training to Sales Expenditure 96
Table 8.6 Major Reasons for Not Training 97
Table 8.7 Interest Rates and Collateral Ratios 103
Table 8.8 Percentage of Credit Constrained Firms 103
Table 8.9 Nonpayment 104
Table 8.10 Percentage of Firms that Invested Over the Last Three Years 107
Table 8.11 How Investment is Financed 107

Table 8.12 Comparative Electricity Prices in the South Asia Region for Industrial Usage ... 113
Table 8.13 Government Unpredictability ... 114
Table 8.14 Bhutan's Trade with India and the Rest of the World, 1996 to 1999 ... 116
Table 8.15 Predictability of Laws and Regulations ... 119
Table 8.16 Regulatory Constraints ... 120
Table 8.17 Firm's Perceptions of the Quality of Public Services ... 120

Charts

Chart 2.1 Bhutan Power Sector, 1991 – 2000 ... 5
Chart 2.2 Annual Industrial Licensed Businesses ... 6
Chart 2.3 Industries by Ownership Classification ... 7
Chart 2.4 Industries by Size Classification, 1997 ... 8
Chart 2.5 Industries by Type Classification ... 8
Chart 2.6 Distribution of Industries by Industrial Subdivision, 1997 ... 10
Chart 2.7 Labor Force by Sectors, 1999 ... 10
Chart 2.8 Employment and Value-Added by Subsector, 1997 ... 11
Chart 2.9 Total Bank Lending ... 12

Chart 5.1 Tourist Arrivals into Bhutan, 1985 to 2000 ... 59
Chart 5.2 Tourist Entry by Month, 1998 to 2000 ... 67

Boxes

Box 2.1 Bhutan's Biggest Companies ... 9
Box 2.2 Bhutan: The Power Sector ... 20
Box 2.3 Bhutan: Five-Year Development Plans ... 21

Box 3.1 Location is Important ... 31
Box 3.2 Poor Management Damages Bhutan's Market Potential ... 35
Box 3.3 Penetrating Niche Markets Through Innovation and Proactive Relationships ... 38

Box 4.1 Supply and Demand for Government Trained Labor ... 43
Box 4.2 Firm Eleven's Attempts to Source New Machinery ... 52

Box 5.1 2002 – An Appropriate Year for Public-Private Sector Cooperation in Marketing . 65

Box 8.1 Matching-Grant Schemes ... 101
Box 8.2 Accounting and Auditing Issues ... 110
Box 8.3 The Legal Environment – Law and Justice ... 115
Box 8.4 Yangphel Handicrafts ... 122
Box 8.5 Incense Production – A Possible Niche Market? ... 123

EXECUTIVE SUMMARY
BHUTAN PRIVATE SECTOR SURVEY

Background

Bhutan has a small, new, and relatively underdeveloped private sector.

Prior to opening up the economy in the 1960s, the only private sector activity was in agriculture supplemented by some trading activities. Since that date, however, the transformation of the economy has been dramatic with a rapid growth in urban centers, the establishment of a basic set of infrastructure services, and the development of an important hydro-power sector. Rates of national income growth in the 1990s have averaged around 6 percent per annum – strongly supported by revenues from the hydro sector.

Overall economic growth has, in turn, fostered private sector development and by the end of 2000, the government had issued over 9,000 industrial licenses, almost 12,000 trading licenses, and 124 registered companies operating in a wide range of activities from power intensive industries such as cement, ferro alloys, and calcium carbide; a range of light manufacturing industries in areas such as fruit processing; some mining companies which mine and process locally available products; a group of saw milling and other upstream processing industries around the wood industry; a group of service industries supporting the tourism sector; and a fast-growing segment of service industries in areas such as construction and transport (spurred, in large part, by the construction activities of the government and the development of additional hydro facilities at the Tala Hydro Plant).

Reflecting the nascent stage of the private sector – and the small size of the economy – the sector is dominated by a handful of medium-sized companies. However, the vast majority of enterprises operating in Bhutan are very small in size and operate with considerably less than 10 employees. Around 85 percent of all firms in Bhutan are classified as cottage or mini (with less than $100,000 invested capital). As shown by the number of registered companies, there is only about 100 companies of any size at all – the largest of which employs less than 540 workers. The sector, like the overall economy, is small.

Increasingly, however, the government is looking to the private sector to provide investment in support of growth and employment opportunities for a growing number of Bhutanese school leavers. The government recognizes that, while it has long been the main engine of economic growth, this situation must gradually evolve with an increasingly greater reliance upon private sector activities as the main motor for development. Nowhere is this more true than with respect to employment generation.

Employment

Although employment data is weak in Bhutan, it is estimated that around 60,000 people are employed in the formal sector. Of these, approximately 22,0000 are employed in public sector institutions (of which 14, 258 are employed in the civil service). This implies that around 60 percent of total formal-sector jobs are in the private sector. However, of the total 60,000 formal sector jobs, it is estimated that 50 percent are held by non-nationals. As the share of non-nationals in public sector institutions is likely to be very small the majority of these 30,000 non-national workers are employed in the private sector.

Rural-urban migration has not yet become a major source of urban unemployment in Bhutan. The vast majority of the rural population continue to remain in rural areas (although this is also likely to change with time). However, good progress in achieving educational and literacy goals has meant that a growing number of educated and literate Bhutanese are now seeking urban employment opportunities. While the majority of these school leavers have been absorbed into the civil service in the past – and this has indeed been the preferred employer for most Bhutanese – the government has now largely reached saturation point. There is a general expectation that the civil service will not grow much beyond its current size.

This saturation of public sector employment opportunities has taken place at a time when the benefits from investment in education are increasingly bearing fruit. Hence, over the decade 2001 to 2010, it is projected that approximately 90,000 school leavers and graduates will be produced by the school system – with exponential increases taking place each year. As the current formal sector work force is only 60,000 (of which 30,000 are thought to be non-nationals – and a further 22,000 are in the civil service or in public sector institutions, which are not growing) the creation of an additional 90,000 jobs appears as a formidable challenge.

The government recognizes that dynamizing the private sector to create employment opportunities for this increasingly literate work force is a high-priority issue; it now forms a central tenet of the Ninth Five-Year Development Plan. Absorbing this level of school-leavers into the private sector, however, will not be easy.

Advantages and Disadvantages for Private Sector Development

As in all countries, Bhutan has a unique set of advantages as well as disadvantages with respect to the development of the private sector. To promote private sector employment, the government should seek to build upon the advantages that exist – while attempting to ameliorate the disadvantages to the maximum extent possible. While it may sound painfully obvious – it is extremely important that the government should not diminish any potential advantage or reduce its potential impact – while at the same time it should not add to the disadvantages that the private sector faces. The task for the private sector is so formidable that it will require all the resources and support available if it is to begin to address the problem of growing youth unemployment.

The report has identified the following factors as being important advantages for private sector businesses operating in Bhutan:

- Relatively free access to the large Indian market under current trade arrangements – although this advantage will gradually lessen as tariff and non-tariff barriers fall as a result of India's gradual liberalization in line with World Trade Organization requirements;
- Access to cheap skilled and unskilled labor from India, which provides Bhutan with a considerable cost advantage in labor-intensive production;
- Extremely stable labor relations. No company in the survey indicated any problem with disruptive union activity, and no working days were lost as a result of strike activity;
- Labor regulations are also very flexible with very little restrictions on the capacity to hire and fire or determine wage levels;
- Electricity prices are also very low (between one-half and one-fifth of the costs in competing countries/states in the region). Although electricity subsidies are likely to be removed over the medium term, they will still confer a considerable advantage in power-intensive industrial development activities;
- Bhutan is politically stable;
- The Royal Government of Bhutan is clean, efficient, and corruption free.

These various attributes amount to considerable advantages compared with many countries in the region. While the impact of some these (e.g., preferential access to the Indian market, very cheap electricity) are likely to decrease in importance over time, every effort should be made to retain the positive effect that these features confer on private sector activity in Bhutan.

Unfortunately, the list of disadvantages to undertaking business in Bhutan is equally impressive. The main problems identified in the survey include:

- A lack of entrepreneurial talent due to the very "new" nature of most private sector activities in Bhutan;
- Bhutan is remote and landlocked;
- Bhutan has an extremely small domestic market of only around 750,000 (although this is compensated for by preferential access to the significantly larger Indian market of over 1 billion people);
- A lack of skilled Bhutanese workers and a seeming unwillingness of Bhutanese workers to undertake menial or unskilled work (although, again, this is more than compensated by a plentiful supply of low-cost skilled and unskilled Indian workers);
- Bhutan's financial system is rudimentary and noncompetitive. It only offers very basic financial products and at a fairly high cost;
- Transportation, particularly in the more remote central and northern parts of the country, poses a considerable cost disadvantage to undertaking many business activities. Road transport is slow and regularly disrupted by monsoons and associated landslides, while air transport is erratic and costly;
- Links with outside markets have been extremely limited due to a concentration of trading relationships with India (with exports of electricity – the main export – dominated by government-to-government deals) and the almost total absence of foreign direct investment (as a conscious policy of government).

Ameliorating the impact of many of these problems will prove difficult – Bhutan, for example, will always remain landlocked. However, action with respect to the financial sector, a gradual improvement in the transport infrastructure, a gradual increase in the skill levels of Bhutanese workers, and an increasing emphasis on external linkages through more diversified trade and increased FDI, are all policy choices that are under the control of the Government. While action may prove costly or complex, action is, nonetheless, possible.

Sector Specific Conclusions – Agroprocessing, Wood-Based Industry, Tourism, and Information Technology

Agroprocessing. Agriculture contributes about 35 percent to gross domestic product (GDP), and 85 percent of the population depends on some form of agricultural production. However, only 3 percent of output is processed for commercial use – mainly fruit and vegetables. The agroprocessing industry is dominated by 104 small firms. There are only three large companies that export over 65 percent of their production. More than 90 percent of the industry (excluding alcoholic beverages) is fruit processing and worth some US$3.0 million. With respect to domestic demand, imported produce is increasing as urban populations grow and tastes move to higher-value products.

Raw materials are uncompetitive because of poor land utilization, low crop yields, low productivity, and high transportation costs. Downstream value-adding is adversely affected by an absence of scale, old technology, bad packaging, a lack of branding, and costly freight.

Management is insufficiently qualified or experienced to offset these higher costs by innovation and marketing. Agroprocessing firms mainly depend on Indian labor, which they feel is more skilled than Bhutanese (although the most non-national-dependent firms are the least profitable). Some 90 percent of the agroprocessing work force around Phuentsholing is Indian.

Processed foods are the fastest growing component in world agri-food trade – comprising 75 percent of trade in 1996 (and worth US$384 billion). If Bhutan could overcome impediments to growth, it has potential in two areas:

- First, in low-volume, high-value products selling into niche markets based on comparative advantages such as the range of microclimates, biodiversity, and organic production. Products in this area could include essential oils, traditional medicines, mushrooms, and incense.
- Second, larger-scale, foreign-investment businesses in border areas based on the comparative advantages of flexible labor, a stable political environment, and competitive infrastructure, predominantly using imported raw materials.

To exploit this potential, firms will need access to competitive, consistent, and high-quality raw materials in a timely manner; supportive policies on transport, labor, and investment; an innovative approach to products, processes, packaging, and product positioning; and improved productivity through better management, improved processes, and enhanced labor skills.

Wood-Based Industry. Forestry contributes some 11 percent to GDP and generates over 25,000 informal- and formal-sector jobs. But wood-based industries, including some 120 sawmills, furniture workshops, and board manufacturers, employ no more than 2,000 individuals. Low productivity in firms stems from inadequately qualified and experienced management, low technology levels, and unskilled labor. There are no economies of scale in the sector, and firms make a diverse range of products for "walk-in" clients. The government, which buys up to 60 percent of the sector's output, drives down quality and margins. Two recent government policies have influenced the sector – a 1999 a ban on the export of logs encouraged firms to move downstream to add value. In mid-2000, a further extension of the export ban, which covers the export of semi-finished products, was put in place. In addition, firms are required to buy timber in "mixed-species" lots from Forestry Development Corporation (FDC) auctions, which means that they cannot get the type and quality of the wood they need.

The sector has potential to serve regional markets, particularly Bangladesh, in specialist categories not adequately served by local producers or the increasing volume of imports from Southeast Asia and Europe. Some niche markets in third-countries could be penetrated with easily transported, low-volume, high-value products. To realize this potential, however, firms must be allowed to access single-species timber in appropriate sizes and quality; the ban on semi-finished products must be relaxed so that firms can gain experience and gradually move downstream; productivity must be raised through improved management, the use of appropriate equipment, and properly trained labor; and market awareness and marketing skills must be increased. In the medium term, as a selling point for Bhutanese wood products, it will be desirable to ensure that Bhutanese forests are certified as being sustainably managed.

Tourism. Tourism has grown by 4 to 36 percent each year for the last decade. Bhutan had a record year in 2000 with 7,559 arrivals by air and 13,000 by road, providing over US$10.5 million in direct foreign exchange earnings. Hotels employ some 1,400 persons, and there are about 75 (mostly small) tour operators. The market is highly seasonal, with average hotel occupancy under 20 percent and low repeat tourism. Two Singaporean-based joint ventures have recently been approved and are likely to influence the development of the industry. A key policy issue for

tourism is the pricing policy, which requires tourists pay up to US$200 per day ahead of their holiday (and US$165 in the lean season). Of this, the government collects US$65 (US$63/lean) as a royalty. Better calibration of these rates – particularly the government royalty – in non-peak seasons could encourage a more steady stream of tourists into Bhutan throughout the year.

Tourism marketing is weak – the private sector lacks resources and the government plays a passive role – and the country is concerned about balancing income generation and maintenance of cultural identity. Holidays in Bhutan are comparatively expensive, but good service is not provided. Service is usually friendly in hotels, but it is of poor quality and amenities are lacking. This is, in part, because tourists must pay before arrival. Once they enter Bhutan, they have little choice, so competition is lacking to drive up standards. The range of tourism products available to tourists is limited, though some improvements have recently been introduced. Access to Bhutan – particularly air access – is inadequate and problems are exacerbated by seasonality.

Tourism has considerable growth potential because of its comparative advantages and the problems in other potential destinations in the region. This potential can be realized if an unambiguous strategy with appropriate policy and regulations is developed; pricing policy is adjusted (particularly lean-season pricing); government and firms are more proactive in marketing; access to Bhutan is improved; seasonality problems are addressed; new products are developed; and standards of accommodation and service are improved.

Information Technology (IT). IT can impact on the economy in two ways: it can be used as a business tool in firms or produced as a tradable service. Computers are underused in the private sector. Almost no firms have local area networks; only 15 percent have Web sites. While 62 percent of firms have e-mail, fax, and telephone dominate communications. An Internet service provider (ISP) was started two years ago; although lease lines are available, few companies use them. Impediments to development include comparatively high connectivity charges; a lack of IT professionals (most must be sourced in India); undeveloped regulatory and financial systems (online banking business, for example, is not possible); and comparatively high labor costs.

Opportunities being targeted in other developing countries include small niche firms selling services such as software development, and larger firms selling data entry or operating call centers. However, in Bhutan, the sector is still in its infancy and several challenges must be overcome before Bhutan can deliver internationally competitive services. These include increasing use of IT as a business tool within the public and the private sectors; developing skilled IT professionals; introducing appropriate regulations, (for example, to permit online business); establishing an environment in which services to the IT sector can develop; and improving the infrastructure by adding data networking infrastructure.

The Private Sector Survey – Biggest Business Constraints of the Private Sector

The private sector survey was conducted for several reasons. The main emphasis was to collect better information on the private sector and its perceived constraints – to help formulate private-sector policy for the Ninth Five-Year Plan. The survey covered ten main areas with respect to the private sector including: entrepreneurship, firm data; labor market issues; training; financial markets and contractual relations; technology; infrastructure; trade and exports; investor confidence; and business support services.

The concluding part of the survey requested firms to identify their three biggest business problems and to rank them in order of relative importance. The results from the 100 surveyed firms is shown in the table titled "Three Biggest Business Problems," below. The survey data indicate clearly and

consistently that the main problems faced by private sector firms in Bhutan relate to labor issues – and most importantly – the issue of skilled labor. Of all firms surveyed, 20 percent listed "skilled labor" as their "number one" constraint; many other firms listed it within their top three constraints to doing business.

After skilled labor problems, the next most important constraint identified was bureaucratic burdens and other regulatory concerns imposed by the government. This attribute encompasses a broad range of concerns including labor policy (a major concern), tax policy, access to land, and so on. This was an interesting result given the general perception that the government is business friendly and supportive of private sector activities.

The other main constraints, in order of importance, included (a) a lack of demand; (b) financial sector problems – including problems of cost and access; and (c) problems with infrastructure. Other concerns were relatively unimportant in comparison to these five main issues, which are covered in greater detail below.

Three Biggest Business Problems

Problems	No. of Times Cited as Number 1 Problem	Weighted
Skilled Labor	20	0.51
Bureaucratic Burden	16	0.38
Lack of Demand	17	0.36
Credit and Finance	16	0.30
Infrastructure	8	0.20
Business Support Services	1	0.06
Import regime	0	0.05
FOREX Regulations	1	0.03

Skilled Labor

By far the most important constraint felt by a majority of private firms was a lack of skilled labor. In addition there were concerns over labor policy and concerns about the future direction of policy on the employment of both skilled and non-skilled, non-national labor.

While progress in educating and skilling Bhutanese workers has been remarkable, the skills and experience required by the private sector are clearly still in short supply. One reason for this is that the government has, up to this point, absorbed the majority of the skilled and educated work force into the civil service. A second reason is that most educated Bhutanese have a strong preference for work in the public over the private sector. This dynamic is now slowly changing as the government absorbs increasingly fewer and fewer school-leavers and graduates. Another missing component within the skill dynamic is "experience" – an attribute not learned in an academic institution.

While it is incumbent upon the private sector to employ skilled and experienced Bhutanese – it is also important to recognize the considerable advantages offered by the country's ready access to a large pool of skilled, experienced, and relatively low-cost workers in India.

The same is true for non-skilled categories of workers. Most companies complained that Bhutanese would not perform the functions – menial tasks, dirty, repetitive and backbreaking work – that non-nationals will undertake on construction sites, road works, and on production lines. They certainly would not perform these tasks at the wages currently paid to non-national workers.

The truth is, however, that the increasing numbers of school-leavers and new graduates entering the work force will have neither the skills and experience to undertake the skilled jobs (at least not initially) nor will they wish to do the unskilled jobs currently carried out by non-nationals. Hence, mandating reductions in the use of non-national labor does not seem to be a productive or cost-effective method of promoting the private sector or of generating employment in the skill areas in which Bhutanese are most likely to be most suited. The challenge rather is to create employment in semi-skilled and skilled areas of economic activity that match the qualifications of the school-leavers – while simultaneously adjusting the school system and vocational training to better match the private sector's skill demands.

As indicated, the objective is to build on Bhutan's strengthens and try to reduce areas of possible weakness. Hence, rather than trying to exclude non-nationals (who confer a considerable advantage in terms of cost effectiveness) the goal should be to increase the productivity of Bhutanese workers through a mixture of management training, worker training, and technology transfers that raise worker productivity and permit Bhutan to compete on a cost- effective basis with foreign firms – initially within the region and later, internationally.

In this respect, training emerged as an area of considerable weakness in the survey. Virtually no firms undertook any serious staff training – despite their complaints over a lack of skills. Within the entire survey, only 3 percent of the employees had received training over the preceding 12-month period. Given the linkages between worker training, work productivity, and firm growth, it is important to ensure that a correct set of incentives are put in place to encourage firms to undertake more training. Such activities could include: more transparent tax regulations on the write-off of training expenses; use of training levies; and the use of matching-grant schemes, and retired executive officers to assist in training.

Bureaucratic Burden – Public Policy and Regulations

A surprising 26 percent of firms felt that the government was unpredictable – with this unpredictability exerting a negative impact on their business operations. A majority of firms (56 percent) feared that the government would make policy changes without consultation – again with negative effects on their businesses. This was an interesting result given the generally benign view that many people hold of the government.

However, the main concerns in this area tended to be about the opaque nature of policy in many areas pertinent to these private-sector firms. For example, many enterprises were confused or ignorant about the tax policy on training expenses, discussed above. In this case, training expenses are reviewed by the tax authorities on a case-by-case basis and are not necessarily limited to 2 percent of total profits (as was assumed by many companies). However, the application of case-by-case analysis, in instances such as this, injects exactly the element of uncertainty into business activity that most good firms dislike.

Indeed, the survey team found many examples of discretionary or ad hoc treatment of important business issues – and a lack of transparent guidance on matters of considerable importance to firms.

This situation is not surprising given the small size and short history of the private sector in Bhutan. Business activities have traditionally grown up based on personal relationships and ad hoc arrangements and, to date, this has not served Bhutan poorly. However, as the private sector grows and as business becomes increasingly more complex, it is extremely important that business policies and regulations become more systematized and clear. Precise policies on, for example, the employment of non-nationals, tax treatment of deductible expenses, business licensing policy in

Phuentsholing, tax auditing of companies, and a range of other issues were all considered to be unclear to many members of the private sector. Leaving these policies opaque creates room for rent-seeking practices to creep into an otherwise clean and well-managed system of governance. Addressing these issues now, ensures that these potential problems do not fester and also imposes order and discipline on private-sector activities. Indeed, the government is very aware of these issues and has already made considerable progress in formulating a body of law, which clarifies legal rights and obligations.

Non-consultative changes in policy can also have a pernicious effect on the private sector – as in the case of the ban on log exports followed by the ban on semi-finished wood products in 1999 and 2000, respectively. Companies that invested in semi-finished processing after the log ban was imposed were severely penalized by the sudden imposition of the later ban on semi-finished products.

It also needs to be emphasized that a lack of clarity and systematization is not only a problem for the public sector. It is also rampant in the private sector. A lack of good information systems – particularly robust and believable financial data – opens the same doors to corruption and other bad business practices. A systematic approach to auditing and accounting not only clarifies the true financial position of companies for the tax authorities, but it should also serve as a useful management tool to guide the operations of private-sector firms.

Technology (Lack of Demand)

The third concern, lack of demand, presents somewhat of an anomaly. Demand in Bhutan is clearly not a constraint for an efficient and well-run business. Domestic demand is increasing rapidly as national income continues to rise – and regional demand for most products from India is well beyond Bhutan's production capacity. When most companies complain of a lack of demand, they are often referring to a *lack of demand – at the price and quality offered by domestic producers.* In other words, these companies are not cost competitive compared with imports or other domestic producers.

Being able to produce goods competitively will depend, to a large degree, on a firm's ability to access technologies that will enable it to undertake its business in a cost effective manner. Technology – broadly defined – falls into three main categories: (a) management capability; (b) equipment and processes used; and (c) marketing and design.

Unfortunately, management capabilities in most firms in Bhutan are weak – most managers are technically unqualified and inexperienced. About half of all managers come from a civil service background, and only a very small share of the total (less than 13 percent) had any work experience with a foreign firm (and those, mainly in India). As a result, management practices are weak. Managers frequently do not know what skills to employ to support their business activities, they do not value worker training, and they are often unfamiliar with best practices and relevant technologies required for their operations.

Equipment and processes used are also weak. Most companies operate with outdated and ineffective equipment from India. Often the equipment was dated even by Indian standards. Yet, if firms are to become competitive and grow, they need to be able to plug into international best-practice equipment technologies. This probably implies that these firms will need to leapfrog the simpler and "easier" technologies, which are currently available from India and are mainly used in Bhutan.

Marketing and design technologies are also poor as a result of infrequent contacts with external buyers and markets. The capacity of Bhutan to enter into small, profitable niche markets in agroprocessing (wasabi, essential oils, shitake mushrooms, medicinal herbs), wood products (furniture, artifacts, etc.), and even tourism will depend crucially upon the ability to design products to meet a specific external demand (for example, in Europe or North America) and to package produce in a sufficiently attractive manner for sale.

Finding and absorbing technology is an expensive and difficult task and the mechanisms that help firms do this are not well developed in Bhutan. There are no networks of suppliers or international buyers regularly visiting Bhutan to teach firms about new technologies. There are few consultants or technical experts and Bhutan's isolation makes it difficult to find them. Even foreign direct investment (FDI) – which is one of the most powerful ways of transferring technology – is almost completely absent in Bhutan. Strengthening and supporting learning mechanisms – through activities such as matching-grants schemes, providing easier visa arrangements for technical experts, providing tax incentives for technical improvements, and most critically, liberalizing FDI – is therefore extremely important. These activities will help firms improve their technological base, raise productivity, and become more competitive.

Finance

Finance sector issues are to be covered extensively by the Asian Development Bank (AsDB) in their 2002 financial sector study. Recommendations from AsDB's report should be reviewed carefully for possible speedy implementation. Firms in Bhutan complained about many aspects of the financial system – and many of their concerns appear valid. Prevalent among these was the high and inflexible cost of finance. With real interest rates of between 7 to 10 percent, the cost of capital is exceedingly high in Bhutan. This has serious implications for any policy that seeks to promote increased capital intensity and mechanization in production processes.

Another interesting feature of the financial sector was the large number of companies that were credit constrained (around 42 percent of the total sample). Although this was partly a result of a lack of financial sophistication among firms which did not wish to carry any debt – it is also a reflection of a lack of sophistication of the banking system which, despite access to large amounts of liquid resources, did not (or could not) reach out to private-sector enterprises to help them develop bankable projects.

The team noted serious problems arising from a lack of financial sector competition. This was reflected in the high and inflexible interest-rate structure; the lack of any sophistication in providing innovative financial products (leasing, venture capital, factoring, credit cards, ATM machines, etc.); and a weak payments system, which is almost exclusively paper based and which takes several weeks to clear funds transfers between branches of the same bank in different towns. Payments are also negatively affected by a lack of ATMs and use of credit cards – and hence, a more general use of electronic funds transfers.

Infrastructure

While firms were mostly complimentary about Bhutan's instrastructural base, the one big exception to this was road and air transport. Poor roads, which are slow and frequently cut off by land slides, make transport costly and unreliable. In the case of some timber products, the cost of transporting the timber is more than the value of the wood itself. High costs and poor reliability mean that it is almost impossible to efficiently produce goods that have a high transport content – except in the

border areas of Bhutan. This also means that goods produced in central Bhutan, if they have a high transport-cost component, are unlikely to be cost competitive.

The high altitudes in the Himalayas dictates that only certain aircraft types can be used. These factors tend to make air transport costly and unreliable. One company complained that raw materials take three days to travel from the United States to Bangkok – but then take an additional month to get from Bangkok to Paro. This severely impacts the competitive position of companies producing niche, time-sensitive goods from Bhutan. Shitake mushrooms, which should be in Tokyo markets within 48 hours of being picked, are a good example of how an unreliable transportation infrastructure can effectively destroy a potentially important market.

A Vision of Private Sector Development

Given the constraints and concerns of the private sector in Bhutan, the report recommends a dual-track development plan:

- . Along the border areas – where labor costs are lower (even Bhutanese labor costs are 13 percent lower in Phuentsholing than in Thimphu) and transport costs and reliability are not such pressing constraints – firms can take advantage of the low electricity prices, lower labor costs, ease of access to Indian markets (for raw materials and finished products), and lack of industrial relations problems to produce more cost effectively than equivalent markets across the border. This would permit the development of heavier industry with a high raw-material input as well as a high labor component.

- In central Bhutan, high labor costs as well as higher transport costs make the development of such industries uneconomic. Instead, these areas should focus on providing services to the heavier industrial belt along the southern border (increasingly providing accounting services, IT services, management, and financial services); providing other services such as tourism, construction and transport; and developing niche markets in specialized fields (mushrooms, essential oils, Himalayan medicines, handicrafts, furniture).

Developing such a dual-track approach to private-sector development, however, presumes that the government will also be able to deal with issues related to skilled workers, government regulations and bureaucracy; to promote greater technology transfer into Bhutan; to address constraints imposed by the financial sector; and to gradually seek alternative methods of addressing the restrictions and higher costs imposed by the transport infrastructure.

Main Recommendations

In conclusion, the main recommendations in support of private sector development for the Ninth Five-Year Development Plan (NFYDP), as proposed by the Private Sector Survey include:

- **TRAINING.** Establishment of a transparent system of tax relief and possibly a system of industry levies to support radically increased worker and management training – in an effort to increase overall productivity.

- **LABOR.** Develop a transparent, time-bound, policy for the recruitment of non-national workers with an eye to ensuring the ongoing cost competitiveness of Bhutanese industry.

- **FINANCE.** Encourage the development of innovative financial instruments and payment modalities – based upon the AsDB study – including, *inter alia,* ATM machines, greater

use of lower-cost credit card transactions, introduction of leasing finance, extension of factoring services. Simultaneously make every effort to encourage greater financial-sector competition and greater interest-rate sensitivity.

- **TECHNOLOGY.** Support technology transfer mechanisms to enhance the private sector through, *inter alia,* the immediate establishment of a Matching-Grants System, use of retired executive schemes, etc. Incentivize technology transfer through the establishment of, for example, tax breaks on research and development.

- **FOREIGN DIRECT INVESTMENT.** Ensure that the new FDI Law is finalized and approved in the next session of the Assembly and that supporting regulations are put in place shortly thereafter. Actively encourage potentially high-impact FDI ventures in an early phase of implementation.

- **EXPORT INCENTIVES.** Immediately implement a system of duty drawback on imported raw materials used in the production of export products (including exports to India) and immediately begin a dialogue with the banks on the provision of pre-shipment and post-shipment finance to the private sector.

- **POLICY ENVIRONMENT.** Develop a clear, consistent, and transparent policy environment for the private sector, within the context of the NFYDP, which takes into account private sector views. Ensure proper and clear systematization, codification, and regulation of private sector strategy, laws and regulations.

- **AUDITING AND ACCOUNTING.** Increasingly include a wider group of private sector companies in the auditing net to encourage the greater use of financial management information as a tool of management information systems (MIS) for firms – as well as to assist the tax authorities.

- **INDUSTRIAL ESTATES AND DRY PORTS.** Further support private sector development through the establishment of strategically located (for the private sector) industrial estates as well as dry ports at strategic border locations.

- **DIALOGUE.** Immediately put in place support mechanisms for private sector industry interests such as the Bhutan Chamber of Commerce and Industry as well as sector associations – by bringing in experienced professionals from external chambers and the private sector.

CHAPTER ONE
INTRODUCTION

Objective of the Study. Two of the seven major development challenges of the Royal Government of Bhutan identified for the Donors Development Forum, held in Thimphu in November 2000, were private sector development and employment generation. Given the fact that the public sector is unlikely to expand further in the foreseeable future, these issues become two sides of the same coin. Future employment generation in Bhutan can only come from the further growth of the private sector.

These developmental priorities are being translated into effective support activities in the Ninth Five-Year Development Plan (NFYDP) – which covers the period July 2002 to June 2007. The principal objectives of this report and associated survey work, therefore, are to assist the Government in developing an improved information base on the private sector and to thereby assist it in formulating its strategy for private sector support over the period of the NFYDP.

The Survey. Given a general lack of knowledge and understanding of the private sector, the Royal Government of Bhutan requested the Ministry of Trade and Industry (MTI), the Bhutan Chamber of Commerce and Industry (BCCI), and the World Bank to operate on a tripartite basis to undertake a survey of the private sector. Support was also provided by the United Nations Development Program (UNDP). The survey was conducted over a three-week period from September 18 to October 8, 2001, and covered five major industrial areas – Thimphu, Paro, Phuentsholing, Samtse, and Gomtu. Surveys were not conducted in the central and eastern regions of Bhutan due to security and cost considerations – although it is hoped that the work of the Dutch NGO, SNV in surveying smaller enterprises in these regions may augment the findings of this survey.

The survey aimed to cover 100 firms – and ultimately 98 firms were interviewed, including pre-testing of the survey instrument, which took place in July 2001. The basis for the survey was registered companies operating in the Thimphu-Phuentsholing corridor. Emphasis was placed on the 124 registered companies (registered under the Companies Act) rather than the 6,000 to 7,000 licensed firms (licensed by the Ministry of Industry) as the former group were larger entities and were required, by law, to have audited financial statements – an important component of the survey work. Of the 124 registered companies currently operating in Bhutan, over 80 percent operate in the five surveyed towns (see Annex One).

The list of registered companies was dominated by construction companies and tourism operators. With this in mind, not all companies in these two sectors, in the surveyed towns, were included in the sample frame, and some of these were replaced with smaller licensed firms operating in the wood sector, the agroprocessing sector, and the information technology sector (IT). This adjustment was made to meet the government's desire to focus the study on the four sub-sectors: (a) tourism; (b) information technology; (c) wood products; and (d) agroprocessing.

The survey instrument covered ten main areas of interest to the private sector, including: entrepreneurship, firm data; labor-market issues; training; financial markets and contractual relations; technology; infrastructure; trade and exports; investor confidence; and business support services. The survey was pretested on 12 companies in Thimphu and subsequently modified in July 2001.

The survey was conducted by four three-member teams, comprising a team leader with a specialization in each of the four subsectors designated by the government for in-depth review (tourism, IT, wood, and agroprocessing), a qualified chartered accountant, and a representative from either the Ministry of Trade and Industry (MTI) or the Bhutan Chamber of Commerce and Industry (BCCI).

Profile of the Companies Surveyed. The following tables provide a profile of the companies surveyed. As indicated in Table 1.1, the majority of firms were very small. The largest private sector firm in the country only employs 532 people. Of the total surveyed firms, 46 percent had less than 10 workers, which is generally classified as micro-enterprise. Consequently, although the survey had purposely set out to cover the larger firms operating in Bhutan, in reality a large number of small, medium, and even micro-firms were actually covered. This reflects the small, nascent nature of the private sector in Bhutan – and a lack of larger-scale enterprises outside of the public sector. Tables 1.2, 1.3, and 1.4 provide additional background information of the survey group by sector, size, location, employment growth, and share of non-national labor.

Geographic Spread of Private Sector Activities. Outside of agricultural production, most private sector activity occurs in the Thimphu/Paro-Phuentsholing corridor. Indeed, around 80 percent of registered companies are located in this area. Given this large concentration of formal businesses, the survey focused exclusively on this region – for cost efficiency reasons as well as logistical reasons (reaching central and eastern Bhutan generally involves many days of car travel). As a result the survey work does not capture potential regional peculiarities that may exist in these other regions. In time, and in the context of future private sector survey work, it will be necessary to also incorporate the views of these regions. While the present concentration of non-agricultural private sector activity is mostly in the west – for reasons related to broader regional development, rural-urban migration, and so on, it may well become increasingly important to ensure that there is a more balanced development of private sector activities throughout Bhutan.

The Views are Those of the Private Sector. Last, by its very nature, a survey of this type covers the views, perceptions, and concerns of the private sector. In all countries, the private sector will have views which differ from that of the government. While the Ministry of Trade and Industry was involved in the data and information gathering exercise, this report basically covers the concerns and views of Bhutan's private sector – which need to be balanced against the views and aspirations of the Royal Government of Bhutan.

Table 1.1: Size of Firms Surveyed

Size Category	Number
Micro (10 workers or less)	45
Small (11 to 50 workers)	26
Medium (51 to 200 workers)	19
Large (201 to 500 workers)	7
Very Large (greater than 501 workers)	1

The survey includes one foreign-owned firm with 20 percent foreign ownership, ten firms had some government ownership, six were 100 percent owned, and the others ranged from 6 to 80 percent.

Table 1.2: Firms Interviewed, by Sector, Size, and Location

Sector	Observations			Number of Workers		
	Total	Thimphu	Phuentsholing	Mean	Median	High/Low
Cement	10	3	7	103	21	532/5
Chemical	5	0	5	145	157	286/10
Construction	4	4	0	54	45	120/6
Food	14	4	10	101	17	364/5
Handicrafts	4	4	0	24	32	60/12
IT	11	8	3	13	9	40/4
Metal	4	1	3	40	19	118/3
Other	1	1	0	43	43	43
Textile	2	0	2	31	38	60/16
Tourism	17	13	4	30	15	150/5
Transport	9	4	5	45	21	190/4
Wood	17	8	9	62	23	373/8
Total	98	50	48	54	20	532/3

Table 1.3: Mean and Median Annual Employment Growth Rates by Sector and Group

	Number	Mean Growth Rate	Med. Growth Rate
Cement	8	.026	-.003
Chemical	5	.043	.019
Construction	3	.130	.110
Food	13	.052	.083
Handicrafts	3	.160	.230
IT	11	.083	.069
Metal	4	.027	.034
Other	1	.182	.182
Textile	2	.023	.024
Tourism	16	.079	.067
Transport	8	.088	.084
Wood	8	.056	.009
Manufacturing	43	.050	.019
Services	39	.089	.077
Total	82	.068	.063

Food = Agricultural processing + Food + Beverages
Cement = All cement, tile, blocks, and other construction material
Chemicals = Plastics and chemicals
Manufacturing = Chemicals, cement, food, handicrafts, metal, textile, and wood
Services = Information technology, construction, transport, tourism, and other

Table 1.4: Employment and Share of Non-National Labor Force, by Location and Group

	Thimphu		Phuentsholing		Sample	
	Services	**Manufacturing**	**Services**	**Manufacturing**	**Services**	**Manufacturing**
Number	30	20	12	36	42	56
Mean Size	34	23	24	100	32	73
Median Size	15	15	19	39	16	23
Mean % of Non-Nationals	13%	15%	57%	59%	32%	44%
Median % of Non-Nationals	3%	0	63%	70%	14%	50%

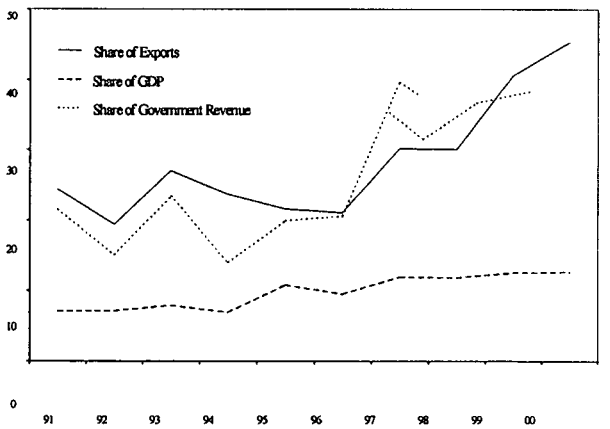
CHAPTER TWO
GROWTH AND STRUCTURE OF THE PRIVATE SECTOR

1. Macroeconomic Overview

A landlocked Himalayan country, Bhutan was largely cut off from the outside world until the 1960s and its dispersed population depended on subsistence agriculture. Once Bhutan opened up, the country embarked on a far-reaching development strategy that has been articulated in eight successive Five-Year Plans. Bhutan's development performance has been impressive and its gross domestic product (GDP) growth rate has averaged over 6 percent a year since 1985. GDP grew by 6 percent in 2000/01, and in 2000, Bhutan's per capita gross net income (GNI) was US$550.[1] Although agriculture continues to account for the largest share of GDP (36 percent in 1998) – Bhutan's rapid growth has been resource led. Hydropower (11 percent of GDP) and foreign aid (23 percent of GDP) are prominent features in Bhutan's small economy (2000 GDP of US$441 million).

Growth has been driven by the 336 mega watt (MW) Chukha hydropower project, which has boosted GDP growth directly through power exports to India and facilitated energy- intensive industries such as cement, ferro-alloys, and calcium carbide. The economy is increasingly dominated by the hydropower sector (Chart 1), and the construction of new power projects has led to double-digit growth in the construction and transport sectors. Generating capacity is set to triple from 2006 with the commissioning of the Tala project but will still only reach about 10 percent of Bhutan's potential (Box 2.2).[2]

Chart 1 Bhutan: Power Sector, 1991-2000



The Bhutanese economy is closely linked with its significantly larger neighbor, India. The country enjoys a tariff-free trade agreement with India that dates back to 1949.[3] More than 80 percent of Bhutan's trade flows are with India (over 90 percent of exports and 70 percent of imports), which is Bhutan's largest foreign donor and source of expatriate labor. India has financed Bhutan's major hydropower projects and some of its large industrial investments. There are no restrictions on trade and payments between the two countries. Bhutan's free access to the vast Indian market and almost unlimited demand for Bhutan's hydropower from India have boosted Bhutan's exports. The ngultrum is pegged at parity to the Indian rupee, which circulates freely within Bhutan. These links limit independence of monetary policy, and interest rates in Bhutan closely follow those in India.

In recent years, Bhutan has received approximately US$80 million per annum in disbursements of concessional assistance. Of this 85 percent is in the form of grant aid with external borrowings limited by the government's policy of using grants in the first instance. The highly favorable terms of its aid, combined with efficient, cost effective, and transparent use, has enabled Bhutan to limit

[1] Bhutan's population in 2000 was estimated at 805,000 – both figures from the World Development Report, 2002.
[2] Although power has a unique and critical place within Bhutan's economy, a review of the power sector is beyond the scope of this report. The sector is dominated by the public sector and is highly capital intensive in nature.
[3] Bhutan also has a preferential trade agreement with Bangladesh (Agreement on Trade) that provides for concessions on a range of negotiated product lines.

its external debt. Its 1998 ratio of debt service to exports was under 7 percent. There are many signs of the impact of these large inflows of resources: a high domestic saving rate (38 percent of GDP), high levels of foreign exchange reserves (around 19 months of import cover), and a high proportion of financial assets in the form of foreign assets.

Fiscal policy has remained prudent.[4] Bhutan has a strong record of public expenditure management. The overall budget – including grants and concessional credits – has always been close to balance. The authorities have historically avoided borrowing to finance recurrent expenditures. Inflation has remained at a moderate rate and was 4.5 percent in 2000/01. The exchange rate has been relatively stable, and Bhutan continues to experience a strong positive balance of payments position. Foreign reserves stand at US$293 million, representing over a year and a half of import cover. The debt-service ratio is estimated at 4.1 percent in 2000-01.

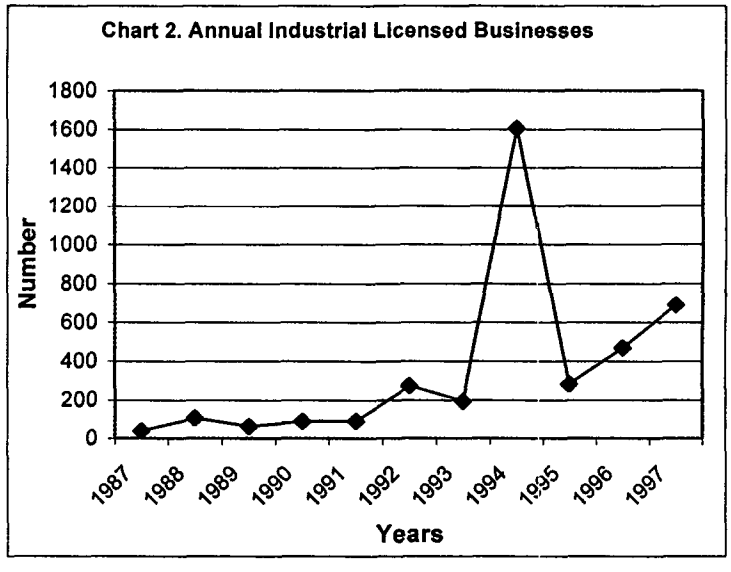
The essential development challenge for Bhutan is to convert its rapid economic growth into effective social transformation, while maintaining it cultural identity and environment, and dealing with an inadequate supply of jobs for the growing, increasingly better-educated labor force. *Bhutan 2020 Vision* firmly identifies "the private sector as the driving force behind employment growth". Given that the private sector is still in an embryonic stage[5] and lacks dynamism, considerable strengthening will need to occur before this vision can be realized. A first step in this process entails developing a better understanding of the private sector in Bhutan and the key issues constraining its growth. A lack of reliable, up-to-date statistics makes this task difficult. Indeed, this is precisely one of the reasons for this private sector survey.

2. Bhutan's Private Sector – An Overview

Based on the limited available information, this section provides a broad overview of the general composition, distribution, and direction of commercial private sector activity in Bhutan.

Growth, Ownership, Size, Type, and Distribution

From the available data covering the period 1987-1997, the trends show that commercial activity – measured in terms of licensed businesses per annum – has grown steadily. Annual growth averaged around 34 percent over the decade with the largest growth recorded in the services sector followed by the contract/construction sector and the production and manufacturing sectors. The extremely high-growth figure recorded in the services sector in 1994 was due to changes in classification that year.



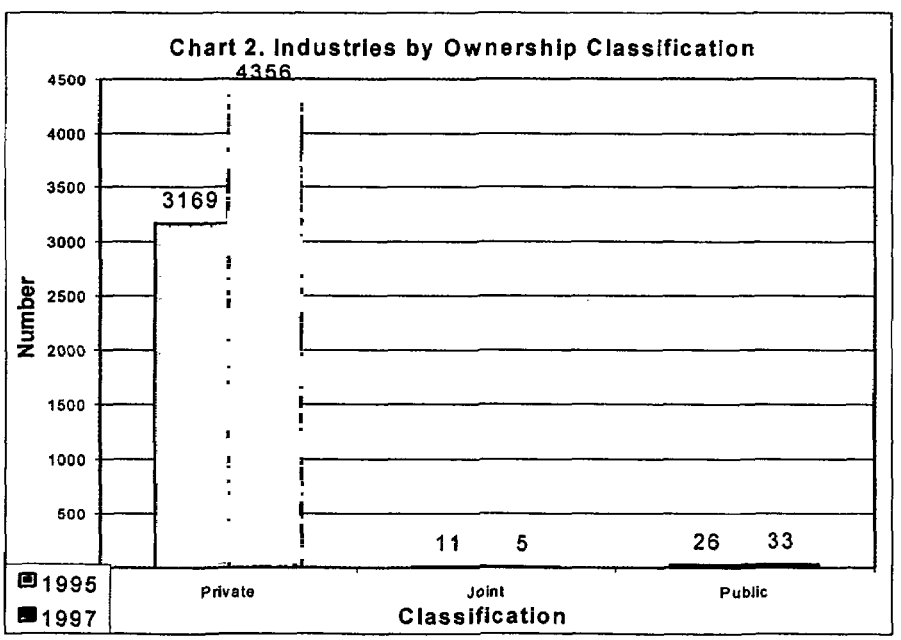
[4] For a full description of Bhutan's Tax Regime, see Annex Two.

[5] One indication underlining the nascent stage of private sector is that the Bhutan Chamber of Commerce and Industry (BCCI) was established with the assistance of the government.

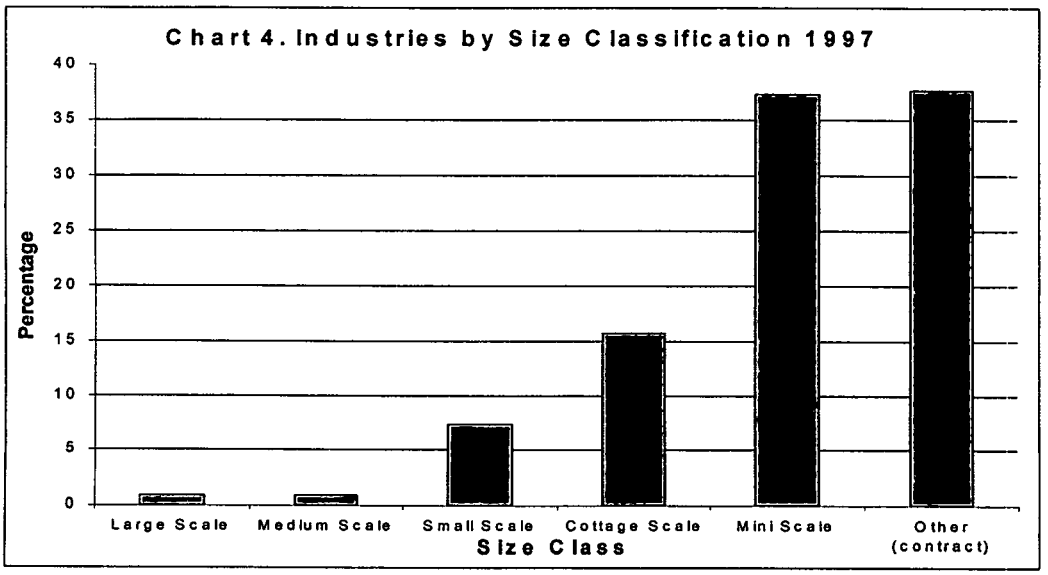
Table 2.1: Bhutan: Annual Licensed Business Establishments by Sector, 1987-1997

Year	Production and Manufacturing	Services	Contract	Total
1987	17	7	13	37
1988	17	12	74	103
1989	8	4	39	61
1990	14	19	54	87
1991	14	23	51	88
1992	37	40	195	272
1993	30	45	118	193
1994	47	1,297	259	1,603
1995	15	140	127	282
1996	36	180	251	467
1997	33	341	315	689
Total	268	2,118	1,496	3,882

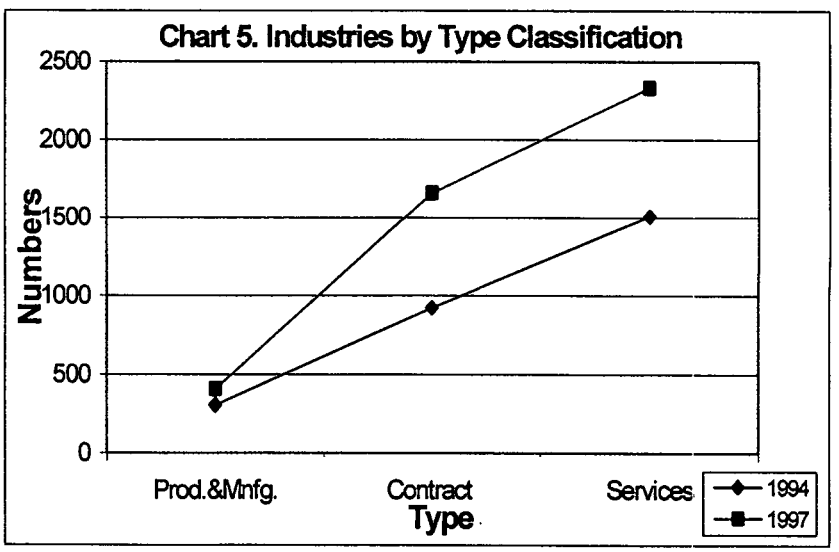
Private development received a major push beginning with the Sixth Five-Year Plan (1987-92) when corporatization of government agencies and divestment of government equity to the private sector began. In terms of number of establishments, the private sector is far bigger than either the public sector or jointly owned establishments – although the public sector continues to dominate in terms of employment. Private ownership in the large public and jointly owned establishments such as the Penden Cement Authority Limited (PCAL), Bhutan Ferro Alloys Limited (BFAL), and Bhutan Board Products Limited (BBPL) (see Box 2.1) has also been growing with the government's privatization program. The government has also privatized bus services and corporatized postal services. There are plans to privatize some agricultural services, to contract out road maintenance, and to encourage private sector participation in education and health. However, the power sector, one of the key sectors in the economy, remains closed to private investment. All hydropower projects are fully government owned and operated. As a consequence, the power sector is not covered in this report, although it could be an important area of future private sector development and exploitation through the privatization process.



In terms of the size of the establishments, Bhutan's economy is dominated by cottage and mini industries. Size of establishments is determined by their capital input: *cottage* Nu 0.5m (US$10,500) or less, *small* Nu0.5 to 5 million (US$105,000), *medium* Nu5 to 20 million (US$420,000), *large* Nu20 million or more. In 1993, the cottage, mini and other categories accounted for around 84 percent of the total by number of establishments. In 1997, this had increased to 91 percent. Large industries accounted for less than **1 percent,** by number. Only two large projects – Cement and Ferro Alloys – were developed in the 1990s.



As to the major classification of business type, in 1994, services made up 56 percent of the total; contract (construction business) 34 percent; and production and manufacturing only 10 percent. In 1997 the composition was 53 percent, 38 percent, 9 percent respectively (Chart 5).



In terms of the geographic distribution of industries, in 1997, there was a concentration of business establishments in Region 1[6] around the capital Thimphu, particularly notable in the Service and Other categories. This is followed by Regions 2, 3, and 4, in descending importance.

[6] Region 1: Thimphu, Haa, Paro, Wangduephodrang, Punakha, and Gasa Region 2: Chhukha, Samtse Region 3: Tsirang, Daga, Sarpang, Zhemgang, Trongsa and Bumthang Region 4: Samdrupjongkhar, Pemagatshel, Trashigang, Tashi Yangtse, Mongar, and Lhuentse.

Box 2.1: Bhutan's Biggest Companies

Chukha Hydro Power Corporation (CHPC) is located in Chukhha Dzongkhag. CHPC was commissioned in 1988. Built with assistance from the government of India (60 percent grant and 40 percent loan), it is the single largest corporation in Bhutan, contributing to 41 percent of the RGoB's domestic revenues in 1999. Its annual sales for 1999 were Nu2,141.65 million (US$47.6 million), 90 percent of which came from exports to India. It is fully government owned.

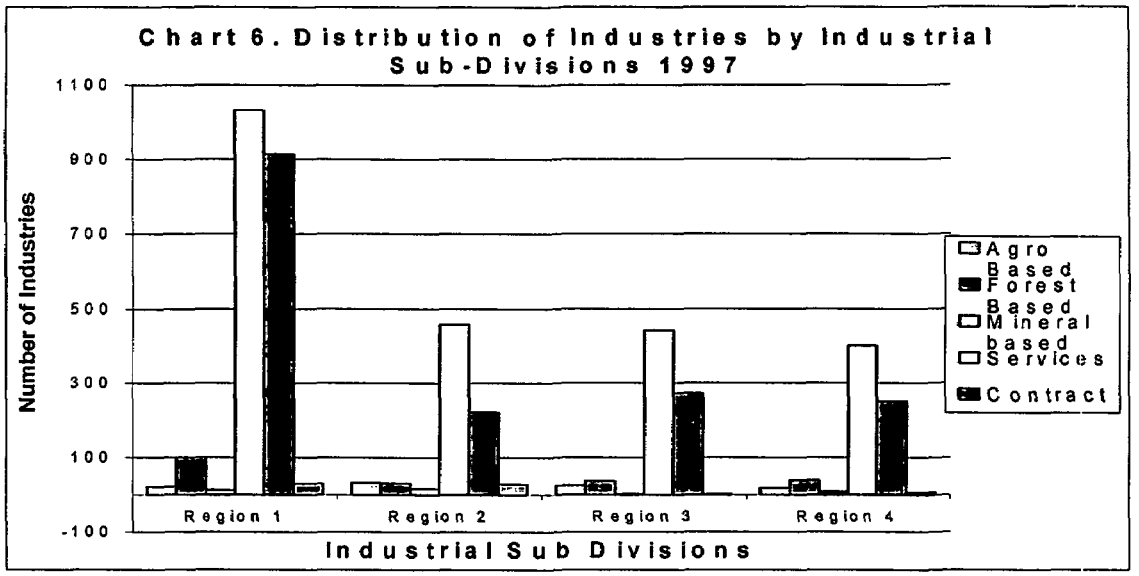
Bhutan Carbide and Chemicals Limited (BCCL). BCCL was established under a joint venture arrangement between the Royal Government and the Tashi Group of Companies in 1984. Although the Government had a 80 percent stake, BCCL was managed by its private promoters. By the end of the Seventh Five-Year Plan (1992-1997), the Royal Government had divested its entire holding in the company. In 1998, BCCL had a market capitalization of Nu375.0 million (US$8.53 million). Its annual sales in the same year were Nu583.6 million (US$13.26 million), almost all from exports to India. BCCL is also one of Bhutan's most profitable companies, declaring dividends of above 100 percent since 1997. It is located in Chukhha Dzongkhag.

Bhutan Board Products Limited (BBPL). BBPL is located in Chukhha Dzongkhag and was established under a joint venture arrangement between the Royal Government and a private promoter in 1983. Initially, the RGoB held 85 percent of the company which was managed by its promoters. Today, the RGoB has a 23.9 percent share in the company. The company had a total market capitalization of Nu107.5 million (US$2.4 million) in 1998. Its total sales in 1998 were Nu383.8 million (US$8.7 million) of which 95 percent was made up of exports to India.

Penden Cement Authority Limited (PCAL). PCAL was established by the RGoB in 1974. Today the RGoB's share in PCAL is 42.7 percent. It had a market capitalization of Nu680.0 million (US$15.5 million) in 1998. In the same year, its total sales were Nu564.7 million (US$12.8 million), of which 81 percent was made up of exports to India. It is located in Samtse Dzongkhag.

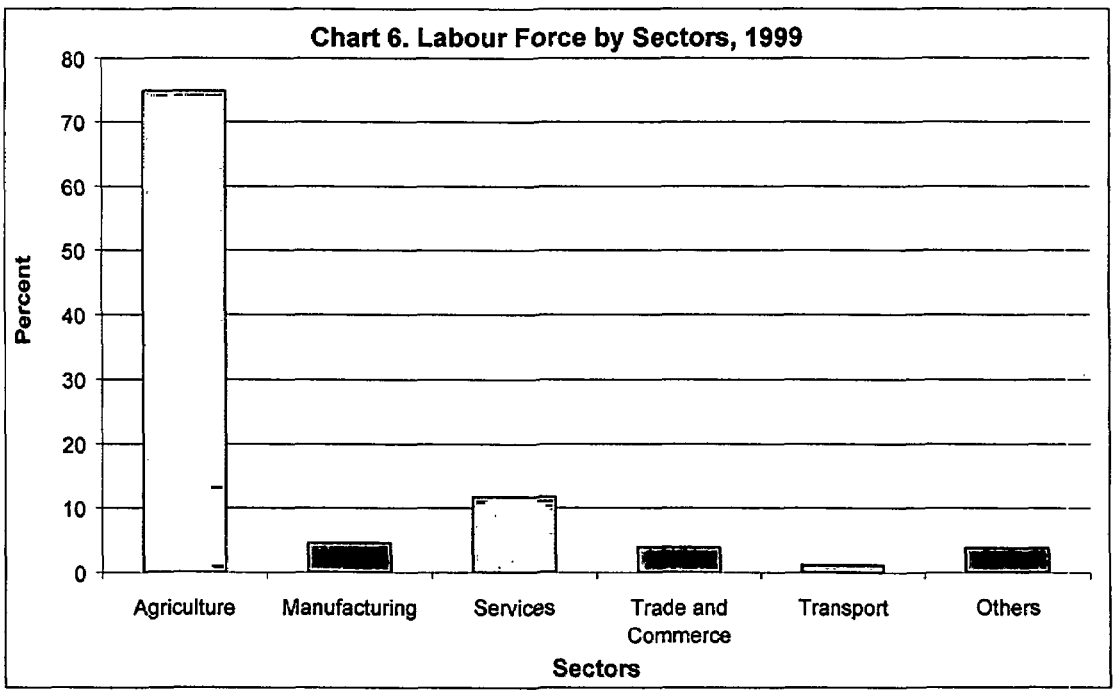
Bhutan Ferro Alloys Limited (BFAL). BFAL was established in 1995. It is one of only three companies currently operating with foreign investment (20 percent Marubeni Japan). The Royal Government has a 25 percent share. It had a market capitalization of Nu180.0 million (US$4.1 million) in 1998. It has been facing problems with landslides and floods caused by the monsoons – particularly in 2000. It is located in Chukhha Dzongkhag.

At the district level, business establishments are mainly concentrated in Thimphu, the capital followed by Chhukha and Samdrupjongkhar. The medium- and large-scale industries are concentrated in Chhukha district whereas cottage industries are concentrated in Thimphu and other districts. Thimphu has the highest number of forest-based, services, contract/construction, and miscellaneous industries, while Chhukha has the highest number of agro-based industries, and Samtse has the highest number of mineral-based industries. The distribution of industries by number of registration conceals the fact that the major industries in Bhutan are mostly located in the Chhukha district – including Bhutan Carbide and Chemicals Limited, the Bhutan Ferro Alloys Limited as well as the Chhukha Hydro Power Corporation.

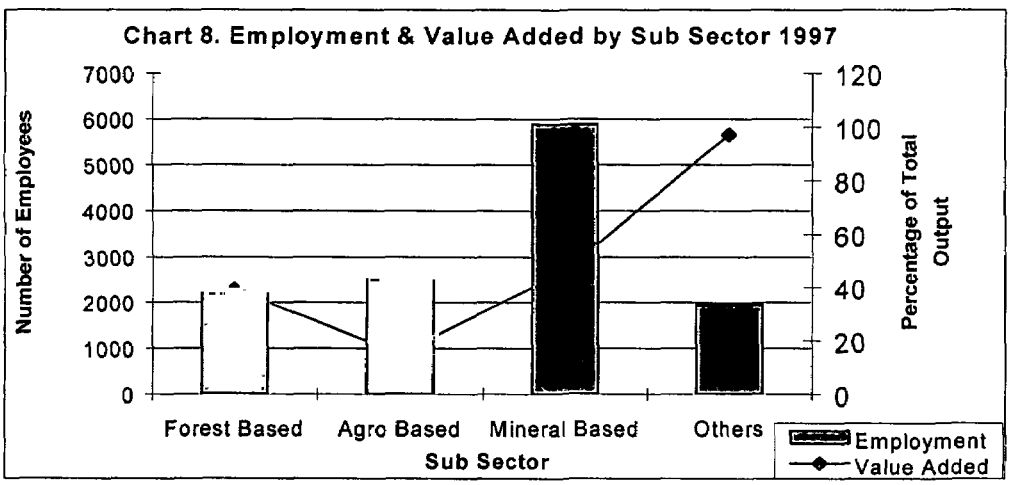


Employment

Data on employment is scarce – and generally of poor quality. However, based on what is available, of the total labor force, agriculture provides employment to 75 percent, the services sector to 12 percent, and manufacturing industry to 5 percent (Labor Force Survey, 1999). Data pertinent to the private sector is limited to the manufacturing and mining industries. (See Chart 6.) In 1997, total registered manufacturing and mining industries operating within Bhutan employed 12,592 persons. Of these, 47 percent were employed in mineral based industries, 20 percent in agro-based, and 18 percent in forest-based industries, and the rest in nonclassified industries. Women accounted for 30 percent of the work force. Excluding the civil service, private companies employed the most workers (41 percent) followed by publicly listed companies (31 percent), public sector companies (15 percent), jointly owned companies (11 percent) – with a residual group



belonging to "semi-government and other" categories, including electricity. Average wages (including bonus and in-kind payment) were highest in the forest-based industries (Nu11,315 or US$257 per month), followed by the other category (Nu10,072 or US$229 per month). The total value of output of the manufacturing and mining industries in 1997 was Nu4,920 million (US$111.8 million), the cost of production Nu2.1 million (US$47,000), and the resulting value-added was Nu2,814 million (US$64.0 million). The highest value-added of 97 percent (as a percentage of total output) was achieved by the 'others' category. These data on employment, however, may not always be accurate and do not always concur with the findings of the survey team in its work.



In 1989, the number of industries employing more than 100 people was 9 percent (15 out of a total of 168 manufacturing and mining industries). In 1997, the number had increased to 10 percent (22 out of a total of 213).[7] Of these 22 industries, 10 employed more than 300 people.

Due to the lack of data on employment provided by the service and contract/construction sectors (the two sectors with the highest growth in registrations), no comparison of employment generation between the major sectors could be made that would provide a meaningful insight into private sector employment in Bhutan.

The Royal Securities Exchange Board and Performance of Listed Companies

Bhutan's stock exchange, the Royal Securities Exchange Board, was established in 1993. A total of 12 companies are listed on the exchange. These are the largest companies in the kingdom outside of wholly government-owned firms. Total market capitalization stood at Nu1.64 billion (US$37.3 million) in December 1998, equivalent to about 10 percent of GDP. The Penden Cement Authority Limited was the largest in terms of market capitalization at Nu680 million (US$15.5 million), followed by the Bhutan Carbide and Chemicals Limited (BCCL) (Nu375 million — US$8.5 million), and Bhutan Ferro Alloys Limited (Nu180 million – or US$4.1 million). In the same year, the Druk Satair Company Limited had the highest return on capital of 53 percent followed by the State Trading Corporation of Bhutan with 48 percent and BCCL with 37 percent. Due to low volume of trading on the stock exchange, market values are not very reliable indicators of a

[7] This is based on the "Report on the National Census of Manufacturing Industries, 1998" CSO, Planning Commission, RGoB. These figures differ significantly from the "Statistical Yearbook of Bhutan 1997," CSO, Planning Commission, RGoB, which lists the total number of licensed manufacturing and mining industries in 1997 as 405.

company's true value, which is often understated. With the exception of four companies, all companies declared dividends ranging from 10 percent (BBPL) to 150 percent (BCCL) in 1998.

3. Financial Sector

Commercial Banks. Bhutan has two commercial banks – the Bank of Bhutan (BoB) and Bhutan National Bank (BNB). Both are publicly owned and there is very little competition between them.

Bank of Bhutan, established in 1968, is the oldest financial institution in the country. With assets of Nu6,613.3 million (about US$150.3 million) in 1999, it is also the largest commercial bank. It is owned by the government (80 percent) and the State Bank of India (20 percent). It has 25 branches and 3 extension centers that cover all the 20 Dzongkhags (districts) of Bhutan.

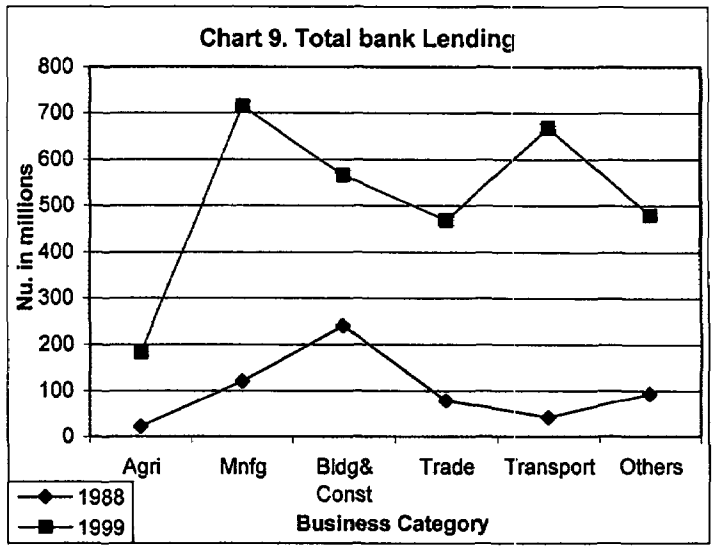
Bhutan National Bank was converted from the Unit Trust of Bhutan in 1997. In 1999 its assets were Nu1,292.2 million (about US$28.7 million). Its largest shareholders are the Royal Government, the Asian Development Bank, and the Citibank – although in 2001, Citibank sold its shares back to the government. It has four branches.

Non-Bank Financial Institutions. There are two non-bank financial institutions in Bhutan -- an insurance company and a development corporation. The Royal Insurance Corporation of Bhutan (RICB) is the only institution offering insurance products and is 41 percent government owned. Total assets were Nu2,077.9 million (US$47.2 million) in 1998, including Nu1,304.4 million (US$29.6 million) of provident funds, which have now been transferred to the newly established National Pension and Provident Fund Bureau (NPPFB). While it enjoys a monopoly in the insurance business, its preoccupation since inception, has been the management, administration, and investment of the Government Employees Provident Fund, a defined-contribution scheme that initially covered only public-sector employees but was later extended to formal private-sector organizations. The RICB also managed the real estate assets of the funds including construction, collection of rents, and maintenance of property. In June 2000, these funds and the accompanying responsibilities were taken over by the newly established National Pension and Provident Fund Bureau (NPPFB). With this change, it is expected that the RICB will focus on its core business of insurance, and a wider range of products and services will be introduced.

The Bhutan Development Finance Corporation (BDFC) is fully government owned. With total assets of Nu614.7 million (US$14.0 million) in 1999, it is Bhutan's smallest financial institution. Its focus is agricultural lending and meeting the microfinance demands of the rural population, although it also lends to small- and medium-scale industries.

Overview of Financial-Sector Lending

Most lending by the financial institutions in June 2000 was in the building and construction sector (20 percent), followed by the transport sector (19.3 percent), the manufacturing sector (19 percent), and trade and commerce (13.8 percent). Only 5.4 percent went to agriculture – 97.8 percent of which came from the Bhutan Development Finance Corporation. Among the financial institutions, the Bank of Bhutan was the largest lender (37 percent of the total)



followed by the Bhutan National Bank (27.6 percent); the Royal Insurance Corporation of Bhutan (21.0 percent); and BDFC (13.4 percent). Growth in bank lending has been slowest to the manufacturing sector, increasing at an annual average rate of only 12 percent per annum over the past ten years.

Bhutan's financial institutions are facing excess liquidity problems, most of which are redeposited in either non-interest-bearing accounts with the Royal Monetary Authority or, increasingly, in high-interest-bearing deposits with commercial banking institutions in India. Excess liquidity appears to be a consequence of a lack of investment opportunities in Bhutan – caused, in part, by a combination of high interest rates (nominal and real), large collateral requirements, conservative lending practices, and limited financial products on offer from the banks. Interest rates were deregulated in 1998 but, even in an environment of high excess liquidity, interest rates did not fall until recently (September 2000) when the Bank of Bhutan lowered its interest rates in all lending categories (except term loans) in the hope of reducing its excess liquidity. At the same time, it also reduced its interest on fixed (time) deposits but left the saving deposit rate unchanged. While the private sector has welcomed this initiative, high excess liquidity is likely to remain, until other areas that inhibit investment have been addressed.

A related issue in Bhutan's financial sector is the government's dominant role. It owns 80 percent of Bank of Bhutan, 27 percent of Bhutan National Bank, 41 percent of the Royal Insurance Corporation of Bhutan, and 90 percent of the Bhutan Development Finance Corporation. There is clearly a need for the government to divest more of its holdings in these institutions and to focus more on banking regulatory issues. Experience elsewhere shows that a high degree of government ownership does not foster competition and growth, and it significantly diminishes and compromises, the effectiveness of the central bank.

In Bhutan, as in other countries with a short banking history, financial intermediation is rudimentary and limited to simple deposit and lending schemes. There is a need to broaden and deepen the financial sector so that it can support broader-based development through the provision of new financial products such as lease financing, venture capital, mortgage financing, factoring services, and so on. The availability of such instruments may help foster investment opportunities that were constrained by their absence and also help to expand borrowing capacity that collateral-based lending tends to depress.

4. Privatization

Beginning in the late 1980s, the Royal Government made a strong commitment to private sector development and privatization. The government embarked on a series of large projects such as BCCL, BBPL, and Gedu Wood Manufacturing Corporation (GWMC) that were beyond the capacity of the private sector. To pave the way for their entry into large scale enterprises, favorable terms – such as management of the company with an investment of only 15-20 percent of the equity – were offered. These companies (except GWMC, which was liquidated) are among the largest and most profitable private enterprises in Bhutan today.

Table 2. Public Ownership in Listed Companies

percentages

Listed Companies	Inception	1994	2000
Bhutan Board Products Ltd.	85.0	24.9	23.9
Bhutan Carbide and Chemicals Ltd.	80.0	0.0	0.0
Bhutan Ferro Alloys Ltd.	25.0	25.0	25.0
Bhutan National Bank	*	67.2	27.0
Bhutan Tourism Corporation Ltd.	*	6.7	6.7
Penden Cement Authority Ltd.	*	60.7	42.7
State Trading Corporation Bhutan	*	51.0	51.0
Royal Insurance Corporation Bhutan**	*	61.0	41.0

Note:
*-data not available
**-As of October 2000 after the RGoB divested 34% of its holdings

The Royal Government also began privatization and

divestment in the 1980s. Since then, the government has divested a significant portion of its holdings in public enterprises[8] (see Table 2) as well as privatizing the road transport and construction sector. It continued to divest its holdings over the Eighth Five-Year Plan, the most recent divestment being the sale of 34 percent of its shares in the Royal Insurance Corporation of Bhutan in October 2000.

The pace of privatization and divestment has largely been dictated by the policy of the government to encourage and promote broad-based participation by Bhutanese shareholders (as a result of which shares are sold at less than prevailing market rates, subject to a maximum ceiling per person and priority for individuals over institutions) and the low absorptive capacity of the private sector.

The government has also started commercializing (corporatizing) selected government agencies such as the postal and telecom services and the forestry logging services, and is in the process of corporatizing the Department of Power. This is seen as a first step towards privatization. While corporatization, with extended autonomy, is expected to result in better performance, there is little evidence to suggest that improved performance will actually take place as most of these organizations are managed and staffed by bureaucrats who, understandably, lack a commercial culture.. Moreover, the majority of these corporatized institutions are monopolies. Competition (foreign and domestic) should be encouraged in these sectors to make them truly commercial.

From a time when the government virtually carried out all nonagricultural economic activity -- today private sector involvement has increased in most sectors in Bhutan. National contractors executed about 36 percent of the road works under the Eighth Five-Year Plan (1997-2002) and private schools are beginning to emerge. Private sector participation is also on the increase in the forestry sector with the Forestry Development Corporation (fully government owned and responsible for logging in the kingdom) subcontracting logging operations to private parties. However, there is still scope for further government disengagement in these areas – particularly in the areas of road construction and logging.

There is no established procedure for privatization in Bhutan except final approval by the cabinet. The main government agencies involved in divestments are the Ministry of Trade and Industry and the Ministry of Finance. There is also no government unit with the sole responsibility for privatization. While this has not caused any particular problems to date, it would be extremely useful to establish a single body responsible for this function. Establishing a unit and a framework for privatization would also increase transparency – which would be highly desirable.

5. Bhutan's Trade Regime

Trade policies have a direct and often dominating impact on economic incentives and resource allocations within the economy. Bhutan has a very small domestic market with a population of around 700,000 with some 85 percent of the population estimated to be dependent on small scale and often close-to-subsistence farming. With such a small market size and with a significant revenue base from the hydro energy sector, there is little reason to impose high taxes on trade to either protect domestic producers or to generate government revenue. Gradual integration into the global trading system is a key government objective to promote economic growth.

---

[8] Table 2 shows public ownership in listed companies only. There are unlisted companies such as the Bank of Bhutan, the largest commercial bank, in which the government share is 80 percent (20 percent is held by the State Bank of India). In this particular instance, public ownership actually increased. In 1972, the government's share was only 60 percent (40 percent with the State Bank of India).

Regional Trade Regimes – India. Bhutan enjoys a tariff-free trade agreement with India (Agreement on Trade and Commerce between the government of the Kingdom of Bhutan and the government of the Republic of India). This is a long-established agreement that dates back to 1949. It provides for trade between the two countries without the application of duties and also provides for transit of goods from Bhutan to and from third countries without the application of Indian tariffs. This is the cornerstone of Bhutan's international trade relations and the government is committed to maintaining and renewing this agreement.

Bangladesh. In addition, Bhutan has a preferential trade agreement with Bangladesh (Agreement on Trade). This provides for concessions on duties on a range of negotiated product lines. Since its signature in 1980, Bhutanese exports to Bangladesh have risen to Nu179 million. The government intends to foster this agreement with Bangladesh through further negotiations.

Other Regional Partners – Thailand. The history of bi-lateral trade agreements in improving market access for exporters in Bhutan has been good and the Ministry of Trade and Industry intends to initiate bi-lateral trade talks with other regional nations such as Thailand.

SAARC. Bhutan has also fully participated in and supported the South Asian Association for Regional Cooperation (SAARC) and, in particular, the negotiations for the SAARC Preferential Trading Arrangement (SAPTA). Bhutan will continue to push for greater liberalization of tariffs within the region and work towards the transition to a South Asian Free Trade Area (SAFTA) by 2002.

World Trade Organization. In order to facilitate Bhutan's integration into the global economy, the government intends to accede to the World Trade Organization (WTO) as a full member. Bhutan was granted observer status to the WTO on 24 April 1998. Subsequently, the RGOB decided to accede to the Multilateral Trading System and submitted its application. The application was discussed in the WTO General Council Meeting held on October 6, 1999 at Geneva. WTO will constitute a Working Party to prepare for Bhutan's membership. The MTI has appointed a WTO liaison officer and established the WTO Reference Center at the Trade Division. MTI anticipates full membership will be achieved during 2002.

6. Foreign Investment

The first foreign investment into Bhutan was the State Bank of India's 40 percent holding in the Bank of Bhutan in 1972. Since then, Bhutan has pursued a conservative and restrictive foreign investment policy. Currently, there is not a single foreign-majority-owned firm in Bhutan, and all foreign investments are approved on a case-by-case basis. FDI has long been a sensitive issue in Bhutan, largely due to concerns over the potentially undesirable impact that FDI may have on Bhutanese traditions and culture. Concerns may also be partly based on the sentiments of a private sector that has enjoyed, and stands to benefit from, such restrictions, as well as a general fear of a large influx of foreign business houses from the region.

At present, foreign investment only exists in Bhutan National Bank (the Asian Development Bank), the Bank of Bhutan (State Bank of India) and Bhutan Ferro Alloys Limited (Marubeni Japan). The State Bank of India has a 20 percent share in the Bank of Bhutan, the Asian Development Bank has a 20 percent share in Bhutan National Bank, and Marubeni Japan has a 20 percent share in Bhutan Ferro Alloys Limited. In 2001, the government, for the first time, allowed two international hotel chains to invest in Bhutan with a majority shareholding. This is considered a major change in Bhutan's approach to FDI.

7. Infrastructure

Compared with other countries in the region, infrastructure generally is not considered a major constraint in Bhutan. The only area within infrastructure that is cause of serious concern is transport. The rugged terrain and topography provide little alternative to road transport, and the narrow and winding roads result in high transportation costs. Road standards are low – although rapidly improving – allowing a maximum tonnage of 8-10 and speeds of up to 40 kms per hour in the hills. The closest port is in Calcutta, about 950 kilometers from Phuentsholing. Druk Air, the only airlines operating in the kingdom, flies to five destinations in four countries within the region but does not have much capacity to handle large quantities of cargo. There are no railways or river transport facilities.

8. Labor and Employment

Labor shortages (skilled and unskilled) are a serious binding constraint for the private sector in Bhutan. This problem is exacerbated by the fact that the growing number of Bhutanese joining the labor force either do not have the necessary skills or experience required for more skilled occupations – or are unwilling to perform the menial work required for unskilled jobs.

Each year Bhutan's educational institutions produce around 4,000 students (see Table 2.3). This is projected to increase to almost 14,000 per annum by 2010. In 2001, of the 4,700 graduating from the school system, around 270 are actual graduates while the remainder are school-leavers. The latter includes some 1,000 who have reached class 12 (finished high school). A large majority of the remainder have only reached class 10 or even less and have only a modicum of schooling.

In the past, most graduates have found jobs in the civil service – generally within a year. Private sector employment still remains a second-best option for most Bhutanese because of perceived job insecurity, lack of social standing, lower perks, and absence of training opportunities. Employment opportunities in the civil service, however, are reaching saturation point. Between 1996 and 1999, the size of the civil service, in terms of graduate officers, increased by only 129 people. In 1999, 30 graduates sat for the civil service, of whom 21 were selected.[9]

As Table 2.3 indicates, over 90,000 school-leavers are expected to come out of the school system over the period, 2000 to 2010 – of which 75,000 will have no tertiary education. Given that current total formal sector employment in Bhutan is thought to be around 60,000 – of which around 35,000 are estimated to be in the private sector – the need to rapidly create new employment opportunities is particularly urgent. With the anticipated continued slow growth in public sector employment, the expectations that faster private sector growth will compensate for this, are indeed, extremely high.

The increasing number of school-leavers represents the most serious employment challenge facing the government. Forty-two percent of the Bhutanese population is below the age of 15.[10] Although the present unemployment rate is low (1.4 percent in 1999), the outlook is bleak with the number of school-leavers expected to increase dramatically to around 50,000[11] (over 80 percent of current formal employment) over the next five years. This presents a real challenge given the current capacity of the Bhutanese private sector and the expectations of Bhutanese workers, especially those who have received some education. Private sector requirements today are mainly for low-skill manual workers and experienced and high-skill workers, while most school-leavers possess

---

[9] Development Toward Gross National Happiness, RGOB, 2000.

[10] CSO Labor Force Survey, 1999.

[11] National Budget for Financial Year 2000-2001 and Report on the 1999-2000 Budget, June 2000.

few skills and are averse to manual work. In addition, youth expectations about income are also not matched by the types of jobs available. These expectations and preferences are based not on skills development but on a sense of social standing derived from the level of education achieved and the degree of literacy attained.

Most businesses are dependent on employment of Indian workers, which is regulated by government. Of the total formal wage employment in Bhutan of around 60,000 – it is estimated that non-nationals (mainly Indian) represent approximately 50 percent.[12] Wages for non-national workers tend to be lower than for Bhutanese workers for all skill classes – although this disparity narrows at higher skill levels.

The main labor dilemma facing the government is the employment of these unskilled Bhutanese school leavers. Dealing with high expectations, developing a blue-collar culture, and increasing the number of tertiary institutes that provide the skills sought by the private sector are some of the measures that the government will need to continue to address. Two recent initiatives include: (i) establishment of the National Technical and Training Authority (NTTA) in 1999. NTTA's main responsibility is to coordinate efforts to develop technical and vocational skills, skills certification to ensure establishment of standards (in close collaboration with the private sector), promotion of traditional arts and crafts, and formulation of necessary frameworks and regulations; (ii) establishment of the National Employment Board (NEB) in 2000 (subsequently converted into the Department of Employment and Labor in the Ministry of Education). It is expected to provide employment exchange services, support employment generation policies and programs, monitor unemployment, formulate necessary rules and regulations for employment, working conditions, and compensation, and take a lead role in the formulation of national human resource policies and plans. In addition, during the Eighth Five-Year Plan, the government supported entrepreneurial skills development for the private sector, both through the Entrepreneurship Development Program (EDP), conducted by the Ministry of Trade and Industry, and through the provision of scholarships and training in various fields such as hotel management, chef training, and so on.

By establishing these institutions, the government has tried to address some of the supply side problems. The real challenge, however, lies in creating jobs in a growing and dynamic private sector. This is all the more critical given the very slow anticipated growth in civil service employment.

[12] RTM Background Document – In addition to this, there are an estimated 10,000-20,000 non-Bhutanese wage workers who receive "day" employment along the border areas, as well as around 1,900 seasonal workers who are employed during the winter months in Southern Bhutan.

Table 2.3: Bhutan: Total Work Force - Graduates and Dropouts, 2000-2010

	2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010		Total Dropouts and Graduates
	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D	
Class Level																							
Class VI	8,714	440	9,012	390	9,881	321	10,887	256	11,800	171	12,688	70	13,961	0	15,175	0	16,639	0	17,702	0	18,709	0	
Class VII	7,999	436	8,783	395	9,243	324	10,156	259	11,117	222	12,064	241	13,092	262	14,176	290	15,747	315	17,260	345	18,399	368	3,426
Class VIII	6,430	363	7,054	325	7,885	284	8,594	219	9,731	196	10,826	217	11,761	235	12,764	256	14,101	282	14,349	307	16,819	337	2,983
Class IX	5,506	284	5,994	255	6,667	224	7,546	185	8,326	167	9,466	190	10,541	211	11,465	230	12,444	249	13,736	275	14,962	299	6,204
Class X	3,366	1,615	5,190	2,387	6,044	2,659	6,838	2,872	7,737	3,094	8,517	3,236	9,655	3,476	10,769	3,661	11,739	3,756	12,746	3,823	14,049	3,934	30,656
Class XI	1,226	18	1,312	17	2,149	21	2,672	27	3,229	32	3,887	39	4,450	45	5,238	52	6,058	61	6,840	68	7,684	77	5,777
Class XII	832	657	1,206	953	1,306	1,032	2,136	1,687	2,655	2,097	3,214	2,539	3,875	3,061	4,444	3,511	5,230	4,132	6,050	4,780	6,832	5,397	34,861
Total VI to XII (Dropouts)		3,813		4,722		4,865		5,505		5,979		6,532		7,290		8,000		8,795		9,598		10,412	75,511
Graduates		270		270		270		299		362		1,447		1,855		2,211		2,526		2,844		3,160	15,514
Total Educated Workforce		4,083		4,992		5,135		5,804		6,341		7,979		9,145		10,211		11,321		12,442		13,572	91,025

E – projected enrollment
D – projected dropout
Degree outside the country is estimated at 125 per annum.

9. Conclusion

Although at present the private sector in Bhutan is small and lacks absorptive power, the government places considerable emphasis on its role as the engine of Bhutan's future growth and – even more importantly – as a growing source of employment opportunities for a rapidly growing number of school leavers. It is expected to be vibrant enough to generate resources to sustain and diversify Bhutan's economy and provide employment for the growing number of entrants into the job market. With a looming problem of unemployment expected to be felt over the current decade, and limited scope for public sector expansion, private sector development is receiving more concerted and closer attention.

To unleash its growth potential, the key constraints to private sector development must be identified and acted upon. This is the main challenge of the Ninth Five-Year Plan. Of all the constraints that the private sector faces – skilled labor shortages – are considered the most binding. The challenge will be to create a better match between the skills that the Bhutanese workers possess and the needs of private sector businesses. In addition, it is important to identify and deal with the other constraints that the private sector must address if it is to grow. The private sector survey addresses these issues. The objective behind this survey is to shed light on the main constraints – entrepreneurship, labor market issues, training, financial markets, contractual relations, technology, infrastructure, trade, investor confidence, and business support. The report also focuses on specific sectors in which Bhutan may well have a comparative advantage – including tourism, information technology, wood products, and agroprocessing – the four sectors where Bhutan feels it has a potential to generate more dynamic employment.

Box 2.2: Bhutan: The Power Sector

Bhutan is endowed with enormous hydropower generation potential. The total capacity is estimated to be about 30,000 MW, of which over 16,000 MW is techno-economically viable. The development of the power sector began in the late 1980s with the commissioning of the Chukha hydropower project (336 MW).

The hydropower generation capacity in Bhutan is expected to increase significantly over the next few years, as new power projects are scheduled for completion. In the 2001 Kurichhu project 45 MW has already been commissioned, and the last unit of 15 MW will be added by the middle of 2002, bringing the total installed capacity from the Kurichhu project to 60 MW. The 24 MW Basochhu Upper Stage project has been completed and was commissioned in November 2001. The Basochhu Lower Stage Project of 40 MW is expected to begin construction in 2002 with a target completion date in early 2005. Bhutan's generating capacity will increase threefold in 2006 with the commissioning of the Tala project (1,020 MW) but only to about one-tenth of the country's technically viable potential.

Looking ahead, the power sector will continue to be the main engine of growth in Bhutan and to be a significant source of government revenue and foreign currency earnings.

The Indian market is huge and currently faces domestic supply difficulties. At present, Bhutan supplies less than 0.5percent of its neighbor's total demand. Internal demand in Bhutan will also rise substantially with progress made on a Rural Electrification Program (supported by a $10.0 million AsDB loan).

The power plants are operated as run-of-the-river schemes and hence sharp contractions in electricity generation during the dry season are prevalent. The projects are considered to be environmentally benign.

Nevertheless, the power sector in Bhutan faces challenges in the future. First, development of future projects is dependent on accessing adequate financing. A major source of funding is likely be India and the fiscal situation there may prove to be a constraint. Second, and more importantly, the Bhutanese authorities must find a way to promote domestic employment through the promotion of power intensive industries. Since local contractor skills are limited, the major works in the construction of power projects tend to use expatriate engineering firms. Despite this shortcoming, a large number of Bhutanese contractors are used in the construction of houses, access roads, and transportation and hence the power projects have provided good domestic employment.

Box 2.3: Bhutan: Five-Year Development Plans

Beginning in the early 1960s, successive five-year plans have provided the basic framework for development planning in Bhutan. The authorities recently conducted a mid-term review of the Eighth Plan (1997/98-2001/02) and established guidelines for preparation of the Ninth Plan (2002/03-2007/08).

A. Mid-term Review of the Eighth Five-Year Plan

The Eighth Plan aimed for sustainable growth and improved living standards while ensuring the preservation of Bhutan's environment and cultural heritage. The review found that Plan objectives had been met in the following areas:

Macroeconomic performance had been satisfactory with the hydropower projects contributing significantly to economic growth. Fiscal performances had been solid with domestic revenue increased by improved tax collection and a higher power tariff.

Most **social development** goals had been achieved. There had been a substantial increase in the number of educational facilities and 90 percent of the population now has access to basic health services.

The Department of Urban Development and Housing had been created to provide **urban infrastructure services** and to manage the municipal affairs of growing townships in the country. By the end of 1999, 45 km of **new road construction** had been completed, with funding secured to construct an additional 122 km of new roads.

Considerable progress has been made in expanding the **telecommunication network**, which now connects all 20 district headquarters. National television and Internet services were launched in 1999.

Since 1997, government ownership in a number of public enterprises had been substantially reduced through **divestiture**. The Agriculture Ministry had established a Marketing Section to induce private sector participation. In education, one private secondary school and seven private primary schools have been established, and applications for the establishment of additional private schools are being reviewed.

All infrastructure developments had been undertaken within the policy of **conserving the rich natural resources.** More than 72 percent of land area is currently under forest coverage.

As part of the **government-restructuring program**, two new divisions (the National Employment Board and the Division of Information Technology) and one new department (Legal Affairs) have been created.

B. Guidelines for the Ninth Five-Year Plan

The Planning Commission released Guidelines for the Preparation of the Ninth Plan in January 2001, focusing on balanced development, decentralization, and **promotion of private sector development**. The following objectives have been emphasized throughout the guideline document:

Greater **revenue mobilization** through improvement in tax collection and enhancement of the tax base;

Focus on a **rural access program** to improve the quality of life and income of rural people;

Consolidation and improvement of existing **infrastructure and services**;

Initiation of **regionally based planning**, and greater **autonomy of local governments** in the financing of their development programs; and

Investment in areas where **employment generation** will be maximized.

Table 1. Bhutan: Selected Economic and Financial Indicators, 1995/96-2000/01 1/

Nominal GDP (1999/2000): US$446 million
Population (1999/2000): 0.78 million
GNP per capita (1999/2000): US$565
Quota: SDR 6.3 million

	1995/96	1996/97	1997/98	1998/99	1999/2000 Prov.	2000/01 Proj.
GDP growth and prices (percent change)						
Real GDP at factor cost 2/	7.4	6.0	7.3	5.5	5.9	6.1
Consumer prices 3/	9.3	7.4	9.0	9.2	3.6	5.0
Consumer prices (India) 3/	8.8	6.6	12.4	5.3	5.2	...
Government budget (percent of GDP)						
Total revenue and grants	42.8	36.8	33.1	40.5	40.4	38.5
Of which: Foreign grants	22.6	17.6	12.1	19.1	16.8	16.3
Total expenditure and net lending	40.6	39.2	32.1	42.3	44.4	43.2
Of which: Current expenditure	18.8	18.5	17.6	18.6	19.0	19.0
Current balance	1.5	0.7	3.4	2.8	4.5	3.1
Overall balance	2.3	-2.4	1.0	-1.8	-3.9	-4.8
Money and credit (percent change)						
Broad money	30.4	30.9	41.7	21.4	21.4	...
Credit to private sector	11.8	-9.4	13.2	12.5	4.1	...
Interest rates (end of period)						
Deposits (1 to 3 years)	10.0	10.0	10.0	10.0	9-10.0	...
Lending	13-16.0	13-16.0	13-16.0	13-16.0	12-16.0	...
RMA bills (91-days)	8.0	8.5	8.5	6.0	8.5	...
Balance of payments (millions of US$)						
Trade balance 2/	-13.2	-31.9	-24.8	-57.6	-70.7	-81.7
With India 2/	8.4	4.4	9.3	-17.1	-31.1	-45.4
Current account balance 4/	-37.1	-56.4	-46.5	-97.9	-126.8	-126.2
(In percent of GDP)	-12.1	-15.9	-12.0	-24.4	-28.4	-26.8
With India	-6.0	-13.1	-25.5	-71.9	-99.6	-99.2
(In percent of GDP)	-2.0	-3.7	-6.6	-17.9	-22.3	-21.1
Grants	79.7	74.4	85.4	120.8	149.9	129.1
Of which: India	24.5	31.6	63.0	87.4	113.5	99.2
Loans (net)	-12.1	5.4	4.4	26.0	18.6	29.7
Errors and omissions	-5.6	-1.2	2.1	-5.8	-5.3	-4.7
Overall balance	24.9	22.2	45.4	44.2	36.4	27.9
(In percent of GDP)	8.1	6.3	11.7	11.0	8.2	5.9
External indicators						
Gross official reserves (millions of US$)	145.1	176.0	215.5	258.5	292.6	320.5
(In months of imports)	15.7	16.1	19.0	19.1	19.0	19.9
External debt (millions of US$)	111.5	112.2	128.0	160.4	172.8	202.5
(In percent of GDP; end of period)	37.3	32.1	36.4	40.7	39.7	43.5
Debt-service ratio (percent of exports)	13.2	9.8	8.3	8.1	5.6	5.5
Memorandum items:						
Nominal GDP (in millions of ngultrum) 2/	9,611	11,355	13,971	15,928	18,202	20,686
Ngultrum per US$ (period average)	34.3	35.8	38.4	42.6	43.6	...

Sources: Data provided by the Bhutanese authorities; and International Financial Statistics.

1/ Fiscal year beginning July 1.
2/ Calendar-year basis, for example, 1995/96 classified under the year 1995.
3/ Bhutan's CPI does not include rents and other services and is based on a 1979 expenditure survey. The CPI for India is for industrial workers. Hence, the two indices are not strictly comparable.
4/ Excluding grants.

CHAPTER THREE
AGROPROCESSING INDUSTRIES

1. Present situation

Introduction. Agriculture is an important sector in the Bhutanese economy – particularly as 79 percent of the population depending on some form of agricultural production for their livelihood. Although agriculture's contribution to GDP has decreased in recent years, it still remains the largest sector. In 1999 it was estimated at 35 percent, consisting of 17 percent from agriculture, 8 percent from livestock and 10 percent from forestry. Agricultural land making up about 7.7 percent of the total land area is composed of small landholdings, which are highly fragmented and scattered over difficult terrain. Many farming communities exist in isolation, often several days walk from the nearest road head. In the main river valleys land is highly priced. In 2000, agro-based industries employed 2,536 persons and had a turnover of less than $4.0 million, while output constituted 2.8 percent of total manufacturing sector industry value added.

Traditionally, the agricultural system in Bhutan has been subsistence based and in many areas of the country, this is still the case. Many farmers are unable to participate in the market economy due to lack of surplus or are cut off from markets due to poor transportation. Lack of market access is the main reason why farmers are reluctant to produce a crop surplus beyond that required for barter trade transactions. Although this situation characterizes a significant proportion of the country, in some regions farmers have adopted cash-crop farming.

Leveraging the production base in Bhutan must be a priority for development of the agroprocessing sector. Discussing strategies for developing the primary sector are beyond the scope of this study, but this should not detract from its pivotal role. Developing Bhutan's agricultural production base must also be in tune with the government's self sufficiency program which, under the Ninth Five-Year Plan, will afford equal priorities to all important cereal crops. Even this situation is questionable given that the land could be used for cash crops and that earnings from exports could be used to buy rice from cheaper producers and be kept under silo for at least one harvest.

Bhutan produces about 106,000 metric tons (MT) of cereals, 32,000 MT vegetable, 39,000 MT fruit, and 7,000 MT spices annually (about 60 percent of total requirements). A *Cash Crop Report, 1995-98*, is located in Annex Four, listing the types, volumes, and values of the main commodities produced. Due to higher consumption in its fresh form, limited processing opportunities, and the geographic isolation of farms, only about 3 percent of output is processed for commercial purpose (mainly fruit and vegetables). The opportunities for on-farm production will be higher when rural infrastructure, packaging, transportation, and processing capacities increase. Many of these issues are addressed in the Ninth Five-Year Development Plan (NFYDP).

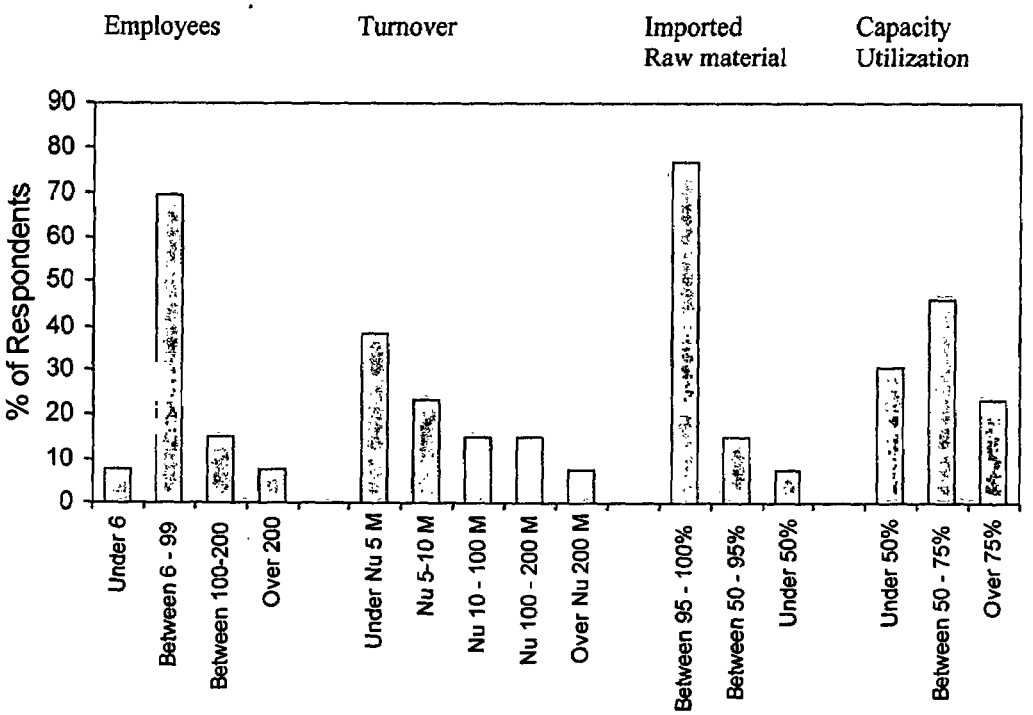
Commercial-level food processing is virtually absent from the economy, yet given the correct environment, agro-industry could have considerable potential for growth, mainly through exports of low-volume, high-value products.

Industry structure. Bhutan produces a narrow range of fresh produce and a smaller range of processed-food products in only a few product categories. In 2000, fruit processing contributed over 90 percent to turnover and employment in the sector – excluding alcoholic beverages. However, the category that has experienced the best growth over the last five years is bakery which has grown at 16 percent per annum.

To put the industry in perspective, in 1996 world trade in agriculture and food was worth US$464.0 billion. Processed foods constituted the fastest-growing component of the world's agri-food trade, growing at twice the rate of primary products, and totaling some 75 percent of global agricultural trade in 2000 compared with 50 percent in 1985.

Industrial orientation. Of the firms that completed the survey questionnaire, only two identified themselves as exporters to countries outside the trade-free zone with India. The profile of the respondents is given in Table 3.2.

Table 3.2: Profile of Survey Respondents



Government policy. Several aspects of government policy create a favorable environment for the agroprocessing sector, in common with other sectors of manufacturing industry. These include the import and export regime and the stable exchange rate with India.

However, the drafting of the food safety regulations and establishment of Quality Control and Regulatory Service (QCRS – units set up under the Ministry of Agriculture to introduce product quality standards) are important steps in moving the industry towards international norms in safety and standards.

Labor and employment. Firms visited in the agroprocessing sector are generally modest in scale, and over half employ only 5 to 15 persons. The largest processor interviewed employed 364 staff.

Firms minimize labor shortages by hiring Indian workers. With the exception of the Army Welfare project in the Phuentsholing/ Samste area, Indian day workers compose 90 percent of the work force in the interviewed firms. Indians are hired because of their skills/experience, better attendance performance, and their lower rates of pay. In Thimphu, Indian workers comprise only 1-2 percent of the work force, and are formally employed as regular staff.

Most firms in the survey identified labor costs as an impediment to their ability to survive. The issue of Indian versus Bhutanese labor was cited by most companies along the border. The general view of companies employing Indian workers is that Bhutanese workers do not possess the necessary technical skills and experience, are too expensive, and are unreliable. Hence, risks associated with training are thought to be too high to warrant much investment. However, many of the problems identified by firms may be of their own making – the companies which rely on Indian workers tend to be characterized by poor working conditions and a lack of sense of ownership. The few companies employing Bhutanese workers and providing a reasonable working environment appear to be rewarded by employee loyalty.

Reliance on Indian workers was most apparent for firms operating at, or near, a loss. Given the apparent inefficiencies in their operation, survival is unlikely if full labor rates were paid. Yet, on the other hand, there is little incentive to automate.

None of the firms interviewed volunteered views about the productivity of labor and none provided or realized a need for training. No firm articulated the connection between the cost of labor, labor productivity, and international competitiveness. Firms which ranked "cost of labor" as a significant factor inhibiting their competitiveness may have really been pointing to low labor productivity – rather than high wages – which also results, at least in part, from poor management skills, low levels of training and inappropriate technology. Finally, no firms cited industrial relations as being an issue.

2. Costs and competitiveness

There are three principal determinants of the processed food sector's competitiveness:

- at the front of the value chain, the cost, availability and reliability of raw materials delivered to the processors;
- along the value chain, the relative efficiency with which value is added – in financing, manufacturing, packaging, branding, marketing and distribution; and,
- the business environment.

The competitiveness of raw material inputs. In terms of local raw materials the agroprocessing industry in Bhutan has a number of comparative advantages, including:

- the capability to produce a wide range of produce due to the huge variety of microclimates including high-altitude zones (alpine), central valleys (temperate) and low-lying foothills of the Himalayas (subtropical);
- organic farming, which is practiced by default as the country has not had the opportunity to develop the pest infestations endemic to the rest of the region and has never used – in large amounts – agricultural chemicals; and
- an extension service which is experienced in introducing new high-value crops.

The list of potential high-value primary products that the country can produce is long, but mechanisms for realizing the potential are lacking. Processors need to work with farmers to progressively identify and exploit opportunities.

Unfortunately, Bhutan's producers are reliant on low-value markets,[14] where the raw materials produced in Bhutan do not confer any appreciable cost-competitive advantage. The situation is made worse by the lack of appropriate management or marketing strategies to enable firms to compensate for lack of cost advantage. Several possible scenarios include:

- Raw materials available below world-parity prices would provide local processors with the opportunity to compete in price-sensitive markets. This is achievable given improved on-farm efficiencies, higher production, and better linkages between the farm and processor.
- Where raw materials enter factories at, or near, world-parity price, innovative product development, marketing and sound understanding of consumer expectations are essential to compete in value-sensitive markets. These were lacking in the firms interviewed.
- Where raw material costs are considerably higher than in competitor countries it is extremely difficult, if not impossible, for processors to develop products for sale in any export market. Even niche opportunities are sensitive to farm-gate prices.

It was beyond the scope of the survey to carry out benchmarking studies of the raw materials used in the sector. Nonetheless, respondents provided useful information and some benchmark studies of raw materials produced in Bhutan have been attempted by various organizations, although their cover is not comprehensive. The main findings are summarized in Table 3.3.

Table 3.3 Summary Price Competitiveness of Agricultural Subsectors

Raw material	Competitiveness
Dairy	Bhutanese costs are high because of high transport costs when raw milk is purchased from India. Local milk costs are high because cow yields are low and herds fragmented.
Chicken meat	Bhutanese costs are high because feed must be purchased from India and transported to Thimpu.
Beef and pig	Difficult to benchmark because animals are not usually reared for meat.
Horticulture	Bhutan is considered a high-cost producer.
Grain	Bhutan is considered a high-cost producer.

In the survey, all the companies said that the high cost of raw materials is a significant impediment to their profitable operation. Locally produced products are, at farm gate, expensive and incur high transport costs from farm to factory, which is made worse by a high incidence of product damage and loss. Farm-gate prices on average are 35 – 300 percent more expensive than in India, transport can account for another Nu0.7 - 1.0/Kg (assuming a radius of 200 km from the factory) and losses can be as high as 40 percent.

For companies situated away from the border areas, products from India incur high transportation costs and are subject to an unfavorable tax burden (see Chapter Eight on Cross-Cutting Issues).

The relative high farm-gate price for Bhutanese raw materials reflects low yields, low farmer productivity and poor land use (farm land is only 45 -50 percent utilized). Available evidence shows that potential productivity gains are considerable, given the right stimulus, and should translate to lower raw material prices and higher on-farm income.

[14] One processor claimed that he purposely produced low-quality products as they were more suited for the segment of the Indian market he was targeting.

In comparison with other developing countries, the agricultural value-added per worker in Bhutan is very low at $148 – compared with $407 in Cambodia; $526 in Lao PDR; a low income country average of $567; and a high income country average of $18,918 (World Bank Development Indices). This suggests that there is much room for improvement.

The most widely used indicator of crop productivity, production per unit of land (or crop yield), is also lower in Bhutan than in other least-developed countries, which in turn are low relative to those in other developing countries (see Annex Three). Yields of basic food commodities (cereals, roots and tubers, and oil crops) are 30-50 percent lower than other least-developed countries (LDC) which are less than half the average for developing countries – although there is much variation among countries. Thus, there appears to be potential for substantial gains in productivity. For chilies and peppers, yields in Bhutan are 27 percent those of the developing countries in Asia Pacific countries, which in turn are only 40 percent of the average in developed Asia Pacific countries. The conclusion is: If local raw materials are not cheaper than imports, the development of a local agroprocessing industry – for domestic and export markets – to process-sensitive markets such as India would be unlikely.

Lack of competitiveness in value adding. Value-adding (including manufacturing, packaging, branding, marketing, and distribution) activities in Bhutan may not be competitive for reasons shown in Table 3.4, and detailed thereafter.

Table 3.4: Agroprocessing – Can Bhutan be Competitive?

Value chain	Critical factor	Competitiveness
Raw material (delivered to factory)	Price, quality, length of supply season, reliability of supply	No price advantage, quality of produce delivered to factories is often low as no grading system in place. Harvest season could be extended by vertical cropping, but does not take place. Supply to the factory is not reliable.
Manufacturing	Technology, labor, utilization rates, innovation	None of the firms had a competitive advantage. Technology is of old design and is not efficient, labor productivity is low, capacity utilization is poor, and processes lack innovation.
Packaging	Cost, quality, design	Uncompetitive processors are reliant on imported raw materials from India. Recycled bottles are used, which are not appropriate for many markets. The production scale is too low to implement alternative packaging such as tetra pak.
Branding	Recognition, support	Bhutanese food products have a good reputation for quality in India but this has not been built into a brand. Establishing and building international (or regional) brands is beyond the resources of most Bhutanese companies.
Freight	Price, time for delivery, damage	Depending on location, firms in the interior are at a disadvantage. Firms on the border have less of a problem unless they require a reefer. Generally the high cost of domestic freight and time to market reduces shelf life. High incidence of product spoilage or damage.
Marketing	Innovation, investment	No competitive advantage. Firms need to learn the requirements of their target countries and how to take advantage of this knowledge.
Financing	Cost of debt, availability	No competitive advantage.
R & D	For small-scale firms hands-on development most appropriate.	Research and development is absent from the agrobusiness culture.

Marketing. Key issues for marketing are whether Bhutan is, or should be, price or value competitive and, in addition, innovative in marketing.

Price or value competitiveness? Bhutan will have difficulty in competing in processed foods in Asia and India as their markets rapidly mature. Scale, modern processing and management systems, and brand awareness are all critical factors that Bhutanese processors will find difficult to address. Realistically, Bhutan's role in Asia will only ever be as a niche player – although niche markets are often extremely lucrative. However, Bhutan is in a difficult situation as it is unable to respond quickly to price-sensitive markets requiring a quality product. The country lacks world-class management, processing structures, research and development, and product or process innovation – all of which are necessary to compete in niche markets. For example, none of the firms interviewed invested in research and development (R&D). In contrast, over 80 percent of Australian firms support their processing operation with R&D – yet Australia still struggles to compete in niche product areas because of its lack of innovation. Bhutan's problems are exacerbated by the fact that all the firms interviewed sourced their technology conservatively – preferring to buy from India. Indian technology is frequently outdated and cannot be calibrated or optimized, making it difficult for processors to produce a quality product.

Innovative marketing. Bhutan's main export market is under pressure as the quality of Indian products increases and prices fall. Indian producers are learning how to increase quality and lower costs as they respond to foreign companies and imports. Yet, despite awareness of the advantages of Bhutanese agro-products, neither companies nor government officials articulated a policy to develop innovative ways to market food products in foreign markets. Those who exported to third-countries, or sold their products in India, did so in a conventional and conservative manner often relying on established or "chance" contacts. Bhutanese products are not clearly differentiated and therefore struggle for margins in the markets in which they are sold. Resources need to be devoted to communicating the nutritional and other advantages of Bhutanese food products to potential customers.

Human resources. The wide range of firms interviewed generally possessed outdated-to-mediocre processing technology, lacked vision, and did not demonstrate a capability to battle with the poor prospects for survival that characterize much of this sector. Overall, firms report weakness in their capability to export and, in several cases, even sustain present market positions. Many of these weaknesses relate to the firms' human resources, motivation, training, and outlook.

In essence, Bhutan lacks a cadre of talented bosses with world-class business experience and perspectives. Managers too are missing foreign-business experience, entrepreneurial and innovation skills. Skill levels throughout firms are poor and they are unable, or unwilling to invest in training in order to rectify this situation. However, the sector will not improve unless it addresses shortcomings in general management, technical skills and marketing skills.

Capacity utilization and scale of operations. Three-quarters of the firms surveyed reported utilization rates of less than 75 percent while the remainder were working near full capacity.[15] The reasons given for low-capacity utilization include supply of raw materials – seasonality and logistical issues – and a lack of market resulting from poor price competitiveness. Box 3.1 demonstrates the problems arising from difficulties in obtaining raw materials and the cost of transportation.

Without exception, the scale of processing plants was too small to be competitive with Indian units. However, being small can be an advantage. It can sometimes mean that a firm can succeed with products for which the niches of foreign markets are too small to attract the attention of larger companies. Nonetheless, this is not the case in Bhutan at the present time.

[15] If calculated based on the international standard of 24 hours operation, capacity utilization would be much lower.

Packaging. Most of the firms interviewed were concerned about the cost and other problems associated with packaging and how this impacted their competitiveness. An ideal form of packaging for many of the agro-products produced in Bhutan would be Tetra Pak. However, these systems, in their smallest configuration deliver several thousand units per minute – a capacity much greater than required at present.

The Bhutanese food-processing industry is not large enough to support a thriving local packaging industry. Yet, without one, the sector will have extra costs and other constraints that impede it from growing quickly. In addition, packaging must be acceptable to the buyer. Hence, for example, the bottle-top used in Bhutan is not acceptable in Thailand as it is difficult to confirm an accurate seal.

BOX 3.1 LOCATION IS IMPORTANT

Major hurdles to development of an agroprocessing sector in Bhutan include, as noted in this chapter, the raw material supply (regularity and price) and transportation costs. The impact of these hurdles is demonstrated by the difference in success of two fruit and vegetable firms producing nearly identical product ranges.

"Company A," located in the interior of Bhutan, buys about 43 percent of its raw materials from India and exports most of its products. Its transport costs are comparatively high (about 6 percent of the ex-works price) as inputs and outputs are transported to and from the Indian border. The firm also depends on raw materials from local producers and experiences inconsistency in supply. Because of difficulties in obtaining sufficient raw materials, it usually works at under 75 percent capacity (based on a single shift). The quality of the raw material is usually poor, further adding to the production costs. At such a low capacity utilization, the company is not able to take full advantage of mechanization and production is relatively capital intensive. The firm has experimented with a number of schemes to promote contract farming and believes some of these are slowly beginning to have an effect.

"Company B," in contrast, is located on the Indian border and reports no problem in procuring raw materials, of which 98 percent is imported from India and elsewhere. Transportation costs are less (3 percent of ex-works price) than in the case of "Company A." The firm returns a profit each year. It obtains a regular supply of raw material and operates at near full capacity for two shifts per day. In the past, the firm was dependent on cheap Indian labor, which is reflected by the low degree of mechanization and labor intensity of their operation (Nu287,360 output per worker per year compared with Nu448,240 in "Company A") but is now increasing its mechanization.

Output per worker. Output per worker – an important measure of supply-side efficiency – is very low in Bhutan. In Thimphu, it is US$9,147 per worker per year and in Phuentsholing it is US$5,864 – by contrast, in Lao PDR it is US$74,000.

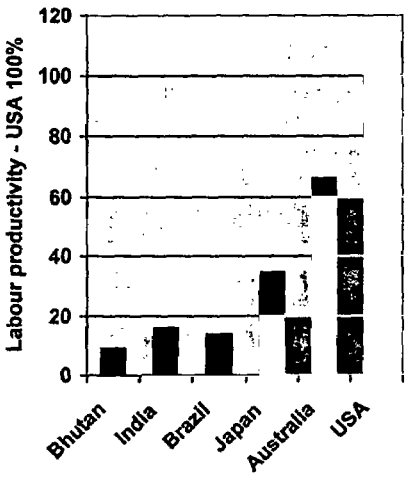
Rudimentary comparisons suggest that Bhutanese food-processing companies are no more efficient than small-scale Indian processors – and are disadvantaged by high raw-material costs and logistical constraints. Labor productivity of Bhutanese companies is therefore assumed to be similar to that of the unregistered Indian food processors – estimated at 9 percent of the American level – as shown in Table 3.5. Registered processors in India, given greater economies of scale, are estimated at 16 percent of the United States level.

Cost structure of the industry. There are considerable variations in the cost structure within Bhutan and between different sectors. Raw material costs, for example, are higher for processors in Thimphu due to the higher proportion of local raw materials or cost of transporting Indian products (see Box 3.1).

Labor costs vary by district, by the background of the worker, and by industry. Average labor costs paid are US$120 and US$45.50 in Thimphu and Phuentsholing/Samtse respectively. However, this is not uniformly the case in all firms. For example, the Army Welfare Project in Phuentsholing employs 90 percent Bhutanese staff – its facilities are located along the Indian border, and the staff are paid a higher average than employees working in Thimphu (US$153). However, in the Phuentsholing/Samste area

generally, labor costs are 38 percent of the level in Thimphu. While labor costs 9 percent of the ex-works price of products in Phuentsholing – in Thimphu the corresponding percentage is 14.5 percent. Much of the variation in wages per month can be explained by the predominance of Indian workers in Phuentsholing. While the lower labor cost, as a percentage of ex-works price, is partly explained by the number of Indian workers. The cheaper raw materials at the Indian border also influence the percentage.

Table 3.5 Labor Productivity



Critical success factors. There are many factors that need to be present for firms to be successful. Several of them are favorable – the import/export regime, the exchange rate, the availability and cost of utilities, and trade agreements with other countries – and are covered elsewhere in this report. Within the specific context of the agroprocessing sector, however, there are five critical success factors.

Availability of consistently high-quality raw materials. Firms need access to good-quality, graded raw materials that suit the needs of the market and their processing lines. Raw materials should be available at market competitive prices. This is currently not the case in Bhutan: factories receive surplus material of generally low quality, that has not been graded, and is high priced. Supply is inconsistent, as is quality.

Friendly policy towards manufacturers. Government policy must be sympathetic to the needs of manufacturers and provide an environment in which the processors can develop and grow. Again, changing policies, unfavorable tax treatment, and cost structures in Bhutan are not beneficial to new agroprocessing enterprises.

Product innovation. Firms need to transcend price competition by developing differentiated products that do not need to compete on price. A prerequisite for product differentiation is an investment in innovation, which must occur along the value chain. Innovation can take many forms, such as process, product, and packaging improvement; clever new approaches to product positioning; and management of the supply chain. Government support is critical in providing an enabling environment for companies to innovate.

Access to appropriate technology and labor. Technology needs upgrading in this sector. Firms are prepared to invest if they are reassured that land leases will not end before the investment in technology has been paid back. Companies also need guidance in sourcing competitive technology that will propel them ahead of the competition. The policy environment should be appropriate and consistent. At the same time, companies need skilled labor at predictable wage rates.

Market-led production. Industry should be led by the needs of the private-sector market. New product introductions should start by identifying the target market and precisely defining its needs and sustainability.

3. Impediments to Growth

Firms reported that they were disadvantaged compared with Indian firms in the following areas: labor, domestic freight charges, financing new plant, and raw materials.

Labor. This issue is outlined above and again in Chapter Eight – Cross-Cutting Issues.

Domestic freight. Most firms indicated that the cost of domestic freight and transport is a major issue. In most cases, either raw material, packaging, or finished products (or all of these) had to be transported within Bhutan or from India (or even further a field). The sector faces a number of serious transport constraints, many of which are related to the country's land-locked and isolated location. These affect both supply of raw materials and processing inputs as well as shipment of final products. The most important constraints cited by companies are:

- distance from the nearest seaport (Thimphu to Calcutta is 950 kms);
- poor standard of roads, including national highways;
- liability of roads to closure during the monsoon season;
- lack of competition in air services to and from Paro;
- high road-transport charges;
- high air-transport charges; and
- specific difficulties in shipping fruit exports through India to Bangladesh.

Transport time is vital when transporting fresh produce from farms that may be several days from a road head and more days from the processing site. This limits the area within which raw materials can be sourced. A further issue is the export of finished goods. For example, typical transit times by truck from Thimphu to Calcutta are reported to be up to 6 days (Thimphu to Phuentsholing – 1 day; Phuentsholing (including transshipment) – 1 day; Phuentsholing to Calcutta – 3 to 4 days).

Costs associated with transporting raw materials and finished products also reduce the competitiveness of Bhutanese agroprocessors. These costs climb dramatically if containers are required. Charges for containers from Phuentsholing to Calcutta, are quoted at Rs10,000 for a 20-foot container, and Rs 40,000 to 50,000 for a refrigerated (reefer) container, which will normally have to be shipped empty from Calcutta.

Some of the above constraints are interrelated, and few will be easily solved. Another problem is that several fruit and vegetable products with good export potential are only available for export during the summer months when monsoon weather tends to disrupt both land and air transport.

One particular issue is agro-product exports to Bangladesh. These products exit India at Changrabandh and then enter Bangladesh at Burimari. Generally fruit is carried in boxes by Bhutanese trucks to Burimari, where it must be trans-shipped to Bangladeshi trucks for onward carriage to markets such as Dhaka, Rangpur, and Chittagong. Problems include:

1. the poor conditions at Changrabandh, where queues to clear Indian customs are frequently long, and where even vehicles carrying perishable transit products (which should be given priority) can be seriously delayed;
2. the flow of apples may be further disrupted by the muddy conditions at the border during the monsoon months, when many vehicles can become bogged; and
3. once goods have been left for trans-shipment at Burimari, the Bangladeshi importers may subsequently claim short delivery or loss of product quality, and thereby refuse to pay in full the amounts specified in the letters of credit.

Other problems include the damage of goods in transit – goods may be loaded and off-loaded several times and breakages are common (e.g., 7 to 9 percent for glass bottles). Lack of care and handling procedures by haulers is also an issue.

Financing new equipment. Most firms acknowledged problems with undercapitalization. Small firms are generally confined to financing expansion or investment in innovation from retained earnings or borrowing. Using retained earnings in the food sector usually slows the process of development because profitability tends to be low. Lenders treat the sector conservatively, expecting to lend funds against fixed assets, so small firms find it difficult to raise new equity and expand.

Raw materials. As discussed earlier, if the backward linkages between the farmer and the processor were improved, many of the problems with raw materials may be reduced – including fragmented and small land holdings, erratic production due to natural factors, and nonuniformity and inconsistent supply.

Management problems. In addition to issues cited by survey respondents, a number of management issues are seen as impacting the agroprocessing industry. At a national level, the management problem in Bhutan is deeper than in many other countries as there is an absence of (a) qualified and experienced entrepreneurs and (b) a resource pool from which innovations can grow. This stems from the fact that there has not been any agro-industrial development and opportunity to develop skills and knowledge necessary for this sector.

Within firms, low labor productivity is a direct result of a lack of training, a low level of technological adaptation, and – related to technology – low management aspirations, and a lack of innovation.

Although lower capital intensity, smaller scale, and raw-material supply issues explain part of the productivity deficiency endemic to Bhutanese agroprocessing firms, they are much less important than lower management aspirations and limited innovation within businesses. The firms studied were characterized in the main by:

1. *Slowness to adopt innovative new processes developed overseas.* In all firms there was a lack of adaptive skills and interest in systems, technology, and conceptual product development. Compared with its neighbors, Bhutan lags considerably – and these countries are far from leading edge. Those firms that had upgraded their technology did so only minimally and adopted technology from India, which generally is far behind international standards.

2. *Poor product and marketing innovation.* In the firms interviewed there was a lack of product and marketing innovation. Management was not able to rethink product categories and innovate to meet new customer demand. This will become a serious issue as Bhutanese companies try to identify and enter niche markets.

3. *Passive supplier relationship.* The food-processing sector has tended not to build proactive relationships with primary producers – one notable exception being Bhutan Agro Industries –

although some companies plan to forge closer links in the near future. Collaborative relationships need to develop that provide opportunities to improve products and processes. Until recently, there was no framework in which to operate at the community level, but this has now changed with the recent introduction of the Cooperative Act. This will impact on the successful introduction of systems, such as quality farming, and help ensure quality through the supply chain.

4. *Modest management aspirations.* Innovation transfer is more likely to occur when managers with high aspirations push for change, or when competitive pressures force firms to improve their performance to survive. Companies lacking these aspirations and pressures may neglect promising opportunities. None of the Bhutanese agro processors were focused on this level of commitment, despite opportunities in the diverse natural resource base – for example, mineral water remains a largely untapped opportunity.

If Bhutan tackles the key performance inhibitors and makes substantial productivity gains, it will be able to compete in global niche markets – the high-value, high-quality sector that currently eludes the country's processors. Box 3.2 demonstrates the consequences of the management of firms not addressing the needs of buyers.

BOX 3.2: POOR MANAGEMENT DAMAGES BHUTAN'S MARKET POTENTIAL

This case shows poor management in dealing with export markets, establishing a poor reputation for Bhutan, resulting in business passing to competitor countries.

A European company specializing in the import and distribution of aromatherapy products worked closely with the Government of Bhutan for up to ten years to develop a market in Europe for lemongrass oil. For a number of years the company purchased some 2 MT per annum.

According to the company it purchased lemongrass oil and paid around $16/kg C&F compared with a normal price of some $11/kg. Despite the price premium offered, the company found the Bhutanese to be difficult to deal with as suppliers. Orders were late in arriving; they were often short-weighted; they did not correspond to the technical specifications; and they were not of a consistent quality. In communicating their difficulties, messages were claimed to have not been received or, if they were received, were ignored. (Similar comments have been made by other buyers supplied from Bhutan).

Finally, the company changed suppliers after finding better quality lemongrass oil for sale through other outlets, and it now purchases from Nepal.

Market information issues. Companies were not fully aware of market information issues – the smaller ones more so than the larger ones. Overall, all companies lacked knowledge and experience in foreign markets and none had the resources for export market development. Firms lacked the financial resources and management time to collect and analyze market information themselves. Few had strong views on market information issues and none were aware of the role of governments in providing such a service. These issues are apparent by the lack of response to requests by the Bhutan Export Promotion Center when organizing trade missions and the overall lack of understanding by firms on how the center could help them in developing their businesses.

4. Potential

New market entrants and smaller firms lack internationally recognized brand names and generally must rely on making niche or specialized products. An alternative is to supply private-label products to retailers/processors. However, given the relatively high processing costs and inefficiencies, this is a risky strategy for Bhutan.

Large vertically integrated firms and supermarket chains dominate the value chains of mainstream food commodities. To appropriate at least some of the sizeable value-added generated at the marketing and distribution stages, Bhutanese firms will have to identify specialty and niche products for which markets are smaller and the scale economies of the large companies are not very important in determining competitiveness. Naturally, the more processing taking place in Bhutan, the higher will be the returns. This is the case even when the processing is a rather simple operation such as drying or packing. Organic markets also offer new opportunities.

Organic produce. Much of the farming system in Bhutan is organic but this advantage has not been leveraged because of a lack of awareness of organic farming systems; lack of infrastructure; lack of marketing facilities; limited access to capital; and inability to capture economies of scale. The major hurdles that need to be overcome include high certification costs; lack of market information and marketing strategies; insufficient export facilitation; complex procedures in importing countries; and tariff and non-tariff protection in import markets. Certification and accreditation issues play a particularly important role. In most cases, exporters depend on certification by international certification bodies to be able to market their products as organic in foreign markets. Costs of certification vary, but can be significant, and Bhutan may find it difficult to establish a national certification infrastructure.

A caveat is appropriate – the issue of rapidly growing markets raises the issue of perceived versus real opportunities. The rapid demand growth for organic food in developed countries is likely to create temporary supply-demand gaps that, at times, can be bridged by supply from developing countries. Such short-term opportunities can, however, only be seized if certification requirements in export markets can be met and market access is facilitated. Continued presence in the market thereafter will ultimately be based on the ability of Bhutan to retain significant production cost advantages, maintain supplies, and ensure consistent quality. In the medium-term, organic production capacity in developed countries is likely to expand rapidly, spurred by attractive prices and subsidies by various governments.

High-value, low-volume products. Given the range of microclimates and extent of biodiversity, Bhutan is in a position to grow a number of high-value products such as those used for essential oils or used as traditional medicines. Bhutan has a further advantage in its capacity to produce the full range of products, both high- and low-altitude species. All competitors are severely handicapped in this respect. However, the exigencies of consumers necessitate a high degree of professionalism. To compete in the international market, Bhutan will have to offer not just a product, but a range of services, which include approved quality systems, a degree of assurance about continuity of supply, and the capacity to bring new products and product presentations to market rapidly.

The "quality" dimension in these markets refers not only to the characteristics of the final product but also to the way in which the product is produced, processed, packaged, and transported.

Generally, price premiums for major niche food and beverage items are increasingly controlled by a handful of companies – often only 2-5 companies conduct the bulk of transactions. This market structure carries the risk that price premiums at retail level are mostly appropriated by the few marketing companies that dictate far less attractive purchasing prices to producers.

It is also important to note that price premiums differ significantly between products. Retail premiums for spices, for instance, generally do not increase by over 5 per cent, whereas price premiums for high-quality tea have been as high as 1,000 per cent.

Major opportunities lie in traditional medicinal herbs, if Bhutan can develop links with established exporters and thereby take advantage of the markets that are already established. In essential oils, Bhutan may find the best prospects lie with specialist niche products, usually those used in aromatherapy and not commonly grown elsewhere. Products such as lemongrass have, unfortunately, almost lost their niche advantage. This is becoming a price-sensitive product and generally requires minimum consignments of 1.0 MT.

Foreign companies. Food-processing industries are well established in the industrialized countries and many developing countries. Developing countries, such as Bhutan, wishing to expand into this field are advised to do so on the back of an established company as the barriers to entry and costs are prohibitively high. The economies of scale in certain areas of food processing are considerable. In cases where developing countries have made significant inroads into food processing – for example, orange juice production in Brazil, canned pineapples in Thailand, and soluble coffee production in Colombia and Brazil – the scale required for efficient production means that upstream access to raw materials and downstream access to markets must also be secured on a large scale.

Foreign companies are sensitive to the business environment of a potential host country and are continuously seeking friendly enabling locations. Bhutan has a comparative advantage in its business environment and strategic location to India. This combination is probably sufficient to attract foreign companies to manufacture in Bhutan for the Indian market using predominantly Indian raw materials.

Bhutan's comparative advantage in terms of its operating environment includes:

1. *Nonrestrictive labor laws.* Labor laws in India make it difficult for companies to restructure, thereby hampering their ability to improve efficiency and expand output. Employment in India's registered sector is highly protected, and companies must obtain specific permission from the state government to retrench or to close down.

2. *Literate labor force.* Low literacy levels within the Indian labor force are a deterrent to foreign companies seeking higher worker productivity.

3. *Minimal red tape and non-corruption.* The large amount of red tape and corruption in India is believed to discourage productive investment. According to surveys of large companies' executives, corruption levels in India are perceived to be substantially higher than in other developing countries. Multiple and often conflicting regulations increase red tape, delay production, and hamper exports. As a result, foreign best-practice players may be deterred from entering the market.

4. *Infrastructure.* Poor infrastructure is one of the most frequently mentioned barriers to investment in India. For example, electricity shortages are common in many regions.

Given low management capabilities in Bhutan, it will be difficult for companies to identify new markets and to build existing ones. Bhutan needs to identify ways to leapfrog the upgrading of its internal capability in the agroprocessing sector – and working with foreign companies may be one viable strategy. The immediate advantages will be training of the local work force and the development of captive markets for Bhutanese ingredients. Fostering relationships with foreign companies will have benefits

particularly in addressing many of the strategic gaps in the agroprocessing sector. Some key benefits include:

- Bhutanese managers will be trained and exposed to international management practices, technology, and marketing methods. In so doing, they will be forming a pool of high-quality agro-business managers with the skills and vision in world-class manufacturing and marketing.

- The modern facilities and international working environment would provide a greater enticement for more skilled Bhutanese to work in the agroprocessing sector.

- With encouragement, foreign companies could be persuaded to purchase more Bhutanese ingredients such as spices and herbs. This will have multiple benefits: production systems will be stimulated and technology and skills will diffuse backward through the supply chain as companies ensure that they procure the desired quality of product. These skills are needed in the rural community and will form the platform from which Bhutan will be better equipped to export its own products to high-value markets.

- Bhutanese-made products will gain greater market penetration and recognition.

- Finally, given sufficient critical mass, support services will be stimulated.

Box 3.3 shows the case of an exporter that penetrated export markets through good management – differentiating a commodity by packaging innovation and a proactive relationship with its buyer.

BOX 3.3: PENETRATING NICHE MARKETS THROUGH INNOVATION AND PROACTIVE RELATIONSHIPS

This case shows that consistent third-country exports are possible by working closely with buyers.

"Company C," which exports Bhutanese red rice to America and Europe, turned a chance enquiry into a long-term relationship. Following an initial inquiry in 1992, despite having no previous experience, the company took a chance and assured the importer that it could supply rice according to necessary requirements. It then worked closely with the buyer to ensure that all requirements were met, and the first trial order of 1 metric ton was delivered in 1994. This was followed by 4 metric tons and, subsequently, by a container load.

The firm's success was due not least to working closely with the importer to design packaging that was appealing to niche markets and ensuring that logistical problems could be overcome. First, the design, which differentiated the firm from other suppliers and appealed to gourmet stores and high-end health food chains, was based on traditional Bhutanese handmade paper bags and included Bhutanese motifs. Second, supply systems were worked out to overcome traditional customs so farmers would supply the paddy; workers had to be trained on the cleaning and grading of rice; and issues tackled over customs clearance and trans-shipment.

Growth has been at about 45 percent annually as a result of working closely with the buyer to satisfy the needs of the niche market in terms of product differentiation, quality, and the ability to deliver in quantity.

5. Recommendations for the Sector

Enabling environment. Bhutan's ability to develop and grow an agroprocessing industry is constrained by a number of factors – many due to the 'newness' of the industry. Individual firms will not be able to

jump these hurdles if they are not provided with a supportive enabling environment. Suggestions as to how such an environment can be created include:

1. Create food laws to include all provisions relating to food products to cover issues concerning safety standards, nutrition, and merit goods.
2. Create a food processors' association or relevant chapter within the Bhutan Chamber of Commerce and Industry.
3. Initiate a concerted promotion campaign to create new markets, a first step should involve strengthening the export promotion center.
4. Expand the availability of quality raw material with extended harvesting seasons through practicing vertical cropping, increasing production, and improving productivity.
5. Develop or strengthen existing databases and market intelligence systems to enable planned investment in the appropriate sector to match the availability of raw materials and marketability of processed products.
6. Strengthen the technical skills of extension services and co-operatives in the areas of post-harvest management of agro-produce to encourage creation of preprocessing facilities near the farms such as washing, fumigation, and packaging.
7. Encourage the establishment of agroprocessing facilities as close to the area of production as possible to avoid wastage and reduce transportation costs. This may include primary processing units. The establishment of product belts, introduced in the NFYDP, will be an important step.
8. Promote investments, both foreign and domestic.
9. Build a strong infrastructural base for production of value-added products with special emphasis on food safety and quality matching international standards.
10. Invest in and provide a human resource development program for all skill levels, especially on management and marketing systems.
11. Support the development of company-level innovation by providing national level R&D facilities and resources. The mushroom research center is an excellent example.
12. Encourage the development of an industrial cluster of foreign food processors.

Industry competitiveness. Successful agroprocessing firms need to be competitive along the value chain, starting on the farm and extending through to a marketing strategy. Firms need to find ways to encapsulate the "value of values" in their products such as promoting them as "eco-efficient." Suggestions for increasing industrial competitiveness include:

1. Companies need to devote more resources to developing a better-trained work force – training is essential.
2. A high priority should be given to improving the general innovative performance of firms in the agroprocessing sector.
3. A detailed study of the skills gap in the agroprocessing sector should be done to assess more precisely the range and level of skills needed.
4. Firms should be encouraged to invest in technology and adopt best-practice management systems.
5. A food-safety program should be initiated.

Multiphase strategy. Agroprocessing should be promoted by developing in parallel the production base and marketing base:

Production base

1. Better availability of raw materials – the area from which raw materials are procured needs to be extended, yields improved, losses reduced, and transport costs lowered. Yield issues will be addressed as farmers come to understand market opportunities. Dealing with individual farmers is not efficient, transactions should be through a cooperative or association, which allows farmers to be managed in groups. Primary processing could also be introduced at the cooperative level to extend the life of produce and lower transportation costs. It will be critical to control primary processing through training in quality processing, reinforced by development and adoption of a management system that links all actors in the chain.
2. Central-collection site development – this would ensure the quality of material processed in the cooperatives and provide a means of bulking up and regulating quality. The center would need to work closely with the cooperatives to ensure that quality issues are continuously addressed.
3. Product diversification should be explored through market-directed opportunities

Marketing base

1. Import substitution – some products currently imported from India could be replaced by locally produced items. Possibilities include most perishable items, including bakery, dairy products, and ice cream. Other innovations may be derived through processing of vegetable oils, potato products, maize products, or animal feed.
2. Niche exports – high-value products such as essential oils for aromatherapy, traditional medicines, and products based on organic produce. Key in this sector is quality, consistency and responsiveness. The range of products in this category is large – for example, refining, capsulation and tableting of herbal medicines and mushroom extracts; organic niche products, such as organic tea; fruit products, such as health bars; herbal drinks; candies; and organic nuts. This market will require product quality, consistency, and assured supply, as well as vigorous marketing to support the products.
3. Develop a cluster of foreign companies near the Indian border. In time, these companies will purchase domestically produced ingredients such as herbs and spices that have a comparative advantage over those obtainable in India.

CHAPTER 4
WOOD AND WOOD-BASED INDUSTRIES

1. Present situation

Background. Forestry is an important resource in Bhutan. It contributes some 11 percent to current GDP and generates about 3 percent of government revenues through forest-product sales and royalties. Forest-related products account for 20 percent of total exports, and forestry generates over 25,000 jobs in the informal and formal sectors.

The total forest area in Bhutan is 2.8 million hectares, which represents over 70 percent of the country's total land area. The forests comprise a variety of different types including fir forests, mixed coniferous, chir pine, and broad-leaved forests. The broad-leaved species, or hardwoods, grow on the lower land, while the coniferous wood grows on the higher land. A relatively high proportion of forests are in protected areas and much of the forests that are legally available for wood supply are undisturbed by harvesting. The estimated annual allowable cut in Bhutan is 35 million cft. About 10 million cft is extracted each year, of which some 20 percent originates from natural, but managed forests – from the government's Forestry Management Units (FMU),[16] from which the commercially used wood comes. Extraction has remained relatively stable in recent years, as shown in Table 4.1.

Table 4.1: FDC Disposal of Timber, 1998 to 2000

	1998	1999	2000
Rural	214,826	242,235	162,254
Urban	730,809	44,771	690
Defense	19,208	1,348	0
Industry	158,408	1,000	0
Auction (Export)	720,484	201,004	74,897
Auction (Internal)		1,406,686	1,425,940
Total	1,843,735	1,897,044	1,663,781
Total for commercial use (direct or via auctions)	878,892	1,608,690	1,500,837

SOURCE:. FDC

The Ministry of Agriculture (MoA) reports that for good forest management it is preferable to extract the full annual allowable cut, but the MoA lacks the capacity for this. There are presently some 14 FMUs, which only cover some 8 percent of the forest area. About 53 percent of the timber is coniferous, and the balance is broad-leaved.

Timber is bought by industry from Forestry Development Corporation (FDC) auctions. The industry comprises around 56 sawmills; 60 furniture workshops; 1 large particle-board firm; some producers of broom handles, fruit boxes, veneer, plywood and blockboard; and some wooden handicrafts producers. Most of the industries are located in the western and southern parts of Bhutan. It is costly to transport timber from one district to another, so hardwoods are mainly processed in the lowlands and conifers in the highlands. Sawmills are widely dispersed; specialist furniture firms are predominantly in Thimphu; and

[16] Petri Lehtonen, Bhutan Forest Policy Review, IDA and Swiss Development Corporation, January 2000.

panel and board producers, which consume some 60 percent of hardwoods, are located in the Phuentsholing area. In mid-2001, a Wood-Based Industries Association was formed to represent the views of the sector.

The market is fragmented, as is common in developing countries, and this is exacerbated by Bhutan's small population and its geography. It is difficult to obtain economies of scale. The government is a major customer of timber products - of the timber available for commercial use, perhaps 70-80 percent is consumed by the construction industry and, of this, over 70 percent is said to be funded by the government and/or donors.

Government policy. As noted elsewhere, several aspects of the policy create a favorable environment for the wood sector, in common with other sectors of manufacturing industry. These include the import and export regime, the stable exchange rate with India, and, to a greater or lesser extent, the SAARC agreement.

Bhutan's Eighth Five-Year Development Plan emphasizes the key importance of the sustainable management of forests for the dual purpose of conserving environmental resources and supplying wood resources to the domestic market. In January 1999, a new pricing and marketing policy was introduced whereby (a) the urban, commercial, and industrial sectors could access timber through open auctions; (b) prices were determined by the market; and (c) the export of logs and sawn timber was banned - except where there is a glut in the market. As Table 4.1 shows, the export of timber in 2000, as a result of the log ban, was only 10 percent of the amount in 1998. Invariably, each timber auction lot consists of mixed species. Each species within a timber lot may consist of different species, grades, sizes, and qualities. If a lot is unsold in two auctions, FDC may sell it through an international auction at which foreign buyers can participate.

While the new policy was generally welcomed by industry, two new regulations introduced in 2000 have negatively impacted on the sector. In April 2000, the export of "semi-finished" products was banned to counter, for example, the export of barely processed timber disguised as finished products. In September 2000, the system of measuring timber was changed from the Quarter Girth to the True Volume system, which has resulted in buyers getting 21.5 percent less timber for the same nominal amount. Earlier, in reaction to the belief that sawmillers were colluding to keep prices high, FDC started two sawmills to force private-sector millers to lower their prices. At present, both FDC and private firms buy conifers for about Nu130/cft and FDC sells the sawn wood for Nu140, while the private sector sells it for about Nu220/cft.[17]

During the period since the log ban, two "regulations" have negatively impacted on the sector's labor market: (a) the announcement that government workers should be paid a minimum of Nu100 per day, which many private-sector firms have found it necessary to follow; and (b) pressure on firms to reduce the number of non-national workers employed.

Other factors in the government domain that have a significant effect on the industry include the many (uncoordinated) ministries and agencies which influence firms; the terms and conditions of tendering for government contracts; the perceived discouragement to enter into joint ventures with foreign firms; and the difficulties (flights and visas) that third-country business persons face in accessing Bhutan.

---

[17] There is no concrete evidence that sawn timber prices are high. A consultant to the Bhutan Forestry Institutional Development Initiative recently concluded that sawmillers' pricing was reasonable; a Bhutan mission to Switzerland found that a sawmill it visited was selling timber for over three times its purchase price; while in Indonesia sawn rubberwood is over four times the price of logs.

Labor and employment. Firms visited in the wood sector are generally modest in scale, employing on average 31 persons. By contrast, the two large plywood/blockboard and particle-board making firms interviewed employ on average 292 persons. It is estimated that total employment in Bhutan's wood-sector firms is no more than 2,000 persons.

There is a shortage of skilled labor in the sector, which is evidenced by low productivity and poor quality. Firms report that in towns there is a scarcity of labor, while rural workers are seasonal and lack an 'industrial' culture. Workers do not receive any formal training in the sector because of high levels of turnover. The Woodcraft Center, which was established in 1991 by the government and Danida, combines training with production and is the only organization in Bhutan that provides a systematic training for woodworkers. The center has trained some 36 trainees, some of whom are working in local firms.

Firms minimize their labor shortages by hiring Indian workers. In the Phuentsholing area, Indian day workers form 69 percent of the work force and are hired because of their skills, better attendance performance, and their lower rates of pay. In Thimphu, Indian workers form 49 percent of the work force, and are formally employed as regular staff – in other words, they have been approved by the various government agencies and have identity cards. Generally, the number of such workers is determined by the size of the firm's investment. However, in practice firms can supplement these regular workers when they undertake government contracts by saying that additional Indians are needed to complete the work on time. Some firms have construction companies with Indian workers, and these workers may work in the woodworking factory.

BOX 4.1 SUPPLY AND DEMAND FOR GOVERNMENT-TRAINED LABOR

In a country where skilled labor is at a premium, it is important that use of Bhutanese skilled workers, such as those trained by the Woodcraft Center, is optimized. However, this case demonstrates a considerable mismatch in supply and demand. Firm Sixteen reports that "one day in February, eight or nine workers arrived on the door with a letter from the National Employment Board (NEB) asking if I could absorb the workers. I discovered that they were trained by Woodcraft, and I thought that I would take three of them. The firm had been stagnating for two years, and I thought they would help the firm grow. But I could not decide between them, so took eight of them. But there is no change in sales and now I have more stock."

In the same month, Firm Eleven applied for a permit to hire an Indian. The request was forwarded to the NEB in March and six months later no reply has been received. In May it applied to Woodcraft for a manager and four workers. Woodcraft replied that it had no graduates and advised the firm to wait, saying it was taking in new trainees in September. The needs of the two firms match the number of skilled graduates available from Woodcraft, but the end result is that one firm has too many workers, and the other firm none. Firm Eleven would like Woodcraft to write that it cannot provide the necessary skilled workers, rather than saying it will have them in the future, as it believes this would provide the justification for the firm to get a permit to hire Indians instead.

In most firms, the owners lack technical skills and, in the case of production, have to rely on the skills of a production manager/supervisor. Such managers, even when from India, are commonly unqualified and inappropriately skilled. All firms require technicians for maintenance, tooling, drafting, and so on, and these skills (which are acquired over a long time working on the job) are not found in Bhutanese workers. In many cases, these skilled technicians are poorly educated, and the agencies responsible for work permits are said not to appreciate the indispensable skills of such poorly educated technicians.

Technology. In the sawmilling subsector technology is low. The Indian technology used is decades old. There is no evidence of firms seeking to upgrade their technology, whether in terms of equipment, saw-

doctoring and maintenance, or work practices. The low technology results in poor timber yield and quality. A few firms visited have moved downstream to use waste wood, and/or to add value, as a result of the ban on log exports.

Many of the firms have kiln-drying facilities, but technology is weak and performance handicapped by the drying of timber in mixed species and mixed dimensions as this prevents the optimum drying schedule from being used.

With the bans on the export of logs and of semi-finished products, there has been investment by firms in the Phuentsholing area in plywood and blockboard production. Firms have generally identified the technology required by using Indian consultants and by visiting similar production units in India. The time and cost involved in searching for and acquiring technology has exceeded expectations, as will be detailed below.

The most professional firms for the production of furniture are in Thimphu. Compared with firms in Phuentsholing, the premises of the firms visited are orderly, comparatively clean, and generally have relatively new equipment. Two newer firms in Thimphu were assisted by Woodcraft Center in terms of their layout and equipment specification. Furniture made by firms in Phuentsholing tended to be of inferior-quality.

Design skills are absent in Bhutan. Firms in Thimphu often use Danida-inspired designs, which are dated and lack Bhutanese character. In places, UNICEF designs have influenced the products made for schools. Overall, designs are very poor.

Firms prioritize their technology needs as follows:

- production assistance (in order of priority, machinery rehabilitation and maintenance, advice on new machines, visits to modern factories, visits to machinery fairs, kiln-drying, and machining);
- marketing (in order of priority, information on foreign markets, marketing techniques, study visits to foreign markets, promotional materials development);
- new product design; and
- management development (in order of priority, financial management, quality systems, business planning, computer training, and human resource development training).

However, while these subjects are important, more emphasis should be placed on sawmilling and kiln-drying, and in business development planning. Above all else, company bosses need to be made aware of the global environment in which they operate and to become familiar with best practice.

2. Costs and Competitiveness

The competitiveness of furniture firms is mainly affected by the cost of timber (typically 40-50 percent of ex-works price internationally); the cost of labor (15-20 percent internationally); productivity; and yield – the amount of the timber which ends up as an output from each stage of manufacture.

Raw materials. It is difficult to compare costs across countries precisely (internationally there can be a fourfold difference between the price of different qualities and grades of the same timber species), but

Bhutan is generally within the range of international competitiveness. Table 4.2 shows that Bhutanese hardwoods vary between US$65 and$102/m³, compared with international prices of US$126-238/m³. With teak, the price in Bhutan is US$127/m³, compared with international prices of US$522-1,695/m³. (cubic meters). In the case of conifers, on the other hand, Bhutan's prices are 12-15 percent more than those of Indonesia.

Table 4.2: Comparative Timber Log Prices

Country	Timber	US$/m³	Comments
Bhutan	Hardwoods (mixed species)	65	FDC auction prices (av. Jan.-Sept. 2001)
Bhutan	Hardwoods (Grade A)	102	FDC auction prices (av. Jan.-Sept. 2001)
Malaysia	Hardwoods (av. 6 species)	126	Sawmill quality; ex-log yard
West Africa	Hardwoods (av. 12 species)	163	FOB; sawmill quality
Indonesia	Hardwoods (av. various species/sizes)	238	Air-dried timber for construction industry
Bhutan	Hardwood: Teak	127	Firms' reported purchase price (2001)
Bangladesh	Hardwood: Teak (Chitagong)	522-696	Prices paid by furniture firms (Feb. 2001)
Myanmar	Hardwood: Teak	1,695	FOB; average price for Grades 1-4
Indonesia	Conifer (Pine)	80	Mill yard price
Bhutan	Conifer (mixed species)	90	FDC auction prices (av. Jan.-Sept. 2001)
Bhutan	Conifer (Blue Pine Grade A)	92	FDC auction prices (av. Jan.-Sept. 2001)

Sources: Tropical Timber Market Report, 16-30 Sept. 2001, International Tropical Timber Organization; FDC, Bhutan; Tyler Associates, Ireland.

There are variations in timber costs within Bhutan. In 2001, mixed hardwoods have, on average, varied from one region to another from Nu50 to Nu76/cft. Mixed conifers have been more consistent, varying from Nu85 to Nu100/cft. On top of the timber cost, trucking can be expensive – the price from Mongar to Phuentsholing is Nu65 per cft - and may exceed the value of the timber.

Labor costs. Bhutan is competitive with a range of countries, as detailed in Table 4.3. A machine operator in a furniture company costs about US$89 per month, while the cost is US$136 and US$156 in Bangladesh and the Philippines respectively. However, labor cost, as a percentage of the ex-works price, is high in Bhutan at 29 percent - nearly twice what is desirable to be internationally competitive.

Labor costs vary by district and by the background of the worker. In Thimphu, production workers are paid on average US$95 per month and labor accounts for 32 percent on the ex-works price of products. In Phuentsholing, they are paid US$55 per month and labor accounts for 20 percent of the product price. Much of the variation in wages per month is determined by the predominance of Indian workers in Phuentsholing. While the lower labor cost, as a percentage of ex-works price, is partly explained by the number of Indian workers and the number of comparatively capital-intensive board factories there.

In Thimphu, firms hiring Woodcraft-trained workers pay wages of US$100 per month, whereas other firms pay an average of US$83. Firms observe that these government-trained workers seek public-sector pay and conditions – insisting on government-mandated holidays – whereas non-Woodcraft Bhutanese workers demand half the holidays, and Indian workers one-third of the holidays. Output per worker in the 'Woodcraft-trained' firms is US$3,753 - little better than the overall national average - but in the 'non-Woodcraft' firms it is US$5,841.[18] When all the issues are considered, government-trained workers may not be more productive, though their work may be of better quality, because of a poor work ethic compared with other workers.

[18] These figures are based on a small sampling. Also the product lines vary with 'Woodcraft-trained' firms making Woodcraft-inspired designs, and the other firms making other types of furniture.

Table 4.3: Comparative Output and Costs Between Countries in Typical Firms

Country	Product lines	Output per worker per year (US$/yr.)	Labor cost as % of ex-works price	Cost of machine operator (US$/mo.)
Bhutan	Sawmills	3,654	22	59
Bhutan	Plywood; particle board; blockboard	8,692	13	58
Bhutan	Furniture	3,576	29	89
Bangladesh	Furniture	3,668	N/A	136
Jamaica	Furniture	10,500	25	350
Romania	Furniture	28,000	20	100
Philippines	Furniture	30,000	40 (a)	156
Ireland	Furniture	115,000	14	1,400

NOTES: (a) It is not uncommon for labor costs to be high in Philippine firms as they specialize in labor-intensive decorative techniques to add value and to differentiate their products from lower-cost countries.
Source: Firm interviews, Tyler Associates

Productivity. Productivity measured by the output per worker is low in Bhutan. As shown in Table 4.3, in furniture-making firms output is US$3,576 per worker per year – one of the lowest levels in like countries. In Bangladesh, for example, output is US$3,668 and, in general, there is less mechanization there. Some experts believe that an output of US$12,000 per worker per year is needed to export regionally and US$20,000 to export internationally.

Yield. It is difficult to measure yield (that is, the amount of useable timber which results from each stage of processing) from short visits to firms – this can vary significantly as shown in Table 4.4. In "best practice" countries, 34 percent of the tree trunk can be converted into finished products such as furniture and panel doors. In Ghana, for example, only 7-10 percent of the tree trunk may be recovered. In the few firms in Bhutan where the information provided seems to be plausible, yield may be 11-20 percent. The practice in Bhutan is to convert the waste into subsidiary products, a practice which will be further examined below. Yield is low because of poor equipment, poor work practices, and because traditionally the price of wood has been low and international competition lacking to force yield efficiencies on firms.

Output prices. Efficiency, if not competitiveness, can be measured by the price firms can achieve per unit of timber – this tests design and marketing as well as processing skills. Table 4.5 shows that as firms move downstream, the unit value of the timber increases significantly. At its extreme, a firm can obtain 100 times more for its timber if it makes key rings (US$27,000/m³) than if it makes rotary veneer (US$275/m³). At present, however, many Bhutanese firms have not been successful at moving downstream and are obtaining as little as US$348/m³ for furniture.[19]

Table 4.4: Comparative Timber Yield Figures

	Best practice	Ghana	Bhutan
Percentage of tree trunk going to sawmill	80	45-66	60
Percentage of tree trunk converted to finished products	34	7-10	11-20

Source: Ghana Country Economic Memorandum, World Bank, 2000; firm interviews, Bhutan.

[19] But examples in adding-value through timber selection, processing, design, and marketing are demonstrated in Bhutan. In the Thimphu Weekend Market, plain, new, turned-wooden bowls sell for prices ranging from US$3,492 to US$508,000/m³.

Table 4.5: Wood Exports from Ghana by Value (fob, US% per m^3) per Product Type, 1999 -2000

Rotary veneer	Mouldings	Joinery	Garden furniture parts	Sub-assemblies	Finished garden furniture	Handicrafts (carved key rings)
275	600	1,000	1,200	1,800	3,000	27,000

Critical success factors. There are, of course, a wide range of factors which have to be present for firms to be successful. Some of them are favorable – such as the import/export regime, the exchange rate, the availability and cost of utilities, and trade agreements with other countries. There are four critical success factors specific to Bhutan's wood sector.

Availability of preferred raw materials. Firms need access to good quality raw materials in species and sizes which suit the needs of the market and their technology and is available at predictable prices.

Supportive policy towards manufacturers. Government policy must be sympathetic to the needs of manufacturers. A leading industrialist described the attitude of government as follows: "the intention of government is favorable; the policy is not so healthy; and the application of policy is bad. And we want to avoid frequent policy changes."

Access to appropriate technology and labor. Technology needs upgrading in the sector, starting in saw-milling and working downstream. Firms are prepared to invest if the policy environment is appropriate and consistent. At the same time, they need skilled managers and labor at predictable wages.

Market-led production. Industry should be led by the needs of private-sector (particularly export) markets. At present, much of the market is determined by the government as (a) a buyer of wood products and (b) a major arbiter of what firms make – by the control of timber being sold into the market and restricting the export of certain products.

3. Impediments to growth

Impediments to growth include a lack of preferred raw materials; inappropriate policies; difficulties in obtaining technology and skilled labor; and a lack of market awareness and poor marketing skills.

Availability of preferred raw materials. The government's policy to restrict the export of logs and sawn timber was appropriate, but other actions of the government have not enabled industry and the economy to reap the benefits. The export restrictions signaled the industry to move downstream and add more value in Bhutan. However, firms cannot move downstream if they cannot get single species of timber (preferably in the right grade, size, and quantity) and cannot make what are called "semi-finished" products. Moving downstream is difficult – Ghana, for example, which has a log ban and wood-sector exports of US$180 million, has only one firm which is consistently exporting furniture.

At present, it is not uncommon for firms to buy lots in which one-third of the timber is good for the core business of the firm, one-third can be used in some capacity, and one-third is unwanted. As noted earlier, FDC sells timber in lots of mixed species for the following reason, "In whatever area we are given, we have to harvest the marked trees. We are just the contractors. The amount harvested is target driven, and consists of various qualities. We do not segment the species at the depot because of the cost, and what difference would it make? The users are not experienced and do not prefer certain species – they can

switch their taste within one month - in the wink of an eye.[20] Even after the hard work in segregating, there is no guarantee we will get the best price for the timber. What do you do about the rejects? It's hard to get approval from the Ministry of Agriculture to get rid of timber which industry has rejected."

Table 4.6 shows the outcome of this practice, examining a typical lot bought by a typical sawmill, what it paid, and the actual value to the firm. First, it should be pointed out that the firm wanted the lot, which was more valuable to the firm than other lots in the auction. The highlighted areas indicate the timber in the lot which the firm wanted, namely 302 cft out of a lot of 532 cft. The firm bought the lot for Nu67 per cft. However, it would have paid Nu80 - Nu130 for the timber it wanted, but only values the timber it does not want at Nu30 per cft. It could be argued that the firm did not lose much money in buying the lot if the lower and higher values to the firm are offset against each other – the firm paid Nu35,644, and estimates the actual value is Nu34,670. However, in addition, the firm has to pay up to Nu65/cft to transport the wood to its factory, where it might get only Nu110-170/cft for converting what wood it can recover from the unwanted logs into orange and apple boxes. The firm has an additional problem – its clients do not normally want the costly Champ wood, and it could take up to one year to sell it. Perhaps most importantly, obtaining a variety of species, grades, and sizes hampers specialization, which would help the firm achieve scale economies and facilitate technology transfer and an upgrading of skills. (Commonly, firms would pay 20-30 percent more if they could obtain timber that was more appropriate to their core product lines).

Table 4.6: Typical Timber Lot – Price Paid by Firm and Actual Value to Firm

Species	Grade	Smaller lengths (3'0" - 4'11")				Longer lengths (5'0" +)			
		Cft	Value to firm Nu/cft	Price paid at Nu67/cft	Actual value to firm	Cft	Value to firm Nu/cft	Price paid at Nu67/cft	Actual value to firm
Kaula	C	32	30	2,144	960	83	93	5,561	7,719
Dabdapey	C	113	30	7,571	3,390	137	93	9,179	12,741
Champ	A	15	130	1,005	1,950	0			
Paihely	E	17	30	1,139	510	22	30	1,474	660
Bongser	D	17	30	1,139	510	0			
B. Kaula	C	41	80	2,747	3,280	0			
Katush	C	0				29	30	1,943	870
Kapasy	A	0				26	80	1,742	2,080
Total		235		15,745	10,600	297		19,899	24,070

Source: Firm Twelve interview

It is not unusual for the wrong species, bad quality, and wrong sizes to put firms off altogether. One of the three biggest purchasers of auction timber stated that it might not buy an auction lot because 10 percent of the lot might be unusable. Another of the three noted that timber deteriorates the moment it is felled, and it is crucial to process it as soon as possible to optimize its value. It observed that FDC tried to sell the old timber first at auctions but because the new timber is not sold first, it too deteriorates before it is sold. It reports it has not bought any "new" timber in the past two years.

The policy introduced in 1999, envisages that if there are no local buyers after two auctions, the timber can be sold in an open, international auction. However, FDC has to obtain prior permission from the

[20] Interviewed firms, on the other hand, reported wanting a continuing supply of the same species so they could specialize.

Ministry of Agriculture. This permission may not be forthcoming, however. The FDC notes that there may be delays in getting the approval of the Ministry, and sometimes timber may be offered four or five times for sale. It is not unusual for there to be gluts in the market, when open international auctions are advisable at short notice to prevent further deterioration. For example, in May 2001, 70,000 cft of timber was offered for sale, but only 15,000 cft sold, and there was a need to sell the timber in international open auction. Sometimes, local firms try to buy the deteriorated mixed species, but later regret it. One of the biggest buyers, believed it could successfully buy such material and, in December 2000, bought 35,000 cft of timber at Nu27 per cft. It paid Nu30 per cft for transport – and when the timber arrived at the factory, it was found to be unsuitable.

Under the present policy, the private sector has to pay for everything that is sold in an auction lot – whether they want it all or not. This results in the private sector having extra costs, in addition to the transport costs, which they would not face if the auction system worked better. The present auction system is burdensome for the private sector because:

- Firms cannot concentrate on core product lines, which would enable them to focus their investment. They have to invest time and money in processing and/or selling their unwanted timber. The diversification which is being forced upon firms is hampering them from developing scale economies and exporting – which is crucial when the domestic market is so fragmented.

- Manufacturers have to be jacks-of-all-trades and cannot concentrate on upgrading worker skills that are specific to the firm. If they could specialize, worker skills could more easily be upgraded, and there would be less turnover of labor – as few firms would have a similar specialization and there would be less opportunity to "steal" workers trained elsewhere.

- Industry is being hampered in making good quality products. For example, each species of hardwood should have a different kiln-drying schedule so it does not warp and crack. However, as one of the biggest firms noted, it would take it one year to buy sufficient timber of a single species to fill the kiln under the present government policy. This is one of the reasons why hardwood products are of such poor quality and firms are moving to conifers and boosting the price, while the price of hardwoods is declining (Hardwoods are cheaper than conifers in Bhutan, although internationally hardwood may be three to four times more expensive, as shown in Table 4.2.

- The market is increasingly rejecting mixed species' products. For example, Indian buyers are insisting that the core of blockboard (a product which historically did not discriminate against mixed species) must be in a single species. India "no longer wants" multi-colored parquet flooring. All markets, except Bangladesh, are turning against fruit boxes made of wood – which has been the most common product for which unwanted wood has been used. If firms cannot sell their unwanted timber, the cost will be added to the cost of their primary products and render them uncompetitive.

It is reported that FDC is moving towards segregating timber at two depots, and this is welcomed. However, it will need adequate resources to achieve its aim.

Wood sector policy. The second impediment to growth is inappropriate government policy and procedures. Table 4.5 shows that the unit value of goods increases as firms move downstream, a process that was facilitated by the ban on the export of logs and sawn timber in January 1999. However, some 16 months later a ban was introduced on 'semi-finished" products. This has had a considerable negative impact on firms. For example, (a) firms invested in downstream activities after January 1999, but the ban

of semi-finished products adversely impacted the business in which they had recently invested; (b) firms often get experience making 'semi-finished' or secondary products before they make tertiary products, such as furniture – but the ban hampers this; and (c) the manufacture of secondary products – such as blockboard frames – enabled firms to use their unwanted wood but this is now restricted. These examples are developed further below.

Negating investments in downstream activities. The impact of the ban on semi-finished products' export is illustrated by the experience of one the largest plywood and blockboard making firms. With the earlier log ban, the firm diversified into the manufacture of flush and panel doors and made considerable investments. Later, the ban of semi-finished products was introduced and, as a consequence, the firm cannot export the frames of doors or windows, which are considered semi-finished products, although it can export doors and window casements. This has impacted severely on the market potential of a firm whose pioneering activities would have opened up opportunities for other Bhutanese followers.

Gaining experience in making secondary products. Making secondary products, such as picture-frame mouldings, floor boards, tongue-and-groove paneling, is vital in the process of moving downstream. First, the machinery may be a step up the technology ladder and new-technology skills are learned by the firm. Second, relatively large quantities of similar products are made which acquaint the manufacturer with scale economies. Third, skilling machine operators is comparatively easy as the work is repetitive. Fourth, once these steps are mastered, it is easier to move on to products with more added value, such as garden decking and furniture parts. The availability of single species is important in the making of secondary products. For example, broomsticks (though not banned) are a secondary product. At present, one firm that has exported them for over ten years can only get enough of the right species to produce up to 12 containers per year, while its international competitors can produce up to 200 containers per year per firm.

Secondary products may use unwanted timber. The sale of secondary, or semi-finished products, is important in the use of unwanted timber – for example, the processing and sale of off-cuts is one of the reasons why Brazil is internationally competitive in the export of pine beds.[21] However, in Bhutan some firms have had to close some of their businesses because the subsidiary products they made were considered semi-finished. In the case of a veneer exporter in East Bhutan, the larger pieces of veneer were eligible for export, but the smaller pieces of veneer made from the off-cuts were deemed semi-finished products. The market could not absorb the resultant price increase to the larger pieces when the export of the smaller ones was banned, so the firm closed. A firm in Phuentsholing closed four manufacturing units, including a veneer slicing plant, with a value of US$300,000 with the ban on semi-finished products' export. In Bhutan, firms report that valuable species suitable for veneer use, such as maple, are lying in the forest for up to nine months because of the low prices they would get at auction as a result of the ban. In Ghana, the average value of sliced veneer exports is US$891/m³ but, some firms prove the exception getting up to US$18,000/m³ with careful log selection and processing. Even assuming Bhutanese firms could obtain the lower figure for the veneer, it is higher in value per m³ than some firms are obtaining for furniture. One firm even reported that it could no longer export sawdust, which is considered a semi-finished product, and noted (a) the damage it causes to fish if dumped in the river; (b) the fire hazard if kept in the factory; and (c) the irritation to eyes caused by sawdust blowing around the factory.

Government policy (on labor, joint ventures, obtaining business licenses – and changes to policy) does not encourage the acquisition of technology necessary to move downstream, but industry is banned from exporting semi-finished products, which is the outcome of that policy. If technology acquisition and the

[21] Biggs et al., "Africa Can Compete, " World Bank, 1996.

marketing of semi-finished products was encouraged, firms would be more likely to move downstream successfully. The ban on semi-finished products may have prevented some smuggling of goods out of the country, but its unintended effects have harmed the development of the sector.

Stable and consistent policy. Several firms expressed a desire to invest in their businesses provided they could plan ahead with certainty. They lack confidence in a stable and consistent policy in view of the unexpected changes since 1999, during which time firms had to reorient themselves two, or more times. There is the belief that the financial institutions lack confidence in the sector because, with the changes, they are not clear on government's attitude to the sector.

Appropriate technology and staff. The third impediment to growth relates to obtaining appropriate technology and staff.

Appropriate technology. The ban on the export of logs and sawn timber required firms to adopt new technology as they sought to move downstream. Additionally, the ban on semi-finished products forced some of them to reorient themselves twice in 18 months. Firms are fortunate in their proximity to the Indian market – where they can undertake market research, hire consultants, and source machinery. However, there have been problems in acquiring technology. First, firms have to identify the products they want to make and search for the appropriate technology provider. Second, they acquire the technology, e.g., buying new machinery, which is then commissioned by the supplier and labor trained to use it. Third, they absorb, or internalize, the technology – using the equipment in everyday conditions once the equipment supplier has left. There are often complications throughout this process, and Bhutan is no exception - Table 4.7 shows that it takes up to 20 months for firms to acquire and absorb new technology.

Table 4.7: Time Taken for Technology to be Transferred to Bhutanese Firms (months)

Months	1-3	4-6	7-9	10-12	13-15	16-18	19-21
FIRM FOUR							
Technology search	x x x	x x x					
Technology acquisition (planned)			x › ›	› › ›			
Technology absorption (unplanned)							
FIRM ELEVEN							
Technology search	› › ›	› › :	x ›				
Technology acquisition (planned)			›	› › ›	: › ›	›	
Technology absorption (unplanned)						› ›	›
FIRM THIRTEEN							
Technology search	› › ›	› › :	x ›				
Technology acquisition (planned)			›	› › ›	:		
Technology absorption (unplanned)					› ›	› › ›	›

Source: Firm interviews

Larger firms, such as Firm Four in the table, are able to hire Indian marketing and production consultants to undertake market research and plan the new facility; they can identify and visit foreign factories to study different production techniques; machinery suppliers can suggest potential buyers; and, if near the Indian border, they can access labor. However, even in the case of this firm, the facility established is a pilot plant to test the market and uses old technology and available labor. To be internationally competitive, the firm wants to make a leap in technology – and to use technology and labor skills which are beyond the capacity of India to provide (as India liberalizes, firms need globally competitive

technology to compete with third-country manufacturers on the Indian market). However, with its experience of recent policy changes, the firm is hesitant to make the technology leap.

Smaller firms, such as Firm Eleven and Firm Thirteen, have difficulties in identifying appropriate markets, the technology they require, and in preparing business plans and accessing funds. It is more common with such firms for things to go wrong. In the case of both these firms, second-hand equipment was defective, additional machinery was needed, and unexpected alterations to premises may be required. Foreign engineers unexpectedly had to be hired by both firms to resolve their problems. In the case of Firm Thirteen, the acquisition of technology took over twice the time planned and the cost doubled. Meanwhile, at the time of planning, the price of timber was Nu70/cft, and within three months of starting production the price was Nu130/cft - jeopardizing the firm's market development activities.

BOX 4.2: FIRM ELEVEN'S ATTEMPTS TO SOURCE NEW MACHINERY

The firm was established in 1999 by a former government employee with no knowledge of the wood sector. When it started, it obtained information on machinery from the Woodcraft Center. Recently, it decided to manufacture mouldings for the construction industry. Learning that it needed to purchase a Weinig four-head moulder, it obtained a price of US$120,000 from the European manufacturer. The firm could not access the finance and was not sure whether the size of the market would justify the expenditure even if it could access finance.

When the World Bank wood-sector expert interviewed the firm and discovered this, he contacted a second-hand machinery supplier and within 24 hours had offers of a range of suitable Weinig machines from US$9,775 to US$28,750. Also he identified an independent technician who for US$500 would visit the machines to ensure they were in good order and would suit the needs of the Bhutanese firm. The firm is now considering the purchase of two additional different machines.

The wood sector, for optimum benefits, should upgrade its technology in primary processing (saw-milling), and gradually upgrade downstream processes. At present, the sector is the weakest in saw-milling with all mills working at low capacity. Since all the equipment is depreciated and premises freehold, too many firms remain in business. None of the mills visited can get sufficient throughput to justify new investment. Also, FDC's sawmilling activities add uncertainty. As a result, there is considerable inefficiency and downstream firms suffer. Due to these inefficiencies, some smaller downstream firms are investing in sawmilling equipment, thus reducing capacity in the sawmills further, and diverting the attention of downstream firms from their core business.

Labor and management. The absence of skilled labor is a commonly expressed problem. There are, however, some aspects which are particularly relevant to the wood sector. First, as much of the sector's output is bought by the government in which the contract goes to the lowest bidder, there is a tendency to hire the cheapest labor. Second, it is unrealistic for firms to skill labor if they do not have access to single species timbers and cannot export semi-finished products. Third, skilled woodworkers from the Woodcraft Center are too costly for many firms to hire, and there is a mismatch between the output of the Center and the needs of firms, as described in Box 4.1.

Productivity is low in firms, even where they have reasonable machinery, because of poor management as well as low labor skills. For example, in one of the better firms a cupboard takes one man 42 work-hours to make, whereas a European firm, given the same specification, estimated it would be made in 5.2 work-hours. Furniture firms and sawmills rarely have batch production so work becomes repetitive and more efficient. Consequently, they are unable to organize labor in the most effective way. As a result of poor management and a lack of production runs, there is little division of labor in firms (one firm held the view that, under a division of labor if something went wrong, the manager would not know whose fault it was). Consequently many workers are equally unskilled. If firms gained scale economies, a division of labor

could be introduced, training targeted at potentially competent employees, while the other workers become low-paid helpers.

Foreign investment. Bhutanese firms have already found that they need to upgrade their technology, management, and the labor skills if they are to compete internationally – even standard Indian technology and skills may be inadequate. This can either be done over many years using internal resources, or the process can be kick-started by encouraging foreign investment. Several firms report that joint-ventures interest them – some have made initial overtures to possible partners – but believe they are not allowed by government to pursue these. Many twilight practices are encouraged if foreign firms cannot enter into partnerships with Bhutanese firms, and the economy suffers many disadvantages and few benefits. If the right conditions were prevailing for foreign investment (policy consistency, flexible labor policy, and easier entry into Bhutan) foreign firms would be interested in the potentially favorable investment conditions in Bhutan. Two or three appropriate joint-ventures could lead to a renaissance in the wood sector and have considerable spillover effects into the economy.

Lack of market-led firms. Firms typically serve a small hinterland of walk-in clients or bid, in a reactive way, for government contracts. Relying on the government, the biggest buyer of wooden products, as a market is no help in raising standards to those required for export. Firms cannot one day supply goods of one quality for the local market and, another day, goods of export quality. As government contracts go to the lowest bidder, sawmilling, kiln-drying, and joinery skills are not put at a premium. Nor do clients seem to adequately quality-check goods to ensure they conform to specifications. Several firms noted their wish to make better standard products but their dependence on government contracts prevented this. They observed that it was better for business to supply products which lasted a few years, rather than to make better quality ones for a slightly higher price which would last a lifetime.

The dependence on a local market in which business goes to the lowest price and marketing skills do not attract a premium has meant that marketing is not practiced in many firms. Firms are not able to research markets and discover niches they could service. They cannot, for example, develop competitive advantages such as Bhutanese-inspired designs.[22] Identifying niches is important even for the exporters of boards. One end of the Indian market is being serviced by Indian "cottage industries" while the other end is being serviced by Southeast Asian and European imports. In such circumstances, Bhutan must position itself in a niche of the market in which such competition is minimal. In both these areas there are probably market niches – for example, knock-down, Bhutanese-style, low occasional tables selling on the U.S. market, and boards with exotic face veneers selling to contract buyers in India.

4. Potential

The potential of the sector is determined by the availability and cost of its inputs; its productivity; market demand for its products; and the ability to identify and service market demand.

Availability and cost of inputs. As noted earlier, timber costs represent 40-50 percent and labor 15-20 percent of the typical wood product. Timber is potentially available at the right price and, to a greater extent than at present, in the species, quantity, and sizes that firms require. In the case of hardwoods, Bhutanese prices are lower than those of international competitors – but quality has to be assured. On the other hand, softwood (pine) prices are slightly more expensive in Bhutan than in Indonesia though on the Indian market firms report that mixed conifers from New Zealand and Scandinavia cost Rs200 compared

[22] One of the firms surveyed, which was making Bhutanese-inspired furniture, was getting US$5,000 per cu.m. of timber – more than ten times what one producer of generic-style furniture was obtaining.

with Rs160-190 per cft for Bhutanese timber. Labor costs, particularly machine operator costs, are cheaper than in many other countries.

In the longer term, it will be necessary to get at least some of the forests and the management practices certified by an organization such as the Forestry Stewardship Council (FSC); otherwise, products will remain locked out of third-country markets. Certification will become increasing important in realizing the value of Bhutan's timber resource.

Productivity. Productivity is among the lowest in the region. Productivity is a function of management, the equipment used in firms, labor skills, and scale economies. Management could be improved if firms could access foreign managers and consultants at subsidized costs – and technology transfer mechanisms for this are available. These are not used in Bhutan at present. Production technology can be improved – firms are prepared to invest in equipment with consistent policy. The knowledge of what equipment to buy and where to buy it can be obtained by hiring foreign managers and consultants. With these improvements, labor skills could be upgraded. Scale economies can be developed if (a) semi-finished products can be exported and (b) firms become aware of market opportunities for volume-produced goods.

Market demand. There is a market demand in neighboring countries for wood products, although current market awareness and marketing skills are insufficient. Firms specializing in the construction sector note that the Indian construction industry is 60-70 percent dependent on imported timber and is increasingly being penetrated by imported products as a result of the opening up of Indian markets. In Bangladesh, where the market is sizeable compared with Bhutan and international trade is U.S. dollar based, timber is scarce, machine operators more expensive than in Bhutan, and firms are no more efficient than those in Bhutan. Looking at individual product categories, the potential is mixed at current performance levels as the following shows:

Particle board. There is increasing competition in India from European imports, but prospects in Bangladesh (the donor community), are good subject to satisfactory trade agreements.

Plywood. More competition is entering the Indian market from Southeast Asian and European suppliers, and there has been an increase in local cottage industries. Sales of typical Bhutanese exporters have declined significantly over the past three years – reportedly, due to unfavorable government policies. One firm reports that its plywood is twice as expensive as that of Indonesian and Malaysian firms in the Indian market.

Face veneers. At present, Bhutan imports face veneers but Indian firms would like to establish export firms in Bhutan, provided government regulations permit, signifying good potential for veneer manufacture.

Blockboard. Bhutanese blockboard is within the range of competitiveness. Bhutanese prices for 19mm blockboard are Rs385 per sqm, compared with prices in India which range from Rs150-450 per sqm. One firm, which set up a plant after the semi-finished products' ban, reports that its blockboard sells for slightly more than the Indian competitors, but is of better quality which is the key to market penetration. Market potential is being constrained, as observed earlier, by the increasing market requirement for single species cores.

Panel doors. Bhutanese panel doors and windows are competitive in India, though potential is hampered because the frames cannot be exported as they fall under the ban on semi-finished products' export.

Mouldings. Demand is high for mouldings, especially in Bangladesh, where firms specializing in mouldings have difficulty getting timber, and one leading firm has closed. However, presently exports from Bhutan are banned.

Furniture. Many firms see their best potential in the export of knock-down furniture. In the long term, there are prospects but currently all firms lack design and marketing skills and, almost without exception, production skills. Knock-down furniture requires production techniques which firms are incapable of at present.

Handicrafts. There is considerable market potential for the export of wooden handicrafts. Prospective distribution channels for traditional products include museum shops and Buddhist-supplies' vendors, while wooden containers have potential as packaging for food products using, for example, timber off cuts. Design and merchandising needs to be improved, but this can happen with the introduction of technology transfer mechanisms.

Policy and business environment. As noted elsewhere, the biggest constraint on potential is the policy environment. There can be no meaningful development without policy improvements and policy consistency. Once this is put right, other business environment issues are generally favorable. The trade regime, on the whole, is conducive to exports. For example, firms which truck goods to Mumbai report no transport problems. However, some details in the SAARC agreement – for example, particle board exported to Bangladesh is subject to the 765 tariff – may not be favorable to the wood sector; and trans-shipping of goods at borders is an unnecessary problem.

Conclusion. Bhutan has excellent prospects for developing its wood sector provided (a) adequate timber is harvested and made available in single species; (b) the export of semi-finished products is allowed; (c) conditions are favorable for firms to upgrade their technology and gain scale economies; (d) design talent can be accessed; and (e) marketing skills improve. Nearly all firms have looked to India for exports, but there may be more potential in Bangladesh in the short- to medium-term. Handicrafts have third-country potential. In the long-term, it is likely that bulky products, such as panel products, will be sold in neighboring countries, while smaller, more-downstream products will be sold in third-countries, e.g., the United States and Japan, in addition to some regional market sales..

5. Recommendations for the Sector

The following recommendations are proposed in areas of concern to private-sector manufacturing industry and do not consider forestry policy and policy implementation – such as the rollout of more FMUs to increase the supply of timber, which is important but beyond the scope of this chapter.

Availability of preferred raw materials

The role of Forestry Development Corporation (FDC). The government should examine and regularize the FDC's contradictory roles as both an agent for the Ministry of Agriculture's forestry policy and, at the same time, an agent in the development of the manufacturing industry.

Facilitating industry's timber needs. The Ministry of Agriculture and FDC should make available, through auction to industry, the preferred species, grades, and sizes of timber in single-species lots. This should be supported by (a) auditing industry on a regular basis to identify the species, sizes, and grades of timber it requires for value-adding production; (b) minimizing the time taken from felling to auction; and

(c) informing industry in advance of the species/grades/sizes that are likely to be made available for auction, so that firms can do medium-term planning.[23]

Giving FDC the tools it needs. FDC should be empowered in its work by (a) introducing electronic systems to help audit the needs of industry and to disseminate information on auctions to local and international buyers; (b) providing the equipment and human resources to make its auctioning more efficient; and (c) permitting it to speedily dispose of timber (in international open auctions or by other means without the Ministry of Agriculture delaying the process) that does not serve the value-adding needs of local industry..

It is suboptimal for FDC to introduce new "recommended" practices if it does not have the resources to implement them. It is inadvisable to implement some of the recommended practices and not others. Therefore, it may be preferable to introduce new practices in pilot areas/depots to minimize cost. Any pilot implementation should be monitored, cost-benefit studies undertaken, practices modified as necessary, and the pilot scheme rolled out when proven. The government should seek external funding where necessary to implement the raw materials' recommendations.

Supportive policy towards manufacturers

Planned, phased, and consistent policy. The government should recognize that firms need to look up to ten years ahead when planning their activities, and that financial institutions need to be sure that their risks will not be unreasonably affected by changes in government policy. Policy changes need to be introduced in a planned and phased manner with advance consultation with relevant parties. The activities of all the government agencies dealing with the wood sector – whether as suppliers of timber or as end users of timber – should be coordinated. For example, there should be coordination between the Ministry of Agriculture and the Ministry of Trade. The impact of construction projects and government procurement on the manufacturing industry – the responsibility of several ministries – should be forecast and relevant parties appraised.

Removing the semi-finished products' ban. The government should modify the ban on semi-finished products and recognize the importance of semi-finished products as a source of income for manufacturers; as a vehicle to introduce new technology and upgrade worker skills; and as a means to develop marketing skills and penetrate foreign markets. The government should investigate and introduce other measures to control the export of unprocessed and primary-processed products –such as improved monitoring of timber movements – rather than by banning semi-finished products.

Trade agreements. Regulations in bi-lateral and regional trade agreements that hamper the export of value-added products should be renegotiated, and the haulage of goods across borders should be simplified to reduce delays, damage to goods, and unnecessary costs.

FDC sawmills. The government should also consider privatizing the FDC sawmills as the public sector should be seeking to withdraw from activities which can be better undertaken by the private sector. The FDC sawmills may, in fact, be impeding the inflow of private investment into sawmilling.

Government purchasing. Government should introduce measures whereby quality is given a premium in the awarding of contracts to industry and which would encourage factory-based, rather than construction-site-based, processing of building products. In the case of the former, independent monitors could

[23] FDC believes it could make medium-term information available based on the Forest Management Unit (FMU) plans.

annually rank approved contractors and award them points for quality and, for example, after-sales service. These points could be translated into a price premium when contractors bid for government contracts.

Dialogue between industry and government. Increased emphasis should be placed on dialogue between government and the private sector. The establishment of a wood-sector association has been a substantial step forward. It is recommended that the association concentrates on a few key issues for a specific period when lobbying government – and that these are supported by all interests – too often different tiers in industry have different priorities, are divided, and less is achieved.

Forestry certification. The forestry department should become aware of, and plan to introduce over time the measures needed for forests to become certified by organizations such as the FSC. The prospect of certification would be valuable in attracting FDI and would, in the longer term, assist manufacturers in penetrating third-country markets.

Access to appropriate technology and labor

Technology transfer mechanisms/incentives. The government should encourage the private sector to acquire technology, competent management, and skill its labor by providing and/or supporting technology transfer incentives and mechanisms. These could include matching grant schemes; the use of retired executive schemes; the hire of skilled foreign staff; and foreign direct investment. Eligible activities could include production, marketing, design, management, joint-venture development, training, and business association development. Emphasis should be on primary processing (sawmilling and kiln-drying). Process-specific training should be fostered, especially short-term courses on individual topics to individual firms or groups of similar firms. These mechanisms could be supported by one, or more of the following: the World Bank (which has supported matching-grant schemes in many other countries); tax breaks; and incentives funded by, for example, a levy on auction sales.

Immigration. Immigration regulations should be eased to facilitate the entry into Bhutan of foreign buyers and technology providers.

CHAPTER FIVE
THE TOURISM SECTOR IN BHUTAN

1. Present Situation

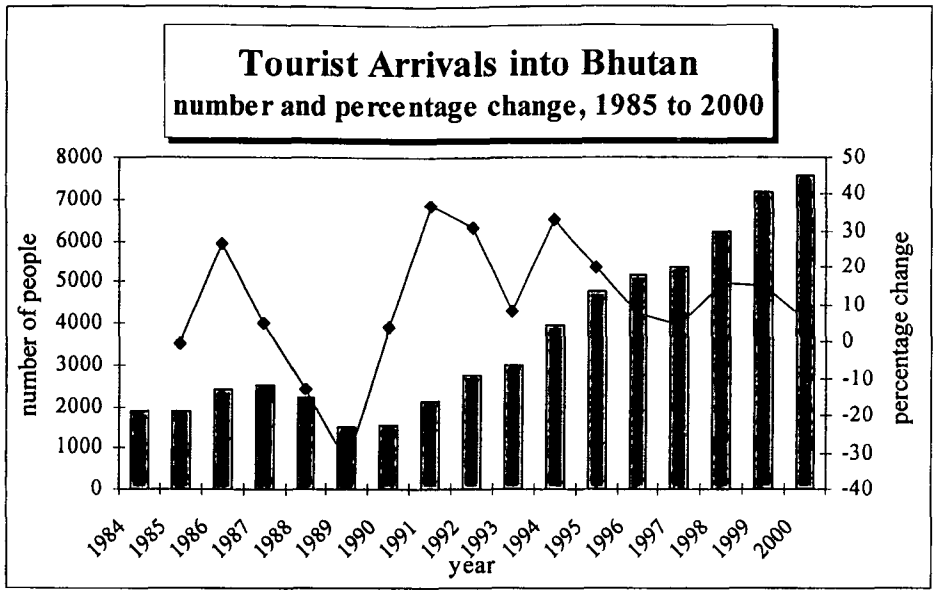
Background. Tourism is a sector with important earnings potential for the Bhutanese economy. With a pristine environment, nature parks with rare and endangered species, high mountains, excellent trekking routes, a culture that is considered both rich and unique, as well as the natural warmth and friendliness of the Bhutanese people – Bhutan represents a unique tourism product. However, development of the sector has always been – and will continue to be – developed with an eye to a high-end tourism market. This focus on low numbers of high-paying tourists is dictated by several factors. Most important is the country's desire to ensure that Bhutan's unique and delicate cultural heritage is not overpowered by large numbers of visitors entering the country – overwhelming and even "polluting" this nation, which has only recently begun to cautiously open up to the outside world. The Nepali experience of reasonably unregulated "backpacking" tourism is not a model that the Government of Bhutan wishes to pursue. Second, facilities and services (hotels, airline services, roads) in Bhutan are limited and cannot cater to a large number of tourists coming into the country.

Bhutanese tourism began only around 1974 when several lodges were built for foreign dignitaries who came into Bhutan for the new King's coronation. Tourism was given a boost in 1988 when Druk Air – the national airline – commenced its jet plane operation. Prior to this all incoming tourists had to travel into the country by road. Until 1991, Bhutan had only one tourism operator – the Bhutan Tourism Corporation – which was privatized in that year and the market freed up to other private-sector competition. At the time, 35 companies applied for tourism licenses and, after the cancellation of two licenses, 33 companies operated the sector throughout most of the 1990s. A further liberalization took place in January 1999, when a more lenient attitude toward entry was adopted with the dropping of a prior requirement that tour operators provide a bank guarantee of Nu100,000 (a proviso intended to ensure that only serious operators received a license). The market currently operates with around 75 domestic tour operators – not all of whom are active players in the market – only a handful of which are of any real size. (Annex Eight shows tourist arrivals by tour operator.)

Growth of Tourism in Bhutan. As a result of the above policies, as well as other factors, Bhutan receives only a very limited number of tourists. In 2000, a record year, 7,559 tourists came into Bhutan by air and a further 13,000 came into the country by road from India. Despite this very low number, it represents a continuous rapid increase in tourist arrivals over the decade with an average annual rate of increase of over 17 percent in entrants by air for the ten-year period – albeit from a very low base. Growth rates have, however, fluctuated widely over this period varying from 4 percent in 1997 to 36 percent in 1991. Chart 5.1 shows tourist arrivals over the period 1984 - 2000, while Annex Nine shows arrivals by year and by month.

Despite the increase in tourism most hotels remain small and underused. There are an estimated 560 hotel rooms in the country, and this should permit 204,400 room nights to be sold per annum. By comparison, in 1997, 5,363 tourists spent an average of 7 nights each resulting in 37,000 room nights maximum, assuming that each tourist stayed in a separate room. Even with this unrealistic assumption, occupancy levels were below 20 percent against an industry benchmark of 60 percent.

Chart 5.1



Anecdotally, the profile of a tourist entering Bhutan has tended to be a professional or a retiree. Staff of the Department of Tourism, however, believe that this profile is slowly changing to that of a "family" tourist. Although relative rankings have changed over time, tourists from Europe, the United States, and Japan (in that order) tend to be most important for Bhutan. In 2000, for example, Europeans made up 38 percent of all tourists (Germans 8.8 percent; British 7.9 percent; French 5.3 percent; Dutch 4.7 percent; and Italians 2.1 percent); Americans made up 36 percent; and Japanese made up almost 12 percent. Americans tend to stay for longer periods while Japanese stay for shorter periods. A table showing a breakdown of tourist arrivals by nationality is given in Annex Seven. Repeat tourism is apparently low – possibly a consequence of the high cost of traveling to Bhutan and the relatively low quality of tourism service provided (one recent study states that the average hotel in Bhutan "would struggle to reach 2-star status"). Thus, value for money is poor.

Recent developments. A recent and important development has been the approval of two new joint ventures in the Bhutan hotel industry. In a first for the country, the foreign owners (both based out of Singapore) will be permitted to hold a majority 60 percent shareholding in the Bhutanese operation. Of the remaining 40 percent shareholding, a minimum of 10 percent will be sold on the local stock exchange and the remaining shares will be sold to a local promoter. Both groups are currently involved in hotel chains within Asia and are expected to provide a high-cost, high-quality service in a chain of hotels across the country (in locations including Thimphu, Paro, Phunaka, Trongsa, and Bumthang). This exciting new Foreign Direct Investment may well have a considerable impact in terms of raising international tourism standards in Bhutan (30 recent employees who will work in the new hotels are already undergoing hotel training in Singapore) and shaking up the local industry. The hotels are anticipated to commence operations during the ninth plan period.

The tourism sector is overseen by a Tourism Development Committee, which is chaired by the Minister of Trade and Industry. This multisectoral committee includes representatives of the Finance Ministry, the Home Ministry, and representation from the private sector – reflecting the importance of the sector to the economy. A Tourism Development Fund also exists, which is a one time $10 charge on tourists. This Fund is managed by the Department of Tourism and is used for the development of public goods within the industry. The Ministry also provides training facilities in, *inter alia,* trekking, tourist guides, and cooking.

The Department of Tourism within the Ministry of Trade and Industry is currently working on a draft Tourism Policy which is anticipated to be completed in early 2002. A Tourism Master Plan is expected to be ready in time for the Ninth Five-Year Plan. A challenge for Bhutan will be to define a balanced national policy. This policy should allow for a modest increase in tourist numbers up to the level of total available bedroom capacity (currently 560 rooms) – throughout the year – rather than the current annual occupancy levels of around 20 percent. To achieve this goal, promotion campaigns will be essential to increase the level of business, particularly during the low season.

Legal environment. As the tourism industry was only established less than 30 years ago, to date, no formal laws have been enacted to regulate the sector. This poses some advantages in terms of flexibility. However, over the longer term, it is desirable that a comprehensive set of laws governing tourism should be put in place. There are many good legal precedents available from other countries, which could be researched via the World Tourism Organization. The outline of a regulatory system does, however, exist which could provide a partial basis for future laws.

The regulations currently in force include:

1. *Trekking in Bhutan Regulations, 1996* – in which the conditions specified are reasonable and provide a good approach to protecting the environment.

2. *Bhutan Filming Regulations, 1995* – these rules are very restrictive and antipromotional in tone. The conditions positively discourage visits by overseas film and television companies. This is in stark contrast to most other tourist destinations, which are adopting the opposite policy.

3. *Rules for Familiarization* – visits by Overseas Travel Agencies, 2000 – these rules are restrictive and also need to be liberalized. In addition to owners, travel agency counter staff should be encouraged to visit Bhutan. Groups of up to 20 persons, including travel writers, should be encouraged to visit at the same time.

4. *Bhutan Tour Handlers* – in recent years rules for the issue of licenses have been greatly relaxed. The result is that there is now a proliferation of tour operators relative to the volume of business (31 operators managed between 40 and 1,322 customers each, while 45 operators looked after between 0 and 40 clients). A case now exists for halting future license applications and encouraging a number of the smaller tour handlers to merge, thus saving on overheads and increasing profitability.

Employment. In common with the rest of the private sector in Bhutan, the tourism trade is not organized or structured from the perspective of either the employers or the employees. The employment situation in the hotel sector is shown in Table 5.1:

Table 5.1 Employment in the Tourism Sector

Type of Staff	Numbers Employed
General Staff	678
Skilled Workers	612
Unskilled Workers	135
Total	1,425

Data on other tourism activities is not available. Trade unions do not exist and hoteliers are not yet fully organized. Nonetheless, informal discussions with hotel owners and tour handlers indicate the following:

1) the industry operates with a very low wage base (a chef earns US$0.83 per hour and a porter earns US$0.14);
2) staff operate with very long working hours (13 hours per day, 6 days per week);
3) there is an over reliance on untrained staff;
4) there is virtually no formal training and most training takes place on the job;
5) senior staff training is confined to short-term overseas courses;
6) the establishment of more formal training facilities based in Bhutan is generally considered highly desirable;
7) there is a reluctance on the part of many Bhutanese workers to undertake menial type work, such as cleaning;
8) there is a consequent over reliance on Indian workers – who are prepared to work for minimal wages and who undertake menial tasks; and
9) government policy is directed at reducing the number of such immigrant workers.

Contribution to the economy. Tourism receipts and royalty payments to the government are important sources of revenue for the country and the government budget. Gross foreign exchange earnings from tourism in 2000, at US$10.5 million – were 18 percent higher than the previous year – the approximate rate of growth in gross earnings experienced from tourism over the entire decade of the 1990s. This level of foreign exchange earnings makes tourism Bhutan's most important source of hard currency foreign exchange receipts from goods and services exports. (Electricity, which is a larger earner of foreign exchange, is sold in rupees which are not considered a hard currency; and donor receipts are a significantly larger source of hard currency resources.) These receipts, however, do not include other important sources of hard currency earnings from tourism including the airfares to Druk Airlines and expenditures by tourists once they are in the country (handicrafts, drinks, souvenirs, and so on). It is estimated that the inclusion of these additional tourism receipts may almost double the amount of hard currency earnings from this source. In other countries of a similar scale to Bhutan, tourist spending on souvenirs commonly exceeds 10 percent of gross earnings.

The government's royalty share of these receipts were $4.1 million in 2000, purportedly making it the fourth largest source of domestic revenue for the government after Chukka Hydro Power; the Department of Power; and Telecommunications. Government receipts from tourism have been increasing at an even faster rate than hard currency earnings – rising by 33 percent per annum, on average, over the nine-year period between 1991 and 2000. The government's share in gross earnings from tourism have also been slowly increasing and currently stand at around 40 percent of these direct earnings from the sector. Movements in arrivals, gross earnings, and government revenue from tourism over the 1990s is shown in Table 5.2.

It should be noted that these numbers – tourist arrivals and earnings from tourists – do not include Indian tourists. Indians can enter Bhutan without a visa; there is little control over their entry, and it is also difficult to collect data on or differentiate between Indians who visit Bhutan for tourism purposes and the large number of Indians who enter Bhutan daily for other reasons (such as work). The Department of Tourism has no data (although it estimates that the number of arrivals may be as high as 13,000 per annum) on what the financial contribution of Indians to the tourism industry may be.

Current government policy. One of the key policy measures is the government's tourism pricing policy. Bhutan maintains a low level of high-end tourism by imposing a high entry price. Tourists coming into the country must spend (upfront) US$200 per day during the peak season (February, March, April and September, October, November) and US$165 per day in the remaining "lean season" months.

Tour operators are required to give the Royal Monetary Authority (the central bank) with 80 percent of these funds (US$180 and US$132 per day per tourist), which is exchanged for its ngultrum equivalent, the remaining 20 percent is used to pay the foreign tour operator. These funds can be charged against meals, internal transport, accommodation, and guides. However, it does not include travel to and from Bhutan, the cost of alcohol within Bhutan, and any shopping and personal expenses. The differential pricing policy was reintroduced in 1999 – but the Department of Tourism feels that tourism demand is not all that elastic in Bhutan, and hence the differential pricing policy has not induced many additional tourists to come during the lean season and thereby iron out the intense seasonality in tourism arrivals.

Table 5.2: Tourism Arrivals, Gross Earnings, and Government Revenue, 1999 to 2000

Year	Total arrivals	Gross earnings (US$ million)	Government revenue (US$ million)	Share of government revenue to gross earnings (%)
1990	1,538	1.91		
1991	2,106	1.99	0.31	15.65%
1992	2,748	2.97	0.98	33.10%
1993	2,984	3.23	1.13	34.99%
1994	3,971	3.97	1.39	35.00%
1995	4,765	5.83	2.04	34.98%
1996	5,138	6.52	2.32	35.64%
1997	5,363	6.55	2.48	37.80%
1998	6,203	7.98	3.02	37.83%
1999	7,158	8.88	3.46	38.96%
2000	7,559	10.50	4.10	39.05%

Source: Department of Tourism, Ministry of Trade and Industry, Thimphu

This lack of elasticity, however, may also result from the small differential in price offered between the two seasons plus the government's policy of receiving a $65 royalty from every "peak season" tourist and $63 from every "lean season" tourist. As some tour operators are suspected of passing along packages at prices lower than the advertised rates ($200 and $165), it is the compulsory payment (the royalty paid to government) which may well be the more binding constraint. To this end the Department of Tourism has recently recommended a reduction in the government royalty for "lean season" tourists from $63 to $55.

For the future, the government could consider three possible options for pricing policy:

1. No change in the present arrangements;
2. The total liberalization of the market, making access to Bhutan the same as any other destination (visa and passport only required), as well as open choice of travel routes, hotels and meals;
3. Compromise - modification of current arrangements.

The choice involves complex economic, cultural, and social issues – both positive and negative. It is recommended that a special commission, including both public and private sectors and an internationally recognized tourism expert who is nominated by the World Tourism Organization, should be established. This commission should be given the task of researching the issue and coming up with recommendations for decision by government. The aim should be to maintain the high-value/low-volume approach, maximizing revenues from tourism, yet also seeking to ensure reduced seasonality to achieve these goals.

Evolving government policy. Government policy on tourism is currently at an important phase of evolution. The overall situation is controlled by regulations – such as Rules & Regulations for Tour Operations, 1999 – as well as by precedent. The Department of Tourism recently prepared an important document on the tourism sector, and, at a later date, the intention is to enact specific legislation dealing in detail with all aspects of the tourism industry. Current government policy is defined in the Rules and Regulations for Tour Operations, 1999, as follows:

> *"While tourism operations have been liberalized consistent with the overall objective of strengthening the private sector, sustainable tourism development based on high value - low volume shall remain the guiding principle for all future tourism policies."*

The tourism sector document contains a useful list of the issues that need to be tackled to put Bhutanese tourism on a more sound footing. This report contains a situational analysis as well as areas of concern to the Department of Tourism. It focuses on problems such as the lack of new products (new trek routes); the extreme seasonality of tourism in Bhutan; the lack of private sector investment (especially in the east); a lack of community participation; low and uneven standards of tourist accommodation; and a lack of clear policy guidelines and other related legislation. In response to these shortcomings, the document seeks to develop a vision and mission for the sector with well-defined strategies and programs for its future development. It then focuses on institutional capacity building, skills development, the development and maintenance of infrastructure, and information and publicity.

However, the approach adopted is somewhat abstract and lacks specificity. Following consultation with interested parties, a suggested (more direct strategy) would be to make the report more detailed and specific by presenting it in a new and expanded format, which would: describe necessary actions; provide a timescale for implementation, as well as estimated costs; allocate personal responsibility for actions; and incorporate reporting and centralized monitoring systems.

2. Costs and competitiveness

International comparisons. Bhutan does not compete for tourist business on the basis of cost. In effect it is a special niche market of great appeal to particular clients who are seeking a unique holiday experience. Costs are quoted below compared with costs for similar remote locations elsewhere in the same region. These figures (obtained from travel agents) are for a seven-day visit, sharing a twin room, inclusive of all meals, transport services, guide, etc., but excluding air fare.

Table 5.3 Comparative Cost of a Seven-Day Tourism Package to Five Countries (2001)

Location	Approximate Charge
Bhutan	$1,260
Nepal	$ 546
Cambodia	$ 615
India	$ 755
Laos	$ 960

Cost structure of the industry. Despite the relatively low wage levels, reasonably cheap food costs, and reasonably high room and food charges – most hotels in Bhutan either lose money or only just break even. The primary reasons for this is the low occupancy rates in hotels, which averages no more than 20

percent annually. The largest tour handlers, on the other hand appear to be quite profitable because of their ability to operate with low overheads and a minimum level of capital investment.

Distribution of tourism revenue. The data quoted in Table 5.4, collected from various tour operators, is indicative of the distribution of tourism revenue rather than being completely accurate, due to assumptions that had to be made. The basis of the calculation was as follows: (a) individual purchases of an all-inclusive Bhutan Holiday from an overseas retail travel agent, based in Bangkok; (b) high season; (c) group size of eight persons; and (d) couples sharing a room. The total cost for a seven-day visit was US$2,040, broken down as follows:

Table 5.4: Cost of a Seven Day Visit to Bhutan

Cost component	Percent	US dollars
Air ticket Druk Air (Bangkok-Paro return)	38.2	779.28
Tour guide and transport	3.0	61.20
Meals	6.6	134.64
Hotel	13.1	267.24
Government Royalty	22.3	454.92
Bhutan Sales Tax	2.2	44.88
Tourism Development Fund	0.5	10.20
Other costs, including tour operator's profit	14.1	287.64
Total	100.0	2,040.00

The government collects a high proportion of total revenue – 24.5 percent from royalties and Bhutan sales tax. This is in addition to 38.2 percent collected indirectly from Druk Air, the state-owned airline. In the longer-term interests of the tourism industry, the government should be encouraged to calibrate the levy, which it charges to ensure higher hotel occupancy throughout the year, and invest some of the funds earned from tourism in marketing and product improvement.

Critical success factors. The competitiveness of Bhutan's tourism sector is determined by a number of critical success factors, which include the reputation of the country; access to the country; the accommodation available and its standard; visitor attractions; and the development of synergies between the various elements of private-sector development policy. An assessment of Bhutan's strengths, weaknesses, opportunities, and threats is contained in Annex Five, and the results of a small visitor survey, which was undertaken as part of this report, is provided in Annex Six.

Reputation of the country. Many potential tourists, even well-traveled professionals, are unaware of Bhutan's location or its features. In addition, the reputation of a country is not only dependent on its own efforts, but is also affected by events in countries which are in the same general region. This is confirmed by events surrounding the 2001 World Travel Market – see Box 5.1.

The government of Bhutan, understandably, views large-scale tourism as a threat to its culture. For this reason a generally low-key approach has been adopted to marketing – in line with the government's policy of "low volume/high value tourism." Bhutan relies almost exclusively on the efforts of overseas retail travel agents to create tourist business for the country. Table 5.5 shows how the various markets are served.

Bhutanese tour handlers make contact with these agents at tourism trade fairs held annually in London and elsewhere. Their efforts are also assisted by the Department of Tourism and the Bhutanese Tour Operators Association, who contribute towards travel costs and the leasing of stand space. The relatively

low occupancy rates quoted by hotel owners, approximately 70 percent in high season and 30 percent in low season, and the possibility of routing more tourists via land entry points (due to limitations of Paro airport), suggest that a well-organized, focused marketing campaign could increase the level of business to near maximum current capacity.

Table 5.5: Location of Overseas Travel Agents

Location	Number of Agents
Australia	1
U.S. and Canada	10
Britain	8
Germany	2
Other European	4

Source: Lonely Planet Guide

BOX 5.1: 2002 – AN APPROPRIATE YEAR FOR PUBLIC-PRIVATE SECTOR COOPERATION IN MARKETING

This chapter highlights the importance of marketing – an area in many countries where there is often cooperation between the government and the private sector. For example, at the World Travel Market (WTM) in London, one of the sector's leading showcases, it is common for private-sector operators to exhibit on "national space" which has been coordinated, if not partly funded by, the exhibitors' government. Surveyed firms lamented that the Bhutanese government does not go along with this practice to the same level as competing countries – particularly in view of the income the government earns from the sector.

Bhutanese private-sector firms that were represented at WTM in November 2001, considered the show a good opportunity for the government to "fly the flag." Especially to capture market share from other countries in the region where political events have had a negative impact on business – and where market-based tour operators specializing in countries along the Himalayan Chain are looking for opportunities to fill gaps in their product offering caused by unrest in their core countries.

The views of the private sector are supported by international tourism specialists at the WTM who opine that at times of difficulty in the trade, it is essential for governments to support their private sector. They confirm that 2001 was just such an occasion with the economic downturn in Europe and the United States accentuated by more recent political conflicts. They note the need for general image building in the context of the scanty public perception of the region with confusion over the location of Bhutan, Kashmir, Afghanistan, and Nepal. They cite the response in other countries, such as Ireland, where the government allocated an additional US$11.0 million for marketing, recognizing that 2002 will be a "very challenging year for tourism."

Access to Bhutan. As mentioned elsewhere, access to Bhutan, particularly for third-country visitors, is limited. Since access by air is restricted, it is important that the tourist season is spread more evenly throughout the year to optimize limited air travel resources. Several measures could be taken to spread the season, such as researching patterns of tourism in similar destinations to identify how these countries spread the market; identifying what features are present in Bhutan in the low season and promoting these features to specialized interest groups – including ornithologists, Tibetan medicine devotees, Buddhist devotees, and so on.

Accommodation. Standards of accommodation, as discussed further below, are generally poor – particularly for high-priced tourism. While it is important to improve standards (as the new FDI-

supported hotels will do), there are ways in which more basic accommodation could be made a feature of Themed Holidays – whereby tourists traveling to different parts of the country could stay in more rustic accommodation and eat food traditional to that area. Furthermore, if hotels have poor physical amenities, greater effort should be made to upgrade standards of service in compensation.

Visitor attractions. The main focus of activity in Bhutan is on outdoor pursuits, such as trekking, touring, and cultural events. However, more complementary activities are increasingly becoming available, all of which enhance the visitor experience and greatly improve the prospects for low-season tourism. These include museums, craft shops, historic monuments, as well as music/dance training institutions and open air markets. Further new product development – such as developing a monastery as a tourism showcase, establishing a one-stop Bhutan Experience Center, and so on – should be a continuing activity to increase current tourist levels and help secure repeat visits.

Synergy. Bhutan has limited resources to develop its industry, whether the industry is tourism or manufacturing. It is important that synergies be sought between the different elements of private-sector development – so activities in one area leverage opportunities in another area. For example, former tourists could become buyers of Bhutan's niche exports, wooden products could be developed as souvenirs including packaging for agro-processed products.[24]

3. Impediments to Growth

While big advances have been made in developing the sector in recent years, there are several impediments to growth such as seasonality of the market; access to Bhutan; tourism infrastructure; and standards of accommodation. In addition, the proposed new structure of the Department of Tourism itself could stimulate, or constrain, tourism development.

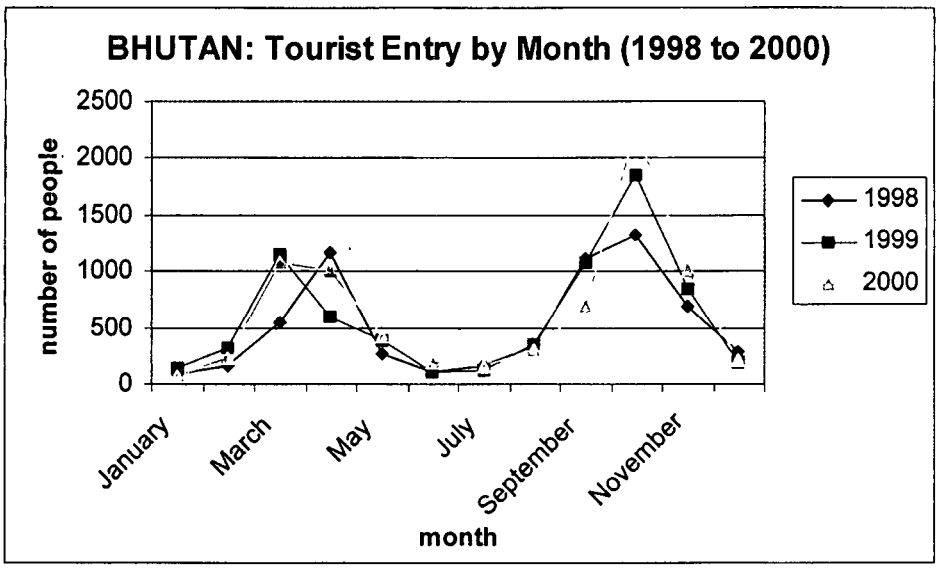
Seasonality of the market. The two main seasons are in the spring from March to May and in the autumn from September to November. This seasonality coincides with important festivals in Paro in the spring (March); Thimphu and Wangdi in late September/early October; and Bumthang in November. Chart 5.2 below, which indicates tourist arrivals on a monthly basis, shows the extremely bimodal pattern of tourist entry over the year. This pattern is further exacerbated by the advent of the monsoons over the period June through August and the colder weather in the Himalayas from December through February. A final contributing factor to seasonality is that Bhutanese tourism is often sold as a package in conjunction with visits to India and Nepal ,and the tour operators in these two countries have traditionally targeted European and North American tourists for these spring and fall periods. Hence, to some extent Bhutan, with its limited outreach in selling its tourism services, is at the mercy of the tour operators in these two neighboring countries.

Access to Bhutan. Access is complicated by the fact that Druk Air (the national airline) is the only carrier flying into the country. The authorities claim that it is not their intention to exclude other carriers from flying into Bhutan, but that there is very little interest from regional or other carriers. This is due to the intense seasonality of passenger traffic, the need for special planes to negotiate the landing strip in Paro, and the perceived lack of commercial viability of such a route. Currently, access has been complicated further by the fact that Druk Air, which normally operates with two airplanes, has had one of its planes out of commission for over a year. Hence, in September 2001, there was only one 75-seat airplane servicing the country. This is not a problem during six months of the year – but during the tourist season Druk Air can hardly handle the level of passenger capacity required of it. This has led to delays and other inconveniences for tourists, which can damage Bhutan's reputation as a tourist

[24] Although a specialist field, wooden handicrafts valued at US$11.5 million are sold to tourists in the Caribbean each year.

destination. During the spring 2001 season, Druk Air chartered Buddha Air (a Nepali domestic private airline) to fly their 19-seat aircraft into Bhutan to help relieve the pressure on Druk. Greater use of external airlines to service the routes during the high season periods may well be one method of relieving the access problems currently created by Druk Airlines' limited seating capacity. This may, however, be complicated by the fact that the high season in countries such as Nepal, where the additional airline seat capacity is most likely to originate, is also likely to coincide with the high season in Bhutan – thus potentially limiting their ability to service additional routes over this busy period.

Chart 5.2



Druk Air intends to purchase new aircraft in the foreseeable future – with a substantial impact on the country's holdings of foreign exchange reserves (the estimated cost of the two new aircraft is US$35 million against foreign exchange reserves of around $300 million – or over 10 percent). It is telling to note that Druk Air, which traditionally has operated at a loss, is reported to have done better financially over the past 12 months when it has been operating with only one, as opposed to two, aircraft. Lastly, it is noted that Druk Air operates with what is known as the "Druk Air Paradox" in that its busiest flying times coincide with some of the worst periods of unpredictable weather – making flying into Paro (which can only be undertaken visually) a particularly difficult task.

Infrastructure for tourism. The quality of a country's infrastructure also has a profound effect on the manner in which a country's economy and tourist industry develops. The following is a brief synopsis of the main infrastructural impediments to tourism development in Bhutan.

Roads, main and secondary – the engineering challenges involved in the construction and maintenance of Bhutan's roads are formidable, due mainly to the country's terrain. Upgrading these roads will take many years and substantial financial resources. The courtesy and driving skills of most coach and truck drivers assist, to some extent, in alleviating the problem. Nonetheless, poor roads and particularly land slides can, on occasion, inconvenience tourists coming into and traveling around the country.

Aviation – currently a single airline, Druk Air, provides services to Paro International Airport. The company operates in difficult circumstances and is constrained by the high altitude of Paro airport, the lack of facilities for night flying, the lack of a convenient alternative airport when planes are diverted by fog, high fuel costs in operating its two Aerospace 146 aircraft, and the necessity of reducing seating capacity below 76, in the event of high temperatures.

It is now being suggested that international aviation consultants, with specialist experience of flying aircraft at high altitudes, should advise on these issues – with respect to additional airport sites, types of aircraft as well as helicopters, landing pads, and so on.

Telecommunications – while major investment has been made in both telephone and IT facilities in recent years, standards fall short of international requirements. The main weaknesses include a lack of direct dial facilities from hotel bedrooms; poor signal quality with international calls; no facilities for prospective tourists to make bookings on the Internet; and a limited mobile phone network.

Emergency services – tourists and travel agents have a general expectation that emergency services will be readily available in most destinations. These should include modern hospitals, ambulances including helicopters, traffic police, as well as emergency phones at selected roadway locations. Very few, if any, of these services are currently available in Bhutan. It is recommended that a committee, representing all of the interests involved, should be established to make specific recommendations for action in this area.

Internal transport – an internal transport service, using mainly minibuses and operated by private individuals, is the main means of transport from towns to the more remote rural areas. This type of transport is also used to a limited extent by tourists, particularly those who originate from India. Private bus operators indicate that their difficulties include: the fixing of fare levels by the government at uneconomic levels; the requirement to operate particular services, even if there are no passengers; the loss of some services due to terrorism close to the Indian border; increasing competition from private-car owners; and the poor road conditions.

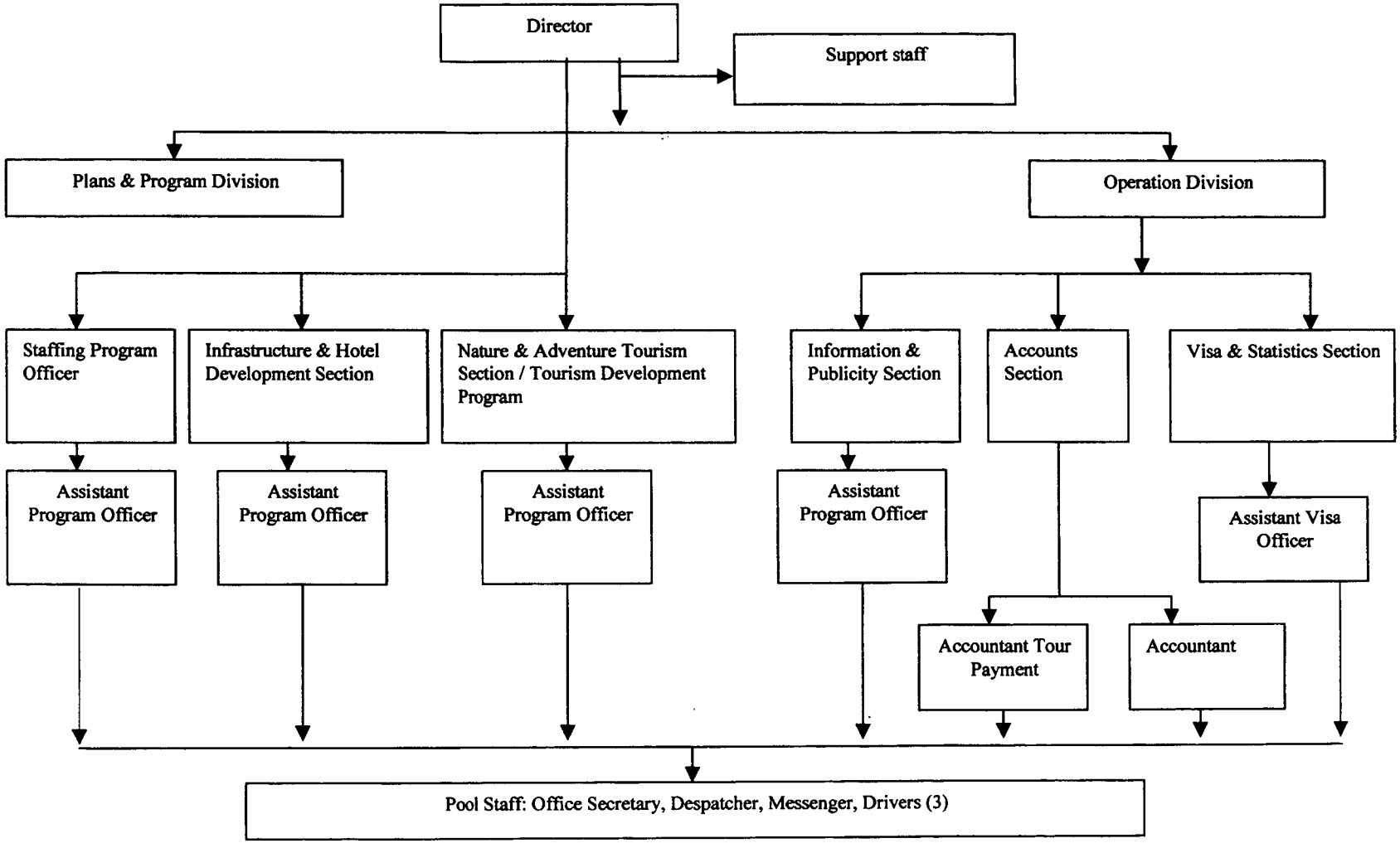
Finance and banking – there are two banks in Bhutan, which offer a basic array of banking facilities. However, credit cards are not in general use, and when they are used, the service fees are extremely high. This is a major limitation particularly when making bookings on the Internet. In addition, there are no cash-dispensing machines, which are used extensively by tourists in other countries.

Standards of accommodation. Hotel accommodation is not generally viewed as being good value for money and improvements are required. In addition, the internal grading system for "International" hotels is limited in scope. Grades A, B, and C exist, but the difference between each category is not large. Most hotels would currently qualify only for two-star international grading and while bedroom sizes are generally adequate, a number of shortcomings are apparent – (a) beds are of poor quality; (b) sanitary fittings are substandard; (c) many staff have limited training; and (d) décor is frequently dull.

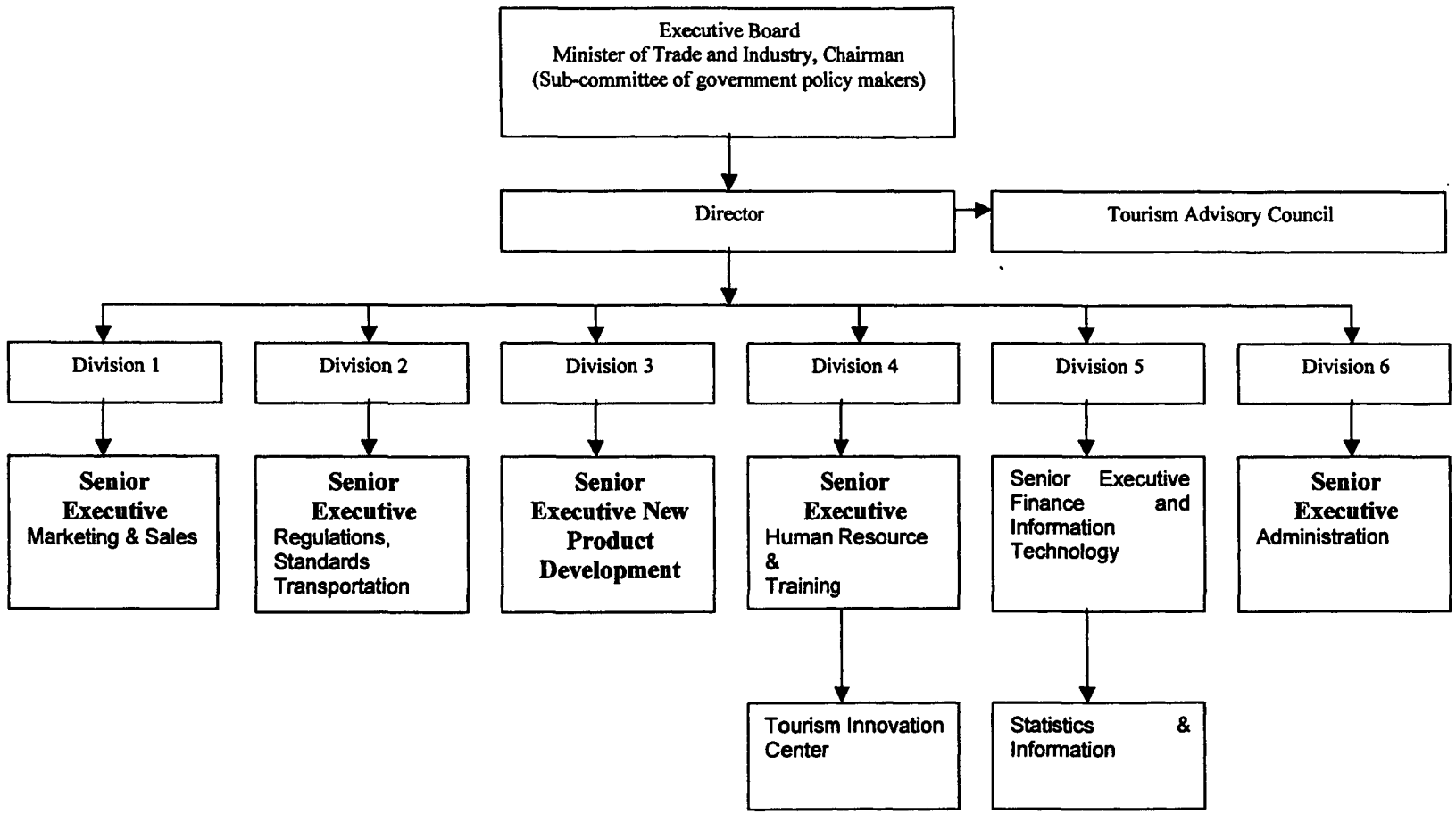
Management structure of the Department of Tourism. A revised institutional structure for the Department of Tourism could also better serve the needs of the tourism sector. The following two organizational diagrams show the existing structure and a proposed new structure for the Department of Tourism (part of the Ministry of Trade and Industry). The latter is considered more appropriate for present and future needs for the following reasons:

- The current organogram is complex and staff at different levels are responsible to the director, and there is no specific provision for marketing, which is a high priority.
- The proposed structure is based on commercial models that have worked in other countries. It embodies clarity of function and emphasizes marketing rather than regulation.
- The proposed structure would be easily adaptable if it was decided to establish a public-private Bhutan Tourist Board.

Organogram of the Department of Tourism



Proposed Organogram, Department of Tourism, Bhutan



Notes:

1. Senior Management line only shown.

2. An alternative option would be to establish an entity "Bhutan Tourist Development Board" as above but governed by an independent board (with government and private-sector nominees).

In any new structure, the various organizations with interests in tourism and the environment should have an advisory role. Such organizations include the Association of Bhutanese Tour Operators, the Natural Environment Commission, the Royal Society for the Protection of Nature, the National Commission for Cultural Affairs, the Association of Hotel Owners, and BCCI.

4. Recommendations for the Tourism Sector

The following recommendations are made to enhance tourism in Bhutan:

Strategic Recommendations

1. Devise and implement a comprehensive master plan for tourism to include product development and marketing. This plan should focus on new marketing and sales arrangements; use IT to the maximum extent; reduce seasonality with expanded visitor activities; increase annual hotel occupancy of up to 70 percent; provide tourism training; offer more dependable air access; improved road standards; encourage more tourist traveling by road via India; and introduce new products.

2. Restructure the Department of Tourism to conform with international best practice.

3. Establish a tourism training resource, such as a training institute or a partner with a foreign training institution, which could provide training with a Bhutanese orientation.

4. Encourage the establishment of tourism-specific employer and employee organizations, particularly in the hotel industry.

5. Seek the advice of an international consultant regarding Bhutan's aviation and airport needs.

6. Seek the advice of a specialist group regarding the future operation of internal transport, including the pricing policy.

7. Establish an advisory committee for the development of emergency services.

8. Further leverage ecotourism as a major promotional element.

9. Establish consultative machinery for all tourism-related organizations.

10. Introduce an incentive scheme to encourage the upgrading of hotels.

11. Further explore the potential of tourism related to Buddhism.

New Product Development

1. Develop an existing, or a purpose-built Dzong or monastery as an interpretive center, including actors and audiovisual facilities, with the cooperation of the religious and other local authorities.

2. Establish a new form of evening entertainment for tourists, including a meal, music, folklore and dance, in an appropriate setting.

3. Establish new visitor attractions in Phuentsholing, as a means of extending the visitor stay beyond one overnight stay (such as the Buddhist temple in the town square; the Kharbandi Monastery occupied by monks; and a private-sector proposal to arrange demonstrations of paper and incense making).

4. Provide a one-stop Bhutanese Experience Center to present history, folklore music, art, religion, scenes from religious festivals, the monarchy, and the future vision for Bhutan.

5. Develop an international Buddhist research and conference center to promote the Tantric of Buddhism – the dominant religion in Bhutan – the foundation of which dates back to 800 AD. (Buddhism was originally founded in 500 BC). This code for living and system of values still dominates nearly every aspect of life in Bhutan, including the arts, annual festivals, literature, and the laws of the land. Buddhist monks from Bhutan participate in exchange visits with their colleagues from other countries, and there is a growing interest in Buddhism in the West.

6. Further develop ecotourism products along the lines suggested at the September 2001 workshop arranged by the Department of Tourism including organizational strategies – to coordinate all relevant organizations; product development such as protecting the habitat of Black-Necked Cranes, traditional medicine products and health centers; expanding domestic tourism; using new marketing tools, particularly the Internet; developing human resources in the identified areas.

7. Upgrade existing attractions on a continuing basis, including the introduction of seven-day opening hours, the introduction of costumed guides, and so on.

Marketing

1. Devise and implement a comprehensive marketing and sales campaign. This should include a new expanded data base of potential overseas retail agents, using the Internet and specialist directories; editions of Bhutanese Travel News in hard copy and on the Internet; the use of e-mail for regular special offers and information dissemination; ad hoc sales teams to visit overseas agents at regular intervals; inviting travel writers to Bhutan from key markets; and the design of tourism literature which is consistent in terms of design, content, and quality.

2. Greatly liberalize and relax current regulations for filming in Bhutan as well as familiarization trips by travel agents and writers.

3. Create a new and comprehensive database for tourism to measure and monitor all aspects of the industry. Some limited work is already being done but needs strengthening. It would be beneficial to recruit a consultant, ideally from a national tourism organization, to design and establish a suitable monitoring system for the industry, and train local staff to manage and update it. Relevant data would include the numbers of tourists and their origins; revenue earned; performance trends; overall room occupancies; aircraft load factors; return on hotel and other investments; satisfaction levels; why Bhutan was chosen for a holiday; income levels of visitors; age group of visitors; activities undertaken, and customer satisfaction.

4. Undertake regular, comprehensive attitudinal surveys of tourists.

5. Introduce holiday reservation arrangements via the Internet and toll-free phone numbers. Both options could be under the direct control of the Department of Tourism. The system could work with toll-free numbers being handled directly or by a call center – with general enquiries processed and literature issued. An Internet Web site should allow potential customers to make real-time reservations, which could then be referred to an accredited overseas travel agent (an equitable arrangement for the distribution of business could be devised).

6. Bhutan should participate fully in international events such as the U.N. International Year of the Mountains 2002, or the International Year of Eco-Tourism 2002. Some of these events would enable the country to obtain technology of immediate relevance, but also provide opportunities for funded workshops on matters of importance to the country, such as the role of tourism in the development of culturally distinct, high-altitude rural areas.

General

1. Introduce formal government accreditation in the tourism trade to foster good standards of promotional literature quality, profit margins, and staff knowledge about Bhutan.

2. Widely encourage the banking sector and vendors to adopt the use of credit cards and to provide cash-dispensing machines in primary locations.

3. Adequately regulate and promote the rationalization of the Bhutan tour handling industry.

4. Arrange visits and short-term placements in other countries for tourism professionals to provide exposure to other international tourism organizations and their practices and products.

5. Establish closer links with the World Tourism Organization (on general tourism issues, including comparative data), UNESCO (on cultural and environmental issues), and ICOM (on museum practice), which could greatly assist in supporting the transfer of new technologies and methods of undertaking business.

6. Ensure the availability and awareness of a range of technology transfer mechanisms, such as retired executive programs, matching grant schemes, and FDI. In other countries, tourism businesses have benefited from matching-grant schemes to undertake market promotion, to establish Web sites, to develop new products, and to set up management information systems. In the field of hotels and craft shops, retired executives could provide training and advice at a very modest cost. (More information is provided on technology transfer in Chapter Eight.)

CHAPTER SIX
INFORMATION TECHNOLOGY

In view of the recent improvements in Information Technology (IT), the government of Bhutan considers IT and the knowledge-based industries that it enables to be ideal sources of future economic growth. IT both plays to Bhutan's strengths and avoids the country's major constraints. IT takes advantage of the disciplined, English-speaking work force and relatively developed telecommunications network. Yet it is not limited by the mountainous terrain, extreme weather, and geographic isolation. In addition, IT services do not impose a large burden on the country's natural resources, which supports the government's goal of carefully preserving the natural environment. However, Bhutan's IT sector is still in its infancy, and it is not likely that the country will export significant IT services or knowledge-based products in the near future. Nonetheless, rapid development of the IT sector holds enormous promise for improving productivity and increasing competitiveness in existing private sector industries.

1. Current Situation

Computers were first introduced into Bhutan in 1984, and it is now estimated that there are over 4,000 – the majority of which are in government offices. While most surveyed private-sector firms do have computers, they are underutilized. Until recently computers were expensive and not widely available. Thus, a computer culture – in which young people in the work force are comfortable using IT – has not yet developed. With the recent reduction of import duties on computers and the efforts to make computers more accessible to students, this situation is beginning to improve. However, the general level of computer literacy and comfort with IT remains low. Consequently, there is limited effective use of IT services in the private sector.

About 70 percent of the sampled firms had computers and most use them for simple functions such as word processing, basic accounting, or other office applications. Almost none of the sample had local networks, used an automated inventory-management system, employed computer-aided design, or made other more sophisticated use of IT. Networks that do exist are mostly confined to government agencies. Of the firms sampled, about 62 percent had access to e-mail; yet the majority of these enterprises said that they continue to communicate predominantly by fax and telephone.

A mere 15 percent of the sample had Web sites, the majority of which were in the tourist industry. One metal firm and one handicraft firm were the only non-service sector companies with Web sites. It is noteworthy that only one-third of the companies engaged in providing IT services had Web sites. Clearly, computer penetration and Internet access is so limited that even most IT enterprises do not see value in establishing Web sites. All existing sites are static – serving only to advertise – and no company reported conducting any business over the Web. A few of the more sophisticated entrepreneurs said that they use the World Wide Web to discover new technology and communicate with overseas vendors. However, even this activity was extremely rare. Overall, few private-sector firms make significant use of IT, and it appears to be employed mostly as a labor-saving technology in offices.

There is one Internet service provider (ISP) in Bhutan, the government run Druk Net, which began operations two years ago. Druk Net provides dial-up service at 33.6 kilobytes (kBps) for the price of a local call throughout most of Bhutan. There are 64kBps and 128kBps leased lines

available, but few customers take advantage of them.[25]. Of those that are taken, most are leased by government agencies. In many countries, financial institutions are some of the heaviest users of leased lines to transmit data – but so far even the banks have not leased lines in Bhutan. Druk Net estimates that it hosts 30-35 Web sites, mostly for government agencies. There has not been a rapid increase in demand for additional Web sites, so it is unlikely this number will significantly increase in the near future. Currently, Druk Net maintains around 800 accounts and estimates that there are over 2,500 users.[26] In mid-2001 there were only six Internet cafes in the country, four in Thimphu and two in Phuentsholing.

When asked why they don't make more use of IT capabilities, firms indicated they did not see enough benefits to justify the costs of further investment. Most firms in the manufacturing sector are using old technology where computerization would not be appropriate and would add little to productivity. Given the level of technology, there is no need for computer-controlled machines, computer-assisted design, automated inventory-management systems, or other sophisticated applications of IT in the manufacturing process. Since few consumers have computer or Internet access and most business are very small, the service sector also sees little added value in IT investment. Not only are observable benefits limited, but the costs of upgrading IT capabilities is substantial because all hardware and expertise must be imported. Connectivity is another issue. While dial-up service is good and relatively inexpensive, there is no data network in the country. Thus, sending large amounts of data is problematic, which makes linking geographically dispersed units expensive.

The most significant impediment firms face in building their IT capacity is the lack of skilled professionals. Almost all IT professionals in the private sector must be brought from India. This is expensive and, because of the strict immigration procedures, difficult. Recently a number of private training institutes have been established in the major towns. However, most of these focus on training office workers in word processing, accounting, and other basic office skills. Few institutions offer any training on database management, programming, Web site development, or other more advanced tasks. The majority of the students are school-leavers paying their own way to improve their job skills. Few firms send workers for training in IT, again indicating the lack of value most firms see in pursuing investment in IT. Almost all of the trainers in the private institutions come from India. The Sherubste College has begun to graduate IT students – the recently established Division of Information Technology (DIT) estimates that this year's class will be less than 20. All of these graduates are expected to go to government agencies and will not be available for the private sector. One local IT-training company tells of offering a recent IT graduate a salary more than three times higher than the government. However, the graduate rejected the offer because the private sector is risky while government jobs are viewed as being secure. In addition to Sherubste College, the Royal Institute of Management has a program that teaches students database management and provides some programming training. But the DIT estimates that it will produce only 12-13 students this year and again most are expected to be employed within the government. Thus, where they have an interest in doing so, private sector firms face difficulty finding suitably trained computer professionals who will work for them.

The regulatory and financial systems are not conducive to online business. The lack of credit cards or other systems makes it impossible to make payments electronically and even Druk Net is unable to accept online payments. Banks report that they do not offer any online services because the lack of demand makes them uneconomic to develop. Even if they were to offer online

---

[25] These are dedicated lines that allow customers to transmit data at a rate of 64 or 128 kilobytes per second (kBps). Such lines are only needed by organizations that rely heavily on IT. The lack of demand for such lines shows that few customers are engaged in heavy data use.

[26] Page 10, Bhutan ICT Master Plan.

transactions, foreign currency regulations would pose a major obstacle. One sector that often leads the growth of online business is tourism. However, the requirement in Bhutan to use group travel arranged through registered travel agents reduces the need for interactive Web sites where tourists can make reservations and check availability. Finally the lack of laws or regulations covering e-commerce or cyber fraud provides a disincentive to pursue online business.

Due to the lack of demand, there are only a handful of companies providing IT services in Bhutan and most of these enterprises are training office workers in basic computer skills. There are less than five small providers of hardware or services, and their capabilities are limited to designing simple, static Web sites and installing basic of networks. As discussed, there is little demand for any other services and consequently little incentive to develop more sophisticated offerings. Currently no firms are exporting or seriously considering exporting IT services.

2. Opportunities

Given the current state of IT services what can be said about the government's desire to see the evolution of an IT export industry? IT exports from developing countries can often be grouped into two general categories. First, are small firms, using skilled professionals to fill niche markets in software development, programming, Web site design, or other specialized applications. The second category consists of bigger companies, using large numbers of less skilled workers to carry out such operations as data entry, digital encoding, or call centers.

The competitiveness of small programming firms relies on low cost, skilled workers who can turn out high-quality products in a short time. Often these firms subcontract for companies in developed countries where wage rates are extremely high. For example, there is a nascent industry in Madagascar that is designing interactive Web sites for companies in Belgium and France. The cost of good IT professionals in Madagascar is only 10-20 percent of the cost in France, on par with India. Also, Madagascar is one of a few low-cost countries with a good quality, disciplined work force that speaks French. Bhutan, might seek to fill an analogous role in the English-speaking countries.

However, achieving this goal will be difficult as there are numerous low-cost countries with an English-speaking work force already competing in this market. Bhutan's neighbor India, is the biggest of these and is currently the source of all of Bhutan's IT professionals. Wages paid to Indian workers in Bhutan must be sufficiently high to attract them to Bhutan, and companies must also deal with the immigration formalities in bringing them in. As a result, in Thimphu, Indian instructors at some of the training institutions are receiving four times the wages they received in Calcutta. These are skilled workers with five-to-seven years' experience who are capable of constructing databases and simple Web sites. More complicated programming would require more experienced workers with an even larger wage differential. As more IT workers are produced in Bhutan, it is likely that the wage differential will narrow, but it is not likely to disappear in the near future. Higher labor costs will likely preclude Bhutan from entering the programming market unless the Bhutanese can establish a reputation for very high quality or unique work. Given the artistic ability of Bhutanese designers this is not impossible, but it will take time to turn native design talent into saleable IT services.

The wage rates of Indian workers and Bhutanese workers along the border are closer but, even here, Bhutanese demand slightly higher wages. With time, this gap may narrow. But it is unlikely that the wages of IT professionals, even along the border, will ever fall to a level competitive with workers in IT clusters like Hydrabad and Bangalaore. Enterprises located in or near these clusters benefit from easy sharing of recent technology advances, having a large pool of skilled workers, and access to inexpensive support services from surrounding firms.

Companies in Bhutan would have to fill unique niches to compete against these advantages. Otherwise, firms seeking service will naturally go to the established IT clusters. One advantage that IT entrepreneurs did point out in the survey, is Bhutan's more friendly business environment. It takes less time to clear customs, there is less corruption, and taxes are more transparent than in India. However, it is unlikely that this alone will offset the competitive advantage offered by the huge pools of trained labor, established infrastructure, and the spill-over effects found in the IT clusters in India, Malaysia, and elsewhere.

Bhutan might be able to build capacity more easily in the second category – with firms engaged in data entry, encoding, and call centers. Even this, however, will take time to develop. Firms in developed countries often subcontract operations such as data entry and data management to firms in developing countries – such as India. The major costs involved in this work consist of labor and connectivity costs – areas in which Bhutan has no special competitive advantage vis a vis India.

These types of firms depend upon large quantities of inexpensive, literate workers. In other countries such as Ghana, Madagascar, and India, firms have sought recent secretarial school graduates, given them basic computer training, and then used them to enter data or find Internet content. Looking at the wage rates of Bhutanese office workers, both in Thimphu and Phuentsholing, who are assumed to have an equivalent level of training, Bhutanese wages are substantially higher than those of Indian competitors. The mean earnings of Indian office workers in Phuentsholing are less than 30 percent the mean wages of Bhutanese office workers in Thimphu. The wage gap is less between Bhutanese and Indians in Phuentsholing, but Indians, on average, still earn less than half the salaries of equivalent Bhutanese workers. To be fully competitive with labor costs in surrounding English-speaking countries, any IT industries in Bhutan, which were established for export, would have to use Indian labor or have Bhutanese workers with comparable skills and productivity levels who would accept wages on par with Indian workers.

Table 6.1: Mean Earnings for Sales and Office Workers (Nu per Month)

	Phuentsholing	Thimphu
Bhutanese	3,082	4,129
Indian	1,168	3,525

Source: World Bank Survey

The second major cost component for large data-entry firms is connectivity. As much as 40 percent of costs, depending on the nature of the business, can go to telecommunications connectivity. Currently Bhutan has two 1 Mb satellite links, one to the east and one to the west. There is no optical cable in the country. The present satellite links are enough to meet current demand, but they will quickly become strained if numerous firms begin demanding international links. At this time, very few organizations have leased 64 kBps lines, and Druk Net charges for leased lines are more expensive than in neighboring countries. This cost could go down if alternative links are brought into play as demand increases. For example, firms might be able to share connections by leasing satellite time from Indian users.

No firms in Bhutan have their own satellite connections. It is estimated that a two-way, 64 kBps link from INTELSAT costs around $700 a month. This is not much lower than a Druk Net leased line, but the figure does not include the costs of hardware, maintenance, or software. If companies target the U.S. market, they must have an additional link or access to a cable network

because it is not possible to transmit to North America on a single bounce from Bhutan. It is relatively easy to establish improved international connectivity to Bhutan and costs will fall as demand increases. But it is unlikely that the costs will fall enough to become competitive with India and other countries, where high demand creates low unit costs for connectivity.

Table 6.2: Monthly Fees for Leased Lines

Country	Type of Connection	Cost
Bhutan	64 kBps	$600
Bhutan	128 kBps	$1,500
Nepal	64 kBps	$2,800
Nepal	128 kBps	$4,500
India	64 kBps	$476
India	128 kBps	$734
Madagascar	28.8 kBps	$800
France	512 kBps	$20

Source: World Bank interviews

For Bhutan to be competitive at exporting IT services, it will have to overcome cost disadvantages in labor and connectivity. For small-scale, high-value operations, such as Web design to take off, the supply of skilled labor must increase. Firms will have to serve niche markets where their skill, design quality, or service standards compensate for higher costs. For relatively large operations such as data entry to be successful, they will have to initially operate on the border where there are larger pools of inexpensive, semi-skilled labor.

No matter what type of IT service industry develops, it will face many of the same infrastructure constraints as other industries. For example, expensive transportation is still an important impediment to the IT sector. Firms must be able to import parts and hardware cheaply and quickly. Since there is not a large IT sector, maintenance personnel and other experts will also need to be brought in periodically. Some firms ship data by tapes or other digital storage devices when they have very large amounts or when their network fails. Irregular air cargo service in Bhutan makes this problematic. However, entrepreneurs in the survey did report that Bhutan has important competitive advantages over its neighbors in terms of the business environment. There is a regular and consistent power supply, there is no labor unrest, and the government bureaucracy appears to be both more efficient and less corrupt. Yet it is questionable whether these advantages are sufficient to overcome the lower labor costs, less expensive connectivity, more efficient shipping, and the spill-over effects of large IT clusters found in India, Singapore, and other competing countries.

3. The Way Forward

In view of the challenges to establishing an IT export industry in Bhutan, it is more feasible to focus initially on developing IT services to support the domestic private sector. More extensive use of IT could increase competitiveness in many ways ranging from improving productivity in the manufacturing sector to making marketing more effective in the service industry. Building the infrastructure, training the workers, and creating the institutional structure necessary to support the domestic private sector could also set the stage for possible future exports of IT services.

The government of Bhutan has already started this process by first concentrating on the expansion of IT services within government agencies. Most of the country's investment in hardware, software, and training is done by the public sector. All government agencies are pushing to quickly automate and to provide more services online. It is hoped that this will not only help the government provide better services, but will also provide incentives for IT service providers to expand and for the private sector to automate and invest more in IT. However, in its desire to rapidly expand the use of new technology, the government is monopolizing almost all of the available skilled labor, leaving few well-trained IT professionals to work in the private sector.

Any attempt to foster the IT sector in support of the domestic private sector must address several key issues including:

(a) *Human Resources Development.* The most important issue is the development of a domestic supply of skilled IT professionals. This not only requires nurturing institutions that train workers but also creating a computer culture where technology is accessible and a part of everyday life. Making computers available to schools, putting more government services online and subsidizing Internet services are important steps toward creating such a culture. However, it is also vital to recognize that it takes time to build a reservoir of experienced IT workers. Training alone can't make up for years of practical experience. The only way to develop a supply of talented indigenous workers is to bring in experienced guest workers to train and work with locals over an extended period of time. Currently private-sector firms find it difficult to obtain work permits, and once they do receive them they are not confident that they will be renewed. If firms are going to make large investments in new technologies, they must be confident that they can easily bring in and keep the skilled IT workers needed to support the investment.

(b) *Payments System and Institutional Development.* Creating the institutions and regulations that support online business and other uses of IT is an important step in building the IT service sector. Online financial services are one such area of potential development. In this regard, the payments system must be improved so that firms can conduct business online. It is necessary to expand the acceptance of credit cards, create online access to bank accounts, and revise foreign exchange controls so that they don't interfere with online business activity. It is also important to carefully examine the legal environment and laws covering such issues as online fraud, unauthorized access, and confidentiality. The need for legal and regulatory reform has already been clearly identified in the RGOB's *Information Technology Master Plan.*

(c) *Data Network.* Substantial work needs to be done to improve the infrastructure. The voice network is good and dial-up access is available from most areas. However, transmitting large volumes of data is still difficult. As suggested in the *IT Master Plan,* it is necessary to build a data network that will overlay the voice network. This will make it easier to build networks that span the country. This, in turn, will significantly improve the management system for shippers, helping to alleviate the delays and high costs caused by the rugged terrain and poor transportation network.

(d) *Foreign Direct Investment.* Many of the issues discussed above can be addressed by joint ventures. Foreign investors who bring with them the latest production techniques will expect to have up-to-date IT services. The demand they create will spur the development of the sector. Any services that are not available, they will create. For example, large multinationals will bring with them skilled professionals capable of training workers and they will have sufficient capital to buy the necessary hardware to improve bandwidth and solve connectivity issues. As Bhutan is both new to the IT field and geographically

isolated, one of the biggest challenges faced in developing an export market is making market contacts and finding buyers. Foreign partners, who already have such contacts, could help overcome this problem. Foreign investors might be lured to Bhutan to take advantage of the political stability and absence of labor unrest. However, the lack of transparency and difficulty getting joint ventures approved currently makes Bhutan less attractive as an investment destination. To improve the IT service sector, it is necessary to attract foreign investment.

4. Conclusion

The IT sector is still in its infancy in Bhutan. While it promises opportunities it has had a late start and must overcome many challenges to become internationally competitive. Today few private sector enterprises make effective use of the technology that they have. More extensive use of IT services offers the chance to improve both private sector competitiveness and the delivery of government services. It appears that Bhutan will have to overcome many steep challenges if it is going to develop an export market for IT services. However, if it concentrates on developing a computer culture and supporting growth of the IT sector that supports the domestic market and government, it could set the stage for future service exports.

CHAPTER SEVEN
FOREIGN DIRECT INVESTMENT

1. The Need for Foreign Direct Investment in Bhutan's Private Sector Development

Since the 1980s, the Royal Government has embarked on a program to gradually liberalize trade, industrial, and financial policies, to encourage and facilitate the development of the private sector in Bhutan. An important element of the liberalization process has been the development of national policies, together with transparent and streamlined rules and procedures. Policy rationalization in different sectors is continuing, and the current development of a Foreign Investment Policy is one of the components of the on-going policy reforms.

Beyond traditional trading activities, there is no real history of entrepreneurial activities by the private sector. Hence, the foundations for building a more active sector which contributes strongly to overall economic growth are largely absent. Key factors such as management skills and market linkages – on which exports can be developed – are in short supply. Thus, a "bootstraps" approach to private sector development, while not necessarily destined for failure, seems likely to achieve only limited and slow progress towards achievement of the desired development benefits.

In a generic sense, foreign direct investment (FDI) can be expected to have characteristics that are complementary to the principal deficiencies within the indigenous private sector in Bhutan. While a shortage of capital may not be a limiting factor in the current economic climate, foreign capital which is attracted to investment opportunities in the Kingdom is likely to embody important factors such as technology, management skills, and familiarity with and links into export markets.

Thus, by attracting productive FDI, the Royal Government will create opportunities for economic development within the Kingdom to be accelerated, with concomitant benefits – such as employment generation, increased incomes, and increased welfare through expanded choice for consumers. By these means, increased levels of foreign investment are expected to contribute to an increase in Gross National Happiness, through the creation of additional economic benefits, in ways which are consistent with the kingdom's goal of preserving its environmental and cultural heritage.

The Royal Government's private-sector development strategy has identified four specific sectors which it considers to have significant potential for development along internationally competitive lines. If attraction of FDI is to be an important element of the overall private-sector strategy, then it will also need to contribute to development within the nominated sectors: agricultural processing, wood and wood-based industries, tourism, and information technology.

Agricultural processing. Of the three areas of potential development in Bhutan – import substitution, smaller niche export markets, and large-scale processing of imported raw materials for export – it is clear that FDI (or, at least, some major form of foreign involvement) could be an important catalyst in promoting success in two. While ***import substitution*** (sales into the local market) may not, in the short term, require the products offered to be of international quality, it is clear that producing for the export market will.

Indeed, the characteristics of the products that can be generated within Bhutan and sold into ***niche markets*** internationally are likely to be high-value per unit weight (to overcome high transport costs), superior quality (and quality control) and packaging, so that premium prices can be secured. Achieving these standards will require international best practice at all stages of the production process: harvesting, post-harvest handling, processing, storage, distribution, and so on. It is unlikely that this knowledge is currently within Bhutan or could be acquired and applied successfully without significant foreign involvement. At the same time, knowledge of the markets in which such products can be sold and the manner in which these markets can be accessed will also need to be introduced.

The proposal for ***export processing of imported agricultural raw materials*** in the border areas close to India will also need substantial foreign inputs. The scale of production envisaged for these operations is well beyond any current experience within the indigenous private sector. Success will inevitably be built on high turnover, low margin operations (the hallmark of export processing operations wherever they are located), suggesting that management effectiveness is likely to be a major factor affecting profitability. Another FDI-related dimension is that the proposal for this type of activity is firmly focused on the Indian market, which means that the companies most readily placed to profit from such initiatives will be those already established in the Indian market, who will see an investment in Bhutan as a lower-cost alternative for servicing their existing markets.

Wood and wood-based industries. In this sector also, there is likely to be a direct correlation between the level of technology and the profitability of the enterprise – at least in relation to the more processed products. While the strong demand for wood from India may well mean that traditional extraction and production processes can continue to be profitable, the outputs from wood-based industries are much more akin to manufacturing products than commodities; hence the need for international-level inputs of technology, management, and marketing skills. Given the real concern which the Royal Government has shown for adding-value to forest resources prior to their export and the sentiment that this can only be achieved by progressing through a series of technology-based steps, it seems reasonable to expect that the government's longer-term objectives for this sector will only be met if significant foreign involvement can be induced. Encouraging investment by experienced foreign companies – either into joint ventures or independently – would seem an attractive strategy to meet this goal.

Tourism. In this sector, where investment in capital development and the establishment of services offer so many opportunities, there are many potential dimensions for FDI. At the same time, there are cultural and environment sensitivities which do not occur to the same extent in most other sectors. Assuming that the government continues to follow its policy of attracting low-volume/high-value tourism, then increased benefits will come from attracting more visitors at the current price level and providing improved tourism products that will attract a higher value clientele. While the former may well be feasible through adjustments to government policy, improved marketing, and so on, the latter – upgrading products for a higher value market – will, almost certainly, require the introduction of foreign capital and expertise. Indeed, the government's recent decision to permit two majority foreign-owned hotels to invest in Bhutan is an implicit recognition of this fact.

Information technology. As noted in earlier sections of this report, the IT sector in Bhutan is currently at an embryonic stage. The two main opportunities for growth that have been identified – upgrading the use of IT within the private sector to create efficiencies (for example, through e-business Internet activity by tour operators and hotels) and a more attractive investment environment; and the possibility of some small-scale exports of IT-based services (such as key-stroking and call centers) – will, in each case, be dependent on substantial inputs of foreign expertise. This is most likely to come from foreign investment. ***Increasing the extent to which***

economic activity in Bhutan is IT based (or IT assisted) will be achieved by increasing the awareness of the cost-benefit relationships which are available from increased use of IT and upgrading skill levels and support services. It is in the latter area, in particular, that FDI would seem likely to play a major role, if an increase in the use of IT within the economy is to occur at an accelerated pace.

While the opportunities for ***exports of IT-based services*** are undoubtedly limited, Bhutan does have a resource which, while far from unique, is also not widely prevalent and is increasingly highly prized. This resource, a key ingredient in IT industries, is a young, well-educated, English-speaking work force. While India will always be a major competitor within the same time zone, the strength of Indian IT skills need not be seen as an insurmountable barrier to any similar investment taking place in Bhutan. However, within such a competitive environment, attracting FDI into this aspect of the IT sector in Bhutan would seem essential for its development. In this context, success in this field will not only depend on the attractiveness of the operating environment which is offered but very largely on the skill with which the country promotes its opportunities. These factors are likely to be more important than the scale of the activity which is possible relative to the Indian IT sector.

2. Current Constraints to FDI in Bhutan

Clearly, a major constraint to the attraction of foreign investment to Bhutan at present is the absence of a legislative framework within which such investment can take place. However, as the government is well aware of this deficiency and has already begun the process of establishing the legislation, regulation, and administrative systems which will be necessary, this constraint is not discussed in this section. (The following section describes the changes which are proposed and the likely impact on private sector activity.) Instead, this section focuses on aspects of the general business environment which will not be affected by the proposed law on investment but which would be seen as important constraints by potential foreign investors. The list of constraints is, by no means, comprehensive, and most of these issues have already been raised in earlier chapters of this report as being constraints to private-sector development in general. Instead, the following discussion seeks to demonstrate how certain aspects of the general business environment will assume relatively more importance for potential foreign investors and will, as a result, be deserving of more attention if the government is to succeed in attracting the levels of FDI to which it aspires.

Perhaps the most important area is **taxation**, where numerous facets of the current system will be seen as substantial impediments by foreign investors, particularly those who would be interested in investing in export-oriented enterprises. It is worth noting that the apparent unsuitability of the existing tax structure for foreign invested enterprises is not surprising, as it has been developed to serve the interests of a government taxing a private sector that is overwhelming dominated by small enterprises, focused on the domestic market, and predominately involved in small-scale production and service industries, including trading. The characteristics of the foreign invested enterprises (FIEs) likely to be attracted to Bhutan will be substantially different. A selection – in no order of importance – of the aspects of the current tax system likely to be seen as impediments includes:

(a) ***Limits on the levels of individual salaries which can be claimed as deductions in business tax returns.*** While there seems to be no logical reason for any limit to be imposed, given the fact that personal income tax is now being levied on salaries, the current level of Nu60,000 is only a small percentage of the salaries which international investors would expect to pay their senior managers. Paying tax against the excess over this limit would greatly reduce the profitability of the investment. (It is understood that

exceptions can be made to this policy – but only on a case-by-case exception basis from the Ministry of Finance.)

(b) A second limitation on business expense deductions which will act as a deterrent is the ***limitations imposed on costs incurred for activities such as market development, advertising, and quality control.*** While the impact of these costs will vary between companies producing for the local and export markets (for example, advertising may well be more important for companies trying to break into the local market), they would all be seen as normal business expenses by foreign companies, in some cases constituting a significant proportion of total costs and, in all cases, being at levels which companies could not easily absorb and remain competitive.

(c) ***Taxation of assumed capital gains created through asset revaluation.*** This existing provision will act as a deterrent in two ways:

i) Foreign investors can be expected to maintain accounting standards that are much more closely aligned with international norms than is the current practice in Bhutan. In doing so, they are more likely to use updated asset values, particularly in circumstances where they are seeking to borrow to finance expansion or other capital expenditure. Paying capital gains tax on the assumed capital gain would be a major impediment.

ii) Most citizen investors wishing to participate in a joint venture with a foreign company are likely to offer land and fixed assets, such as buildings, at current market values, as their equity contribution. Having to pay capital gains tax on any assumed capital gain will be a severe penalty, which could be expected to deter many potential candidates from forming joint ventures. The impact on the level of FDI would come from the fact that, without local partners, fewer foreign investors will be willing (or, as joint ventures are mandated, able) to invest;

(d) ***Tax deducted at source.*** While this tax can be used as an offset against annual corporate tax liabilities, this provision is not of any benefit for companies that are making losses – in these cases, such tax payments only serve to heighten the losses. The significance for FDI is that foreign investors, particularly those in manufacturing, typically expect to make losses in the early years of operation, as they gear up to full production, develop markets, identify lower-cost supply alternatives – and cope with unexpected start-up expenses. This start-up scenario is considerably different from the common experience of citizen investments, which would generally start with less capital invested and expect to be profit making within a shorter time span.

A further tax-related matter is the non-existence of **double taxation agreements** with the countries from which the majority of investment is likely to come. Without such agreements in place, investment in Bhutan will be significantly less attractive to foreign companies. It is worth noting that, if the government envisages moving to a corporate tax rate, which is lower than that operating in India, negotiating a tax-sparing agreement with India may be advantageous, as this would allow Indian companies (which could well be the major investors in Bhutan) to benefit from the lower tax rates, even if India moves to a system of taxation of worldwide income. Indeed, the negotiation of such agreements should be attempted with any developed country from which significant amounts of investment are expected and whose corporate tax rate is higher than that which will apply in Bhutan. Such agreements are particularly important if any form of investment incentive is introduced to lower the effective rate for investors. Without them, the

provision of the incentive merely transfers revenue from Bhutan to the government of the source country of the investment.

The current regulations covering **accessibility of foreign exchange for imports** are also likely to be a factor affecting the attractiveness of Bhutan as an investment location. These regulations provide that foreign exchange is only automatically available if the enterprise has earned the currency required – Indian rupees or hard currency – through exporting. As India is likely to be the dominant market for exports from Bhutan, those foreign investors expecting to use imports from hard currency areas will see this system as an impediment.

Banking sector services and skills will have a number of effects, particularly on exporters. However, the current situation of interest rate inflexibility can be considered likely to affect a wider range of investors – at least to the extent that they would wish to borrow locally – for example, for their working capital requirements.

Finally, as is the case in a very large number of developing countries around the world, where land ownership is a sensitive national issue, **access to land** by foreign investors could also serve as an impediment in Bhutan.

3. Essential Elements of the Currently Proposed FDI regime

Recognizing the potential benefits from FDI, the Royal Government has developed, over the last two years, a policy for opening up the economy to this potentially important form of investment. The process of developing the policy has been relatively slow, as formally allowing foreign investment for the first time has been accepted by the government as an important issue which needs to be examined closely and structured in a way which ensures that important characteristics of the current economic and social environment are not threatened.

The outcome of this preparation process to date is a statement of proposed Foreign Investment Policy, which is currently being discussed by members of the government, prior to draft legislation being prepared for submission to the National Assembly when it next meets in July 2002. The draft policy is understandably cautious and has been prepared with an explicit acknowledgment that additional changes and modifications will be made once the government has gained greater experience. There is also an explicit understanding among those responsible in the preparation of the policy statement that it is far better to err on the side of caution – and accept the risk that the inflow of FDI may be smaller than hoped for – than to have foreign investment take place in Bhutan in the early years of the new policy and create outcomes which will be regretted.

The policy states that the broad objectives of encouraging foreign investment in the country are to:

- broaden employment and training opportunities for the people;
- benefit from technology and skills transfer; and
- broaden the revenue base and enhance foreign currency earnings.

These are modest and sensible goals for a first entry into a complex and competitive market, and should also prove to be mutually consistent and supportive.

While much of the detail that will define the operation of the policy will only be available after the regulations and procedures have been developed, some of the more important elements of the proposed policy regime are already clear. These are as follows:

(a) ***Definition of a foreign investment*** – at 20 percent, the trigger point is double the international norm, which will mean that foreign investors will be able to take significant financial interests in Bhutanese companies without becoming subject to the new law;

(b) ***Commitment to the use of a simple, transparent, and automatic registration system*** – in adopting this stance, the government has moved directly to international best practice, a stance which will be welcomed by those investors with an interest in investing in Bhutan;

(c) ***Minimizing the competition for citizen investors at the small and micro level*** – with a very limited history of modern entrepreneurial activity, the private sector in Bhutan is not currently in a position to compete effectively with entrepreneurs from surrounding countries – particularly in trading, services and simple manufacturing for the domestic market;

(d) ***Adoption of positive lists of sectors open to FDI*** – by choosing this option, the government has limited FDI to sectors in which it believes Bhutan has potential competitive advantage and in which such investment would be beneficial;

(e) ***Mandatory joint ventures*** – the maximum foreign equity in an FIE will be 70 percent;

(f) ***Non-equity foreign involvement*** – rather than approval being automatic (against defined criteria) as with the equity investments, approval of these arrangements will be considered by application to the Board of Investment;

(g) ***Equal treatment*** – foreign investors will be accorded the same treatment as local investors engaged in the same business in the application of relevant laws, regulations, and procedures;

(h) ***Remittance of profits/dividends*** – allowed only to the extent that net foreign exchange earnings in the currency concerned are available;

(i) ***Taxation*** – as for other private sector companies in Bhutan; worldwide income provisions will not apply;

(j) ***Imports*** – subject to the requirement that the foreign investor provide the necessary foreign exchange, all industrial plant, machinery, spares, and raw materials will be exempted from sales tax and customs duty; and

(k) ***Employment*** – FIEs will receive an automatic entitlement to a designated number of work permits, according to the size of the investment; additional expatriate employment approved where shortages of appropriately skilled Bhutanese can be demonstrated, however, these positions will have to be converted to local jobs via a training program.

The proposed foreign investment policy is an admirable attempt to develop a compromise between the more liberal conditions which would make Bhutan a more attractive location for FDI and the understandable concern regarding the possible negative effects on the economy and culture of either inappropriate investment projects or excessive levels of such investment, particularly in some key sectors. As a compromise, there is, of course, a cost, in that various elements of the policy will have negative effects on the attractiveness of Bhutan as an investment location, so that some of the benefits listed as objectives may not be realized, in part or in full. The following section discusses the negative impact of some of the policy choices which have been made. These comments are not intended as criticisms, rather explanations of the costs involved, so that there is full awareness within government of the implications of the choices

which have been made – and of the opportunities for positive changes to be made to the law once some confidence in this area has been acquired. In some cases, the policy choices would appear to directly limit the attractiveness of FDI in the nominated priority sectors.

Three policy choices will have a major impact on the extent to which FDI becomes an important contributor to private sector development in the Kingdom. These are the choice of a positive list approach to defining allowable sectors for investment, rather than a negative list, opting for mandatory local equity in each FIE; and, possibly to a lesser extent, the stipulation of minimum project size.

The decision to define a **positive list of sectors for investment** will incur costs at two levels. First, it is not possible to anticipate all the possible projects which private sector entrepreneurs might identify as attractive, many of which would be in sectors and industries which would be non-contentious. Indeed, it is the innovation of the private sector, in aggregate terms, that provides the dynamism which produces economic growth. To the extent that some of these non-contentious projects will fall outside the positive list, so Bhutan will be denied investment it would have been happy to accept. While it is possible that the minimum project size requirement may prevent many of these projects, even if they were allowable under a negative list approach, it is important to be aware of this constraint. (One implication from this policy inter-relationship may be that moving from a positive to negative list approach may need to be accompanied by a reduction in the minimum equity provisions to generate a significant impact – which may well be feasible once greater confidence in the FDI process has been acquired through experience.)

The second cost will be administrative, in that interpretation of the inclusiveness of nominated sectors on the positive list will constantly be an issue for the approval of proposed investments – particularly as the proposed list is defined in relatively broad terms, for example, "light industries, including electronic industries" and "engineering and power intensive industries."

The mandatory requirement for **local equity** of 30 percent seems likely to be the most costly impediment to FDI, particularly when combined with the minimum project size requirement. Again, there are two dimensions to this cost. The first is that it is a well-established fact that the majority of foreign investment which takes place around the world is in the form of 100 percent foreign-owned projects. This is because most investors have a strong preference for this form of investment. While some favor joint ventures in some circumstances and others will agree to seek a local partner when this is the only option available to them, there are a significant number who will not invest in joint ventures. Thus the adoption of mandatory local equity provisions has the effect of limiting the population of potential investors interested in investing in a country.

The second dimension of the cost is that, at this stage of its private sector development, it is unlikely that Bhutan can offer more than a handful of local companies, which have the technical and managerial capacity to be viewed as acceptable (let alone attractive) joint venture partners. Add to this the financial obligations – a minimum of 30 percent of projects which must be at least $1.0 million in manufacturing and $0.5 million in services – and the field of potential partners is narrowed even further. Thus, even those foreign investors willing to consider a joint venture may have great difficulty identifying partners with whom they would be willing to enter a joint venture agreement. Projects well above the minimum size will be even harder to structure, unless the government steps in as the local equity partner, which would seem counterproductive to a private-sector development strategy.

Allied to the issue of the availability of local joint venture partners is the question of the developmental impact. There is plenty of evidence from numerous developing countries in all regions that the imposition of mandatory local equity requirements for FDI, in economies where

the private sector is not well developed, results in the emergence of a limited number of large, powerful, multi-sector conglomerates. This is entirely understandable: forced into joint ventures, foreign investors will seek to link themselves with those companies which offer the best prospects for continuing success. Often, these will not be companies with interests in the same sector which can bring relevant industrial experience but, rather, companies which have the management capacity and financial strength to contribute productively to the relationship – with capacity to provide further equity funds for future expansion often an important consideration. Thus the same companies (or individuals) appear time and again as partners in new FIEs, which severely limits the private-sector development benefits that this well-intentioned policy was expected to produce. Stated in its starkest terms, a mandatory local equity provision can easily lead to a small number of relatively affluent businessmen benefiting substantially while much larger numbers of potential employees are without work as a result of foreign investors, who would otherwise have invested, baulking at the joint venture requirement.

Mention has already been made of the combined impact of other policy choices (positive lists and mandatory local equity) and **minimum project size**, however, there will be other impacts arising from this stipulation. One of these is the limitation of the "osmosis effect" – the absorption of improved business practices by the domestic private sector through its day-to-day interaction with the foreign private sector. The extent to which this occurs will be largely determined by the number of FIEs created, rather than their size or value, so that limiting foreign investors to what are fairly large investments relative to the existing Bhutanese economy, will also limit the extent of these benefits.

More specifically, the fact that the nominated minimum project sizes are relatively large is likely to result in a range of small projects which would be beneficial to the economy and non-threatening to the local private sector being ineligible. In fact, this circumstance is quite probable in two of the nominated priority sectors – agroprocessing and IT. In agribusiness, the export of high-value products to niche markets could be an area of considerable potential. Earlier in this chapter, it was argued that this kind of development is only likely to occur through the introduction of FDI yet, almost by definition, such projects are likely to be relatively small and would certainly be so in their start-up phase. A similar argument has been made for the expansion of IT use within the local economy – i.e., that this is likely to be accelerated by the introduction of specialist IT service providers. These are also likely to be small in capital investment terms, as they are technology, rather than capital, intensive, with human resources, rather than equipment, being the major input.

While it could be expected that the large majority of FDI which will be attracted to Bhutan will be export oriented, there will be some which will be aimed at domestic sales – some of which, as explained above, will be closely aligned with the government's priority development sectors. The limitation on the **remittance of profits and dividends** to the net earnings of the type of foreign exchange required for the remittance will be a major impediment to such investment taking place. Specific instances of this impact in priority sectors will be on IT services for the domestic economy and agroprocessing for the domestic market, with the latter perhaps even worse affected if there is any requirement for imported inputs. Even where the sales focus is on export markets, to the extent that non-Indian investors wish to sell into the Indian market, they will find themselves potentially short of the hard currency needed to effect remittances.

One last comment is on **training of nationals** and the localization provisions of the proposed investment policy. While it is not clear from the wording of the draft policy statement as to how this policy will be implemented, it is to be hoped that the choice will be for market forces to be allowed to play a major role, rather than localization to be effected by way of regulation. Given the low levels of training which are currently carried out within the private sector in Bhutan, there is a good case for some form of fiscal incentive being introduced, to encourage companies to train staff

and so accelerate the rate at which localization can take place, without impacting negatively on the operational efficiencies of the FIEs.

4. Remaining Issues to be Addressed

In early October 2001, the final draft of the foreign investment policy was submitted by the Minister of Trade and Industry to the government for consideration. Once formally accepted as an appropriate basis from which to develop draft legislation, this process can commence, so that the legislation can be submitted for consideration by the Assembly when it next meets, in July 2002. The necessary regulations can be prepared on a concurrent basis, so that these will be ready – subject to any adjustment necessary as a result of modifications to the legislation made by the Assembly – as soon as the legislation is approved. However, despite the expected availability of both the legislation and regulations by the end of the summer parliamentary session, Bhutan will not be in a position to start operating its foreign investment system at that time. Before this can take place, procedures will need to be developed (including those for monitoring the FDI activity which takes place), responsibilities for the administration of the system assigned, and relevant staff trained.

Once the administrative system is established and operational, two other important components of Bhutan's overall strategy for attracting and benefiting from FDI will need to be addressed. The first is the creation of some form of investment promotion capacity. While an efficient system to implement the policy adopted will be a major advantage – if the opportunities created by the introduction of the new policy are to be effectively exploited – it will need to be complemented by a range of promotional activities. Bhutan is virtually unknown as a potential location for foreign investment, so that some targeted publicity of the decision to allow FDI – and the opportunities which are available – would be beneficial. At the same time, prospective investors will benefit from facilitation services provided by the government as they seek to gather the information they require to decide whether an investment is feasible, obtain the registrations, approvals, and licenses they need once they decide to invest and start up their investment. Creating some form of investment promotion agency will require decisions about the institutional position of the agency within government, the mandate it should be given and the functions it should adopt, recruitment and training of staff, and a range of other capacity-building measures.

The second ongoing requirement will be for monitoring and reviewing of the system and its impact. Quantitative data on the sources, sectoral interests, and scale of intended operations of all investors – both prospective and actual – will provide information that will play an important role in the reviews of the FDI regime which the Government will need to periodically conduct. Another important part of these reviews will be qualitative information on the attractiveness of Bhutan as an investment location, which the investment promotion agency should be able to collect, based on its frequent contacts with the foreign investor community.

Arrangements are already being developed under which the Royal Government will obtain external assistance for the process of converting the investment policy statement into draft legislation and supporting regulations. It is proposed that the Foreign Investment Advisory Service (FIAS) will provide some of the assistance required and that the process will be jointly funded by FIAS and UNDP (with the latter funds being drawn down from an existing project being administered by the Ministry of Trade and Industry). Following the approval of the legislation by the Assembly and the promulgation of the regulations, a second phase of external assistance from FIAS is planned. This project would comprise a number of components, covering the outstanding tasks described above and be expected to be implemented over a period of at least 18 months to two years. The government is currently seeking the necessary cofinancing for this project.

CHAPTER EIGHT
CROSS-CUTTING ISSUES

1. Introduction

Bhutan's increased focus on private-sector development and employment creation is coming at a time of considerable regional and global change. One of the most important developments has been the gradual move to reduce and simplify tariff and non-tariff barriers in India. Bhutan's free-trade agreement with India provides it with privileged access to Indian markets, which in turn have been protected by high tariff barriers. As tariffs and other trade restrictions fall in India, Bhutanese exporters will have to become more efficient if they are to grow and prosper in the face stiff competition from low-cost producers from around the world.

As a small, land-locked country, Bhutan's main areas of comparative advantage have been four fold: relatively unrestricted access to the large Indian market for imports and exports; low electricity prices; access to low cost and stable labor; and a competent, committed, and non-corrupt government. In addition, Bhutan's unique development path with a major focus on the environment, as well as its geographic location, provides it with the potential to produce niche-market goods, which are based upon location (such as tourism, some agricultural products, Himalayan herbs, and medicines) or environmental advantages (organically produced goods and environmentally and sustainably managed forests). Developing policies in support of private-sector-led growth that build upon these comparative advantages will be the challenge for the NFYDP and may, indeed, necessitate a different approach to private-sector development in different parts of the nation.

Against these considerable advantages, Bhutan's private sector faces equally imposing obstacles. Chief among these has been the relatively late opening up of the domestic economy to the outside world. The almost exclusive reliance upon agricultural production prior to that date means that there is a lack of well-developed entrepreneurial skills in Bhutan outside of some basic areas such as agriculture and trading. Available economic evidence suggests a strong linkage between external interactions – particularly through exports, imports, and Foreign Direct Investment – and economic growth. Unfortunately, the closed nature of the Bhutanese economy until recently, has precluded most of these potentially beneficial interactions. A second serious challenge for the private sector is geographic barriers and their impact upon transportation infrastructure. Road links are not robust and are frequently disrupted by either landslides or political disruptions in India (several parts of Bhutan are only accessible through India as internal road linkages do not exist) and air linkages are also adversely impacted by weather, equipment breakdowns, and landing and takeoff restrictions at Paro International Airport. A third issue is a government which has had only limited involvement in supporting the private sector and is consequently "new to the game." This is exacerbated by the fact that the private sector is "even newer" to the game of private-sector-led growth. As the government is relatively well run, efficient, and effective, it has a general perception that the private sector is less well organized, less effective, and likely to be more corrupt that the public sector. In short, the government has developed somewhat of a patronizing attitude toward the private sector that it strongly wishes to support.

This chapter examines some of these concerns in greater detail by reviewing a set of cross-cutting issues that impact all sectors. It uses survey data to investigate the problems and seeks to identify policy measures that will help Bhutanese industry become globally competitive and help

strengthen the private sector so that it can eventually replace the government as the main economic engine of growth.

2. The Biggest Business Problems for the Private Sector

In ranking their biggest business problems – a lack of skilled labor was overwhelmingly cited as the most significant issue of concern by the survey respondents. This was followed by bureaucratic burdens/governance issues, a lack of demand, credit and finance, and infrastructure – in descending order of importance. The rankings were substantially the same for all sectors and regions.

Table 8.1 presents the survey results. The first column gives the number of times that a particular problem was ranked as the main constraint, and the second column gives a weighted ranking. The weighted rankings, however, do not alter the relative importance of the number-one ranked issues of concern.

Table 8.1: Three Biggest Business Problems

Problems	No. of Times Cited as Number 1 Problem	Weighted
Skilled Labor	20	0.51
Bureaucratic Burden	16	0.38
Lack of Demand	17	0.36
Credit and Finance	16	0.30
Infrastructure	8	0.20
Business Support Services	1	0.06
Import Regime	0	0.05
FOREX Regulations	1	0.03

NOTE:
1/ The weighting was calculated by providing a "number one" problem with a weight of 3; a "number 2" problem with a weight of 2; and a "number three" problem with a weight of 1.
2/ In this table, various groupings of "like" attributes have been classified together. Hence, for example, all issues related to government regulations – labor law, tax policy, obtaining land, and so on, are grouped together as "Bureaucratic Burden". Lack of demand and competition from imports have also been grouped together.

Whereas most of the above issues are self explanatory, the issue of "lack of demand" is somewhat nebulous. Firms frequently complain that they cannot complete with imports that foreign producers dump onto the domestic market – or that the local market is too small for their production base. Often, however, the underlying problem is the inability of these firms to compete on a cost-competitive basis. The fact that there are significant imports illustrates that there is consumer demand, not to mention the fact that India (which Bhutanese producers can sell into without restriction) is one of the largest consumer markets in the world. The reality is that many Bhutanese firms have difficulty competing in terms of price, quality, delivery, and marketing and therefore are unable to win market share.

3. Labor Issues

One of the ironies of Bhutan is that there is increasing government concern over employment issues when, by some estimates, around 50 percent of the formal sector work force consists of non-nationals – mainly Indians. These low-cost workers have accepted jobs that many employers feel Bhutanese workers will not undertake including menial and backbreaking work in factories, on construction sites, and in road building. This, in turn, has resulted in the second irony of

employment in Bhutan: despite the desire to employ more Bhutanese workers the government is concerned about increasing mechanization rather than promoting labor-intensive methods of production. The bountiful supply of low-cost, unskilled Indian labor has resulted in the adoption of labor-intensive technologies in Bhutan. However, there is a general perception that, as a result, production quality has suffered and firms are hiring less expensive non-nationals in lieu of local workers or more appropriate capital equipment. Consequently, the government advocates mechanization as a way to improve production quality and break the reliance on non-national labor.

However, the government, in its attempts to spur job creation and mobilize the private sector to absorb the growing Bhutanese work force, must take care not to handicap the competitiveness of the budding, but fragile, industrial sector. Arbitrarily cutting off the supply of inexpensive and skilled non-national labor or forcing the adoption of inappropriate technology to reduce the employment of unskilled non-nationals could render Bhutanese industry non-competitive, reduce growth, and actually lead to a loss of jobs. Instead, the key to success lies in developing the country's human resource base and its overall productivity to levels, which will make Bhutanese industry globally competitive. The focus must be on education, training, and acquiring improved technology to raise productivity levels, increase international competitiveness, and create job opportunities for the expanding Bhutanese work force.

Bhutanese industry is labor intensive – as efficiency demands in an environment with low-cost labor and high-cost capital – hence, keeping labor costs down in relation to productivity is critical to maintaining competitiveness. Bhutan's future, by dint of geography, is intimately linked with that of India. A long, unpoliced border and a free-trade agreement further strengthen these ties by permitting the reasonably free movement of goods and labor between the two countries. Thus, except in exceptional circumstances, wage and productivity levels cannot be too far out of line with those in India. With the increasing implementation of WTO requirements Bhutan will also have to match the productivity levels of other low-cost producers. If wages in Bhutan remain at levels higher than in neighboring countries, then companies in the same industry can only survive if labor productivity is correspondingly higher, to cover this wage differential. As the cost of capital is no cheaper in Bhutan than elsewhere – and possibly even more expensive than in India – Bhutanese industry also needs to take care that its efforts to raise labor productivity do not result in the adoption of high-cost, inefficient, capital-intensive modes of production.

Labor Stability. The Bhutanese labor market has two very valuable attributes. Principle among these is a total absence of labor unrest. Disruptive union activity does not exist, and no companies in the sample recorded any work days lost as a result of strikes (although some work days were lost due to non-national workers attending festival celebrations in India). This unique feature means that Bhutan has access to cheap, non-national, labor without the unrest which is prevalent in other countries of the region. Labor force stability, in combination with low wage rates, is a considerable strength – and comparative advantage – relative to its South Asian neighbors.

Labor Flexibility. A second advantage is that the labor law allows for almost complete flexibility in labor markets. Although the government ostensibly regulates the employment conditions of all Bhutanese citizens,[27] labor regulations are largely undeveloped and employers can easily hire, fire, and set wages without any influence from organized labor. Hence, for example, no company in the sample experienced problems in firing poor performers – either national or non-national. Employers "lay off" workers at will, and since they do not have any job

[27] Royal Government of Bhutan, *Rules and Regulations on Employment of Bhutanese Nationals in the Private Sector*, December 1997.

security to lose, workers "leave" their jobs when other demands (rice planting, harvesting, or even general discontent with their job) loom large. This has both benefits and costs in terms of labor force stability – for the national work force – as it also creates an unwelcomed element of "mobility" into the labor market.

Wages. Flexibility is further increased by the absence of an official Wages Policy. Currently the minimum wage law only applies to the National Work Force – those who work for the government or on government contracted projects – and not the private sector. While some companies follow the government lead, they are not obliged to do so. Most manufacturing firms, especially those relying on non-national labor, do not pay the government minimum wage. This lack of a formal policy provides considerable flexibility to the private sector. Wages tend to be very sticky (i.e., they do not move often or easily), and there is little union agitation (currently) for salary increases. The disadvantage of this policy, however, is that wages tend to go for long periods of time without adjustment and then are suddenly adjusted by large increments. So, for example, in 2001, the government announced an increase in the minimum wage rate from Nu50 per day to Nu100 per day – an effective 100 percent increase in salaries. As a wage leader in the economy, some private sector firms have followed the public sector's lead.

Wage levels vary considerably between regions and nationalities. The survey confirms, for example, that private-sector wages tend to be higher in regions away from the border. It appears that Bhutanese workers of all skill levels have high reservation wages (the minimum wage that will induce them to work) and generally demand more compensation than Indians. Consequently, many of the industrial activities, especially those concentrated along the border areas where there is free movement of labor, rely upon low-cost, non-national workers to produce competitive products for sale into the Indian market. Table 8.2 provides data on the average wage of Indian and Bhutanese workers in the surveyed manufacturing firms in the two main towns. It relies only on manufacturing firms because the work force is more homogenous than in the service sector and is therefore more comparable. The table illustrates that Bhutanese workers in all categories and all regions, receive higher pay than their Indian counterparts. At the lower end of the scale, several surveyed firms in the border towns, were paying unskilled non-national women as low as Rs25 per day and non-national men Rs30 per day. Such rates are extremely low by both regional and international standards.

Table 8.2: Average Monthly Salary By Region and Ethnicity

		Production	Non-Production	All
Thimphu	Bhutanese	4,823	13,811	6,112
	Indian	3,905	8,839	5,609
Phuentsholing	Bhutanese	4,176	9,000	5,718
	Indian	2,393	6,369	3,048

Given the high level of labor mobility, especially in the border areas, the only sustainable way for Bhutanese workers to be paid more than non-nationals is if they are more productive. A cursory comparison of firms with large shares of non-national workers compared with those with a high proportion of Bhutanese workers reveals that the firms with mostly Bhutanese workers have a higher average value-added per worker. In Table 8.3, the average value-added per worker in manufacturing firms with more than 80 percent Indian workers is almost 28 percent less than the average for firms with less than 20 percent Indian workers. Yet, anecdotal evidence and interviews would suggest that Bhutanese workers are less productive than their Indian counterparts. This is not, however, contradictory. Since Bhutanese workers have a higher

reservation wage, they tend to only accept employment in firms with high value-added per worker that come with higher pay. It is likely that most Bhutanese are found in capital intensive industries or those demanding higher levels of skill. On the other hand, there are few skilled Bhutanese workers and most firms, particularly manufacturing firms, are labor intensive with low wages, which leads to a high percentage of Indian workers.

Table 8.3: Mean Value-Added Per Worker Per Year (US$)

	Manufacturing	Service
All Firms	2,892	4,950
Less than 20% Indian	3,411	5,841
20%-80% Indian	2,450	5,645
More than 80% Indian	2,645	398

Unskilled Workers. The government has been concerned for some time over the relatively large share of non-nationals in the total formal labor force and has instructed firms to reduce levels of non-national employment. This has been difficult to enforce in border areas where day laborers are free to walk across the uncontrolled border, undetected, and unrecorded. These non-nationals, however, are not allowed to travel beyond the border areas without special permission. Consequently, as reflected in the sample, non-national employment in firms in Thimphu is significantly lower than non-national employment in Phuentsholing. Table 8.4 gives information on the percentage of the sample's production and non-production labor force, where production workers are assumed to generally be less skilled than non-production workers.[28] Bhutanese account for 64 percent of the entire sample's work force but 71 percent of the non-production workers. Indians make up a greater percentage of the work force in the border area in both categories. Companies in Thimphu, appear to use Indians with skills that they cannot find in Bhutan and for jobs that locals will not undertake. However, on the border they are used in all categories and their lower wages seem to be the determining factor.

Table 8.4: Percentage of Indian and Bhutanese Workers in Sample by Type

Type	Thimphu		Phuentsholing		Full Sample	
	Bhutanese	Indian	Bhutanese	Indian	Bhutanese	Indian
Non-Production	89	11	63	37	71	29
Production	76	24	57	43	63	37
All Workers	79	21	59	41	64	36

The exception to this rule is construction companies – which are largely involved in building sites and in road construction projects.[29]. These companies are provided with generous allocations of non-national work permits – even in central Bhutan – and this, in turn, has spawned "construction companies" which are more interested in securing work permits for non-nationals than in actually undertaking construction projects.

In justifying their appetite for non-national workers, many firms assert that Bhutanese workers (a) are high cost; (b) are less productive than their non-national counterparts (thereby making them doubly expensive); (c) are unreliable and disappear during rice planting and harvesting seasons;

[28] Non-production workers include managers, owners, technicians, and professionals. General production workers, office workers, and service workers are grouped into the production category.

[29] Construction companies use highly labor intensive techniques and few Bhutanese are willing to engage in such strenuous work for such low wages.

(d) do not have a good work ethic and will leave a job suddenly and without notice if they feel slighted or affronted by their employer's actions; and (e) are unprepared to undertake dirty, repetitive, or menial work. The government counters these accusations by arguing that Bhutanese workers will never develop a good work ethic and increased productivity unless they are exposed to a workplace environment. Consequently, the government is increasingly insisting that private companies reduce their non-national work force (one company surveyed in Thimphu had been told to reduce its non-nationals by 25 percent by end December 2001 and a further 25 percent by end June 2002).

If non-national workers are replaced, higher costs and reduced productivity – in combination with a weaker overall work ethic – mean that Bhutanese companies will be placed at a competitive disadvantage. Hence, the natural desire to increasingly "Bhutan-ize" the labor force will need to be sensitively calibrated against the desire to generate a larger and stronger private sector as – at least for the short term, these two objectives are likely to be in conflict.

Skilled Workers. When asked their biggest business problem, firms in the survey overwhelmingly cited a lack of skilled labor in Bhutan. This was true for all sectors and geographic locations. Until recently, virtually all Bhutanese with a full secondary or tertiary education were absorbed into the public sector. Only over the past several years have a growing number of graduates been unable to find employment in the civil service, their preferred employment option due to its benefits and job security. As a result, an increasing number of Grade 10 leavers, and even graduates, are seeking employment in the private sector. However, companies complain that the best school-leavers still go to the government, and those that come to them have little experience, yet demand high benefits. In addition, managers report that there is a mismatch between skills needed by industry and those provided by most schools and training institutions. An increasing number of school-leavers entering the market cannot find jobs, yet industry still feels its biggest single problem is a shortage of skilled and experienced labor.

As most private sector industries are reasonably young, skills tend to be weakest in the area of management. Bhutanese entrepreneurs overwhelmingly have a civil service or government background. Including the civil service, NGOs, the royal family, and the military, almost 48 percent of the sample were working for the public sector immediately prior to establishing their business. Less than 30 percent came from another private-sector business. These "public sector managers" often do not know their industry well and don't know how to identify and hire technically skilled and professional support staff. Without seasoned managers, firms fail to properly manage their business, find the proper technology, train their workers, or even hire the required skills. It is often a case that managers "don't know what they don't know." Many managers in the survey group did not recognize the management failures that were evident to the sectoral specialists involved in the survey.

Developing a cadre of Bhutanese managers, school-leavers, and graduates with necessary skills will take time and require nurturing. Thus, in areas where skill shortages exist among the Bhutanese workforce, the government should provide for the liberal recruitment of skilled non-national workers. Several areas were immediately evident including: accounting, auditing, information technology, human resource management, marketing, packaging, and so on. Leveraging the skill sets of workers from neighboring countries in these areas should assist the further development of industry in Bhutan. IT is a particular case in point where South India has been extremely successful in developing a vibrant export sector, an activity that the government of Bhutan now wishes to actively pursue. Liberal work permit schemes for skilled non-nationals will be necessary to provide the skills required by the private sector. Access to relatively low-cost and highly skilled Indian workers provides Bhutan with an important cost advantage, which it should seek to leverage.

Training. Despite the fact that managers reported a lack of skilled workers as their single biggest business problem, the survey found that, apart from the largest companies, very few private-sector firms provided significant formal training for their workers. In fact only about 39 percent of surveyed firms reported doing any training (Table 8.5). Less than 3 percent of the sample's entire work force received any training over the past year, and the average ratio of training-cost-to-sales is an extremely small 1.4 percent. Service firms were more likely to provide training and train a slightly larger percentage of their work force. This is expected since service firms, especially tour operators, cannot easily hire skilled non-nationals. Given the growing body of evidence linking worker training with firm growth and productivity, the lack of training in Bhutan is an important shortcoming that needs to be addressed.

Table 8.5: Percentage of Firms Training and Training-to-Sales Expenditure

	Manufacturing	Service	Full Sample
Percentage of firms Training	28	52	39
Average Training/Sales	1.1	2.0	1.4
Percentage of Work Force Trained	1.8	4.7	3.0

Almost 30 percent of the firms who do not conduct significant formal training, cited a lack of government incentives as a reason (Table 8.6). Many firms labor under the misconception that worker-training costs are only a tax deductible expense up to 2 percent of total profits (as are entertainment and some other allowable expense deductions). For small firms, and firms which are only breaking even or making a small amount of profit, this provides no incentive to allocate scarce resources to training. According to the Department of Revenue and Customs in the Ministry of Finance, however, this is not the case and training allowances are permitted on a case-by-case basis and are granted reasonably liberally.

Another major reason cited by managers for not training is that Bhutanese workers are excessively mobile and can "move on" or "out" at a moments notice. In addition, since Indian workers are supposed to be phased out, there is also an automatic bias in the system against training them, which in many firms constitutes a high component of the total labor force.

The reason most often given by firms for not training was that training was not needed. Almost all companies use mature Indian technology, and it is less expensive to hire trained workers from the large available pool on the border than to train their own staff. In fact, some managers indicated that they stay with older Indian technology, rather than upgrading, specifically because it simplifies the task of finding trained workers and undertaking maintenance. Not training also reduces the cost of worker turn over. However, the reliance on old technology, in combination with low levels of training, augers ill for raising labor productivity and improving international competitiveness. A final reason why managers don't see a need for training was apparent to the sector specialist participating in the survey – often the managers themselves are technically unskilled and do not know or fully understand the need for skills upgrading.

Given the pressing need to encourage worker training and the current misperception of what is allowable, it is highly desirable that the policy on training be made as explicit and automatic as possible. To this end, the Department of Revenue and Customs needs to move away from the current case-by-case determination of allowable training expenses and devise an explicit allowance which is freely available to all companies, without exception. The work of the National Technical Training Authority (NTTA), which is examining ways to structure incentives

that will make it more attractive for firms to train in an environment where Bhutanese workers are highly mobile, will also be important.

Table 8.6: Major Reasons for not Training (% of firms responding)

Reason	Percentage
No Need	64
Lack of Government Incentives	30
Worker Turnover	26
Cannot Afford it	25
Lack of Training by Chambers, Associations, etc	17

Percentage of the 66 firms saying they do not train.

New Labor Regulations are currently being prepared and are expected to be implemented soon. The new regulations will extend the minimum wage to cover the private sector, set working hours, and define overtime benefits. While it is important to ensure fairness and equity in the workplace, one of Bhutan's comparative advantages is an absence of excessive labor regulations, which plague many other regional countries. Developing an appropriate balance between fairness and a desire to regulate with only a "light touch" will be important in assisting Bhutan retain its labor market flexibility and competitive edge.

Within this context several key issues need to be considered particularly carefully. Since public sector wages are already higher than market wages and significantly above what non-nationals accept, the extension of the minimum wage threatens to impose an unmanageable burden on a nascent private sector. On the other hand, developing a wage policy that provides smaller, more frequent, and preferably automatic salary increases to the public sector – and making it very clear that this only applies to public sector wages – would go a long way to ensuring that wages do not lag too far behind other prices in the economy. It would also help shield the economy, and possibly the private sector, from sudden sharp shocks in salary levels.

Policies. In designing policies to spur employment opportunities, the government must be careful not to cripple the small and still relatively fragile, private sector. Advantages arising from labor stability, labor flexibility, and low cost, need to be carefully calibrated against the desire to protect workers' rights and gradually increase the share of Bhutanese workers in the formal labor force. Flexibility in wage setting, hire and fire procedures, labor force stability, and the ability to pick up missing skills from India, all afford Bhutan considerable advantages vis a vis other countries in the region. Given other disadvantages faced by the private sector in Bhutan, these advantages should not be sacrificed to the detriment of the young private sector.

A key to private sector development is raising worker productivity. This will improve the competitiveness of Bhutanese goods even at existing wage levels. However, labor, employment, and wages policy need to:

- Ensure that private-sector firms have access to the skills they require – including liberal access to skilled non-nationals in the absence of adequately skilled or experienced Bhutanese workers;
- Ensure that firms are not arbitrarily cut off from low cost Indian unskilled labor;
- Make sure that firms do not mechanize inappropriately in ways which increase the capital-labor ratio beyond what is optimal in an effort to raise worker productivity. This will merely reduce profits and make firms less competitive vis-à-vis countries that are using more appropriate technology;

- Ensure that productivity gains are achieved by transferring appropriate technologies – through better management techniques, increased levels of worker training, and the careful introduction of appropriate equipment;
- Promote productivity gains by moving up the value chain and producing new products. For example, in services such as IT, accounting, design, tourism, and in niche markets, which typically have higher value added per worker but require higher skill levels;
- Permit the continued application of a flexible wages policy as well as reasonable latitude in the ability to hire and fire.

It is critical that Bhutan invest in improving the quality of its work force. Since individual firms will not be able to capture the full benefits of training, the government must be prepared to offset some of the associated costs.[30]. Readily available tax incentives, matching grants schemes that share the costs of training or acquiring technology, and direct subsidies for training are all ways that should be considered. In addition it is necessary to align the educational and vocational training programs with the needs of private industry and to invest further resources in secondary and higher education.

4. Technology Issues

To enter world market and successfully compete with imports, Bhutanese firms must dramatically improve their productivity. Not only must they seek to upgrade their human capital but they must also adopt appropriate new technology. The advantages offered by preferential access to Indian markets, in combination with high Indian tariffs and the natural protection provided by Bhutan's remote location, have led to little domestic competition and created few incentives for firms to seek productivity improvements. Investment is low and is mainly directed at increasing production or replacing worn machinery with existing, mostly Indian, technology. Very few resources are devoted to improving production processes or introducing new products. This, in combination with a lack of worker training, has led to low productivity and makes most Bhutanese products uncompetitive both globally and within the South Asia region.

Long experience in many countries has shown that learning mechanisms, which help firms obtain information on the most productive practices and improve their technical capabilities, are key determinants of productivity growth.[31]. Such mechanisms include exporting, foreign investment, foreign consultants, worker training, and external support services. Unfortunately, most of these mechanisms are either poorly developed or completely lacking in Bhutan. Non-electricity exports are extremely low, few firms train, and foreign direct investment has been almost totally absent (as a result of conscious government policy). This lack of learning mechanisms is exacerbated by the fact that most businessmen are inexperienced and many are not familiar with the technical aspects of their business. They either don't recognize the importance of technical innovation or do not know how to go about making technical changes.

In the area of technology, it is important that Bhutanese companies look beyond India – the main source of its current technology. In the past, it has been easier and cheaper for enterprises to look across the border to obtain tried-and-true production methods supported by a ready pool of trained

---

[30] There are large spill-over effects from firm level training that cause the net social benefits to be greater than the private benefits captured by firms. Thus, there is suboptimal investment and the government should provide some support. The spillovers include: trained workers leaving and taking their skills to other firms; training by one firm provides a demonstration effect to others; firms often provide training to suppliers and customers; firm training often raises the quality of products and this provides benefits to its customers.

[31] Biggs, T., M. Shah and P. Srivastava (1995). *Technological Capabilities and Learning in African Enterprises.* World Bank Technical Paper No. 288., Washington, DC

labor. This may not, however, always be the most efficient technology for Bhutan. With Indian trade barriers falling, Bhutan will have to compete globally and this will require adopting international best practices. This may mean that Bhutanese companies have to leapfrog Indian technologies and take up more developed third-country technologies. Although this may be more expensive and difficult, it will help ensure competitiveness in world markets. Strengthening the private sector in Bhutan requires improving productivity and that necessitates dramatically enhancing the learning mechanisms that allow firms to improve productivity.

Key technology areas. Technology is a general term and covers a wide variety of issues. The areas that are most relevant to Bhutan include management knowledge; market knowledge; production technology; design and product development; information technology; and management and quality systems.

(a) *Management knowledge.* Management is weak in firms – owners commonly lack technical qualifications or relevant prior experience. Owners and managers need to be more aware of appropriate "best practice" before they can effectively transfer new technologies to their firms. In other developing countries, many managers develop skills and knowledge of best practices by working for foreign companies or attending technical courses abroad. However, in Bhutan this practice is rare. Less than 13 percent of the managers in the sample ever worked for a foreign company, almost all in India. This compares with Nepal, where a similar survey found that over 51 percent of managers reported working outside the country. While over 60 percent of managers in the sample studied outside of Bhutan, most went for non-technical basic education with no direct relationship to their business (frequently in their former civil service capacity).

(b) *Market knowledge.* As a result of Bhutan's past isolation – and the government's market dominance – firms lack an awareness of marketing and are unfamiliar with marketing tools. The identification and penetration of market niches is also made difficult as the relevant skills are not present in Bhutan and Indian expertise may be inappropriate.

(c) *Production technology.* Productivity and quality in Bhutan are not up to international standards as a result of weak management, old equipment, insufficient maintenance, and bad operator skills. If inputs are no cheaper and/or better quality than India's, firms need to leapfrog Indian technology and use globally competitive know-how. Production management needs improving so managers can optimize existing resources and any future investment.

(d) *Design and product development.* Innovative products are seen as a way forward to address niche markets in the agroprocessing, wood, and tourism sectors. Firms need to develop product policy – procedures to balance market needs with suppliers' resources – followed by market-driven, product-specific briefs and new product development.

(e) *Information technology.* Firms are struggling to introduce IT, which is essential in areas such as financial management, technology searches,[32] and in developing market links.

(f) *Management and quality systems.* Product consistency is lacking in many firms. Firms would, for example, benefit from ISO 9000 and HACCP to respectively guide organizations towards improved performance and ensure food quality.[33]

---

[32] To demonstrate the power of IT in gaining market information, 500,000 documents were accessed in a very short period of time when a search engine was asked for information on aromatherapy – one of the niche products identified in Chapter Three on agroprocessing.

Difficulties in technology transfer. Firms experience difficulties in searching for, acquiring, and absorbing technology. Some managers reported that it can take up to two years to reach a point where the firm is reaping the full benefits of a new technology. Due to the costs and difficulties in making technological changes, firms in Bhutan often forgo upgrading and rely on familiar technologies from India. While this lowers costs, it results in enterprises staying with old technology that rapidly becomes uncompetitive.

Searching for technology. Large firms generally use their equipment suppliers and buyers to identify sources of technology, but many recognize they need more advanced technology which they cannot easily identify. Often small companies are using guesswork to estimate their technology and provider needs – frequently leading to costly mistakes.

Acquiring technology. Although time-consuming, acquiring technology is less problematic, if companies use reliable suppliers who commission the equipment and provide operator training. However, with used equipment, firms often find the equipment is incorrect and/or defective. Hiring consultants is also problematic as many of them may be inappropriate unless recommended by a supplier or buyer.

Absorbing technology. Absorbing, or internalizing, technology presents a significant problem. Once production technology is acquired, it frequently has to be adapted to meet specific orders from customers. Some firms said that such absorption problems can add one-third to overall technology transfer costs. Maintenance and spare parts add further difficulties. With information technology, for example, the interviews revealed that three-quarters of the firms experienced difficulties in adequately training staff, in obtaining back-up service, or in developing and customizing software.

Learning mechanisms. To help overcome these problems, it is essential that efforts be made to create an information-rich environment of training opportunities (from both institutional or private sources) and information sources that address specific business problems in addition to fostering the availability of networks of specialized consultants. Some possible learning mechanisms include:

Government and Development Agencies. In many countries there is a network of institutions often supported by the government or donor agencies, which provide sources of training, technical information, recommendations on consultants, and other ways for firms to obtain information and assistance in finding and absorbing new technologies. The institutions are funded and managed in a wide variety of ways, but all seek to build partnerships with the private sector. There appears to be few similar institutions in Bhutan. For example, firms could benefit from the voluntary services of retired executives from developed countries, particularly to obtain management technologies and to catalyze other technology transfer.

Business Associations. Business associations can play a key role in helping small enterprises identify and obtain technology. They do this by sharing information among peers and helping form cooperative agreements between firms. Often individual firms need outside help to overcome coordination problems and form cooperative agreements between competitor enterprises. Associations also serve to lobby the government to help establish institutions to

---

[33] ISO 9000 is primarily concerned with "quality management" of all the features of a product (or service) which are required by the customer. ISO 9000 is concerned about the way an organization goes about its work and not directly the result of this work. Hazard Analysis Critical Control Point (HACCP) is a proactive process control system by which food quality is ensured. It is mandatory in some countries and includes hazard analysis, identifying critical control points (CCP), establishing critical limits for each CCP, monitoring CCP requirements, and using the data gathered to effectively control processes.

promote technology transfer. In Bhutan, associations are at a rudimentary stage of development and the perception is that information does not flow between firms.

Exports. Exporting brings many benefits including technology transfer since firms often learn about new technologies in the process of exporting. To be competitive in export markets, firms are forced to undertake market research and to work closely with their buyers. Often, buyers will work closely with their producers to help them design products, improve quality, and assure a consistent supply.

Foreign Consultants and Matching-Grant schemes (MGS). Another important learning mechanism is consultants and equipment suppliers. Unfortunately, there are few consultants with technical knowledge in Bhutan and very few equipment suppliers with a permanent presence. So there are not many places for firms to find new technologies. Bringing in consultants is usually prohibitively expensive for a small enterprise. MGSs are popular donor-sponsored programs, which foster technology transfers by sharing such costs. Firms implement approved projects and about half the costs are reimbursed. The schemes are generally run by international contractors who may hire sector specialists to advise firms on business planning, on sources of technology, and on project implementation. All Bhutan's main trading partners have implemented or are implementing MGSs.

BOX 8.1: MATCHING GRANT SCHEMES

Matching-Grant Schemes (MGS) are a common mechanism (funded by organizations such as the EU and the World Bank) that allow firms to access international technology at a subsidized cost. (The subsidies exclude the cost of hardware). The schemes consist of a technology fund, which is usually managed by an international contractor, responsible to a steering committee generally representing government and the private sector. The schemes may last 3 to 5 years. Contractors are usually selected by international tender.

Capable firms, or groups of firms, which want to obtain technology, submit a project detailing the relevant technology, the provider of the technology, and the cost of its acquisition. Usually firms have to submit a business plan to show how the project fits into the overall business development of the company. In assessing projects, contractors should ensure that the firm would not have undertaken the project without the fund, and that there will be some form of spillover from the project into the wider economy, eg. other firms will copy the assisted firm.

Once approved, the firm implements the project and, on completion, recoups part of the cost (typically 50 percent) from the fund. The schemes' contractors may be required to hire staff familiar with the sector(s) being assisted. These personnel advise firms on business planning, on sources of technology, and may advise during project implementation. Activities eligible for support could include production assistance; marketing; product design; management development; training, joint-venture partner searches, business association development; and other necessary technologies.

5. Financial Sector Issues

As is common in many developing countries, Bhutan's immature financial system adds to the cost of doing business and handicaps investment. While the banks' high liquidity position demonstrate that they are efficient at mobilizing savings, the survey results indicate that they are less successful at transforming these funds into productive loans. Firms reported finance as their fourth biggest business problem. Most of the complaints centered around the high cost of borrowing and the lack of access to credit, which restrict investment and force companies to rely on internally generated funds to finance the majority of new investments.

Cost of Borrowing. A major concern cited by surveyed firms was the very high level of nominal and real interest rates. Most lending is within the range of 13 to 16 percent – when consumer prices have been increasing at between 3 and 6 percent over the past two to three years – implying real interest rates of 7 to 10 percent. In addition, there has been very little change in these lending rates for most of the 1990s, and the banks appear to use a sectoral matrix of lending to determine rates rather than an individual assessment of a particular borrower's risk profile.

The banks justify the high interest rates by pointing to their high liquidity position, which has left a large share of total bank funds underutilized. This has increased interest rate spreads and the upper limits on lending rates. High interest rates are also blamed on the relatively high level of non-performing assets (interviews suggest this is around 15 percent) in the banking system, which has further increased banking costs. The Royal Monetary Authority now allows banks to redeposit large excess fund balances with banks in India (currently between 30 to 40 percent of their assets are in these almost risk-less foreign deposits), earning reasonable rates of return, thereby helping to reduce the overall level of non-income-earning assets on the balance sheets of the banks. Developing alternative remunerative outlets for commercial banking funds will assist in narrowing spreads and bringing down the high fees on banking transactions. However, providing risk-less forms of investment in India also reduces the incentives for banks to find ways to increase riskier private-sector lending within Bhutan.

Many bank customers informed the survey team that interest rates are determined for the commercial banks by the Royal Monetary Authority when, in fact, the RMA deregulated interest rates some time ago. It is important that the RMA actively publicize the fact that banks are free to determine their own lending rates and that customers are free to negotiate rates unimpeded by any restrictions from the central monetary authorities. This may assist in injecting some much needed competition into the banking system.

Anecdotal evidence also suggests that banks in Bhutan set interest rates based upon sector of lending, although it was difficult to obtain hard evidence on this. Many underdeveloped banking systems determine interest rates based upon a matrix of "sectors" and "terms" rather than on the underlying risk profile of the actual borrower. Training bank credit officers to properly assess risk is an important step in moving the banks away from more simplistic and less relevant criteria in determining interest rates, as well as helping in make interest rates more market determined.

As well as being high, interest rates are also extremely inflexible, with little variation in rates based upon changing economic circumstances. This lack of market orientation is driven by lack of competition in the banking system along with a lack of innovation and creativity throughout the sector more generally. Issues of innovation, creativity, and market orientation are likely to be best addressed by increased competition for both depositor funds and for lending opportunities. Frequently, the best forms of financial-sector competition in small, underdeveloped banking systems come from non-bank sources. Leasing companies, insurance companies, venture capital, and private debt instruments, among others, can all provide effective and efficient competition for the banks.

Collateral. Collateral requirements, which remain high despite claims to the contrary, also add to the cost of funds (see Table 8.7). In interviews, banks stated that as a general rule they demand that project finance be secured by property worth only 33 percent of value of the loan. In addition, they accept machinery and other equipment purchased by the loan as security. However, interviews revealed that firms actually face considerably higher collateral requirements from the banks and that machinery is often not acceptable. More than half of the sampled firms'

outstanding commercial bank loans required more than 100 percent collateral and for the development lenders the median collateral requirement was 116 percent.

Table 8.7: Interest Rates and Collateral Ratios

	Interest Rates	Collateral Ratio
Bank Loans		
Mean	13.4	86.2
Median	13.0	100
Development Institutions*		
Mean	13.7	116
Median	13.5	150
Overdrafts		
Mean	14.4	
Median	15.0	
Nepal		
Mean	14.3	190

* BDFC and RICB

Access. Despite the banking system's high liquidity, the survey results show that, in addition to cost, access to credit is also a major problem. Almost 43 percent of firms claimed to be credit constrained, i.e., wanting to borrow more at current interest rates. Close to 30 percent of firms had neither short-term nor long-term bank credit, and 8 percent had been rejected for a bank loan. More than one-quarter of the firms had never bothered to apply for a loan, with the majority saying that they either did not need credit or they did not believe that they would receive a loan, so never asked.[34] The median number of banks that firms reported dealing with is only two and 40 percent of the sample used only one bank – or none. The lack of multiple bank usage reinforces the point of a shallow financial system.

Table 8.8: Percentage of Credit-Constrained Firms

	Manufacturing	Service	Full Sample	Nepal
Credit Constrained	40	46.5	42.5	32.3
No Bank Credit	25	33.33	28.5	26
Never Applied	25	29	26.5	20
Rejected for a Loan	9	5.5	7.5	5
More than 2 Banks	11	7.5	9.5	

Companies in the service sector were more likely to be credit constrained than manufacturing companies. This may reflect the fact that service companies generally have fewer physical assets to pledge for collateral than manufacturing companies – or the fact that lenders are less comfortable assessing the risks of service providers such as tour operators, transportation firms,

[34] When firms say that they do not need credit it is hard to disentangle their lack of desire for credit from the effect of the high cost. Although firms are specifically asked if it is a matter of not wanting credit or it being too expensive, many managers say they do not want credit when they mean that they do not want credit at the current cost and security requirements. Many entrepreneurs said that they could afford to borrow but do not believe in taking on debt. However, this can be seen as a reflection of immaturity of the financial system – as well as of the private sector. Entrepreneurs are scared to take on debt or have not been adequately educated on how to manage debt.

and computer-training schools. The service sector's difficulty obtaining credit is also reflected by the fact that fewer service companies than manufacturing companies have bank credit.

Information and Enforcement. Banks base their reluctance to lend on two factors. The first is the lack of available information and mechanisms to collect information that makes lenders unable to identify enough profitable projects in a risky environment. Consequently, they prefer to earn good returns in relatively risk-less deposits in Indian Banks. Most firms do not keep accurate and transparent financial accounts, an issue discussed further below, and there are no credit-rating agencies or other institutions geared to providing information on borrowers. In such a small, thin market, where few firms are diversified, the market is particularly vulnerable to shocks of any kind, and it is difficult to make earnings predictions. In addition, because of the lack of information and inadequately trained loan officers banks are unable to adequately monitor the use of borrowed funds.

The second impediment to increased lending is the inability to enforce contracts. Although the legal code is improving rapidly and many new laws have been passed, financial institutions still find it difficult to enforce agreements or seize collateral. The laws may be adequate, but they are not enforced. For example, banks reported that it is against the criminal code to pass checks with insufficient funds; however, no one has ever tried to enforce this law. Consequently banks report that even government agencies are hesitant to take checks. Courts are extremely slow and inefficient, and it is almost impossible to seize the assets of borrowers who default unless the property is directly attached to the loan. Thus all loans demand high levels of collateral, specifically tied to a loan, so that it can be seized to offset the cost of long, drawn out court proceedings. The fact that the courts are considered a very inefficient way to resolve disputes is evidenced by the fact that only around 5 percent of firms in the survey reported hiring a lawyer or threatening to take a client to court for nonpayment. Improving and streamlining the legal system would help improve access to capital and probably also lower its cost. In addition it would facilitate trade by helping increase the amount of trade credit firms are willing to extend.

Table 8.9: Nonpayment

% of Firms Reporting Nonpayment in the last year	**31**
Average Times of nonpayment	10.4
% of Firms Hiring Lawyers	6.0
% Going to Court	5.3

Efficiency and Fees. The payments system and other banking services are relatively inefficient and costly, leading to a high proportion of business being conducted on a cash basis. This raises the cost of doing business for all sectors but particularly for the tourist sector and firms attempting to export to third countries. The payments system and check clearing is extraordinarily slow – discouraging firms from accepting checks or other noncash forms of payment. One study suggests that clearing can take as much as 19 days between Paro and Thimphu.[35] There are a myriad of fees that banks charge which also contributes to the cost of using banks and the formal financial system. For example, one bank levies a fee of 0.25 percent to move money from Thimphu to its branch in Phuentsholing, and it can take several days to move the funds. In most countries such a service is free. As the private sector grows, especially as foreign investors come to Bhutan and exports increase, the inefficiency of the payments system and banking services will become a severe impediment to doing business.

[35] Financial Sector Vision Concept Note, World Bank 2000

Absence of Innovative Financial Instruments. As indicated, the existing banking system provides very few innovative lending instruments. The survey team only came across one example of factoring services in which the Royal Insurance Corporation of Bhutan (RICB) provided loans to one private-sector entity based upon work orders. However, this practice did not appear to be common. Other missing services include venture capital (or risk capital) for start-up enterprises; leasing finance; private debt markets; ATM outlets; electronic banking; or even credit or debit card facilities. Two of these – leasing and private debt markets – are discussed further below.

Leasing. Leasing is a potentially powerful, yet relatively simple financial service, which is increasingly offered in the developing world. Such financing has several important advantages for small and medium-scale enterprises. Most important, the leased equipment (truck, bus, car, machinery, etc.) belongs to the finance company throughout the period of the lease. Consequently, repossession in the case of nonpayment of the lease is extremely simple and no long legal process is required. Indeed, the leased equipment most often forms the collateral for the underlying transaction thereby negating the need for the "borrower" to provide large amounts of security against the loan. These two advantages are particularly powerful in environments such as Bhutan's. In addition, in many countries, leasing offers a tax advantage over borrowing because the cost of a lease can be written off as a tax-deductible operational expense.

Many countries have effectively established leasing companies which, in addition to providing new and important financial instruments to the private sector, have provided effective competition to the existing commercial banking sector. The Royal Monetary Authority (RMA) should actively examine the establishment of private leasing companies to support such activities in Bhutan.

Private Debt Markets and Inter-Company Borrowings. Another potentially effective method of providing more competition for the banking system is to intermediate funds flows outside of the banking system through the development of private debt markets. In many countries, good name companies with sound financials, will issue their own debt into the domestic market. Like a government debt market, this provides funding directly to an enterprise without channeling funds through the banking system. Commercial banks receive fewer deposits as a result (thereby reducing their potential over liquidity) and savers and borrowers can both gain from higher rates (for savers) and lower rates (for borrowers) as the intermediation mechanisms squeezes interest margins more effectively than intermediating through a commercial bank.

The main concern when developing such new markets is that the issuer of the debt must be of sufficiently good standing and in reasonable financial condition, so that the risk is acceptable; particularly for unsophisticated depositors who will (at least initially) be unfamiliar with properly assessing the risks and rewards of investing in these new instruments. In addition, given the very small number of sufficiently large good-name firms, the market for such issues is bound to be small in the first instance, although the demand for such instruments may well be high. Nonetheless, given the potential benefits that could accrue for both investors and borrowers, the RMA should seriously examine the development of such markets in Bhutan.

Other Issues in the Financial Sector. In addition to the above, the following four issues emerged from the survey as areas of concern for the private sector with respect to the financial sector:

(a) **Inversion of Interest Rates on Term Lending.** In virtually all enterprises surveyed, the interest rates on short-term lending were higher than the interest rates on long-term

lending (See Table 8.7). In most countries, the risk of longer-term lending is considered to be higher than that for short-term lending and the rates on the former are generally higher than on the latter. It would be useful for the RMA and the AsDB to examine why rates are inverted in Bhutan.

(b) **Debit Cards.** To the extent that credit card payments are possible at all in Bhutan, the charges on such transactions tend to be extremely high (7 to 8 percent in the case of some hotels). This, most importantly, impacts the tourism industry where foreigners from Europe, Japan, and North America mainly use "plastic money" to effect their transactions rather than cash or even traveler's checks. Making credit card facilities more accessible throughout Bhutan, as well as examining ways of reducing their costs, is likely to have a beneficial impact upon the efficiency of payment mechanisms in the country generally and in tourism and related industries, such as handicrafts, in particular.

(c) **Debt-Equity Mix in Private Sector Companies.** Many companies are not skilled at determining the most appropriate debt-to-equity mix within their business operations. Many companies undertook no borrowing whatsoever, apparently because they had an aversion to debt of any kind rather than any inability to borrow from the banking system. Other companies had significantly over-leveraged themselves to the banks and were experiencing financial problems as a result. Better training in securing the best mix of finance in their business undertakings would be a useful tool for many entrepreneurs.

(d) **Royal Monetary Authority.** The survey team encountered several issues where the RMA became the scapegoat for the actions of other parties. These included: (i) the general perception that it is the RMA that sets interest rates – by sector and level – for the banks; and (ii) the fact that the RMA is seen to be stopping the use of "hard currency" to purchase raw materials for the export of goods to "non-hard currency" India. It may be useful to explain, in both cases (and there may be other examples) what the role of the central bank is vis-à-vis the Ministry of Finance and the commercial banks.

The survey team strongly feels that the existing policy prohibiting the use of hard currency to purchase intermediate inputs for final products sold into India needs to be reviewed. The reasons for this are three fold: (i) the demand for such funding is likely to be relatively small; (ii) Bhutan has considerable reserves of foreign exchange (even after deducting the financing for the two new Druk Air planes and medium-term debt servicing needs); and (iii) the Indian market is well known and the easiest, for novice private-sector entrepreneurs to penetrate. Creating barriers for entry into this market serves as a significant impediment in permitting them to "grow into" the more difficult and less well known non-Indian export markets.

Investment. The lack of credit and its high costs directly contributes to the low level of investment in the Bhutanese private sector. Over one-quarter of the surveyed firms made no investments during the last three years, though service firms were more likely to invest than manufacturing firms. The median equipment-investment-to-capital ratio was .05, which is higher than Nepal and some developing countries but low by international standards. But at 5 percent, the investment rate is still well below the 10 percent average rate of depreciation found in many developing countries. This suggests that most companies are running down their capital stock faster than they are replacing it. The average age of machinery in the manufacturing sector was 6-10 years but only 1-5 years in the service sector. This, however, masks a wide variation. In almost 44 percent of manufacturing firms, the average equipment age is more than 11 years old. Clearly there is a need for increased investment if Bhutanese industry is going to improve its productivity and competitiveness.

Table 8.10: Percentage of Firms that Invested Over the Last Three Years (1999 to 2001)

	Manufacturing	Services	Full Sample	Nepal Manufacturing 1999
% who Invested	71	78	74	
Avg. Capacity Utilization	60	50	58.3	58
Avg. Age of Machinery	6-10	1-5	6-10	
Median I/K*	.05	.21	.09	.014

* Investment in 2000/value of Capital Stock

The low level of investment has many causes. Firms primarily cite the perceived lack of demand. With the average firm operating at only 58 percent capacity utilization, they see little cause to expand. But firms still need to invest to improve their productivity and competitiveness, and the high costs and poor availability of finance make this difficult. Despite the banking sector's high level of liquidity, most new investment is financed out of internally generated funds such as retained earnings, borrowing from friends and families, and personal savings (see Table 8.11). This puts companies in a doubly difficult position. Firms have to delay investing until they have accumulated sufficient internal capital to cover costs. As their equipment ages, it is difficult to maintain competitiveness, which in turn makes it hard to raise sales and build up capital to replace old equipment. On average, banks financed less than 25 percent of the sample firms' most recent equipment investment.[36] However, this is still more than in Nepal where a recent survey found that the banks funded less than 20 percent of equipment investment.

Table 8.11: How Investment is Financed – Average Percentage of Financing for the Most Recent Investment

	Manufacturing	Services	Full Sample
Retained Earnings	49	37	44
Personal savings	16	23	19
Borrow from Relatives	4	4	4
Bank Loans	24	24	24
Bank Over Drafts	1	6	3
Equity	0	0	0
Other	6	6	6

Conclusion. Bhutan has made important strides in developing its financial sector. However, it is still far below what is needed to make Bhutan internationally competitive. The weakness in the financial system will become an even more important constraint as the private sector grows and especially as foreign investors enter Bhutan and local firms attempt to break into world markets. Nonetheless, it is clear that the cost and efficiency of banking services needs to be improved and encouraging competition and innovation in financial instruments will certainly help. The results of the Asian Development Bank-funded financial-sector study will be important – as will the role of the Royal Monetary Authority – in helping to create more effective financial markets and financial instruments in Bhutan.

[36] The study focuses on equipment investment only because the vast majority of recent investment expenditures is for equipment. Investment in buildings was insignificant.

6. Land Issues

Even though land is not always easy to obtain, access to land did not emerge as a major issue in the survey. The government has established industrial estates in Phuentsholing, Thimphu, Gelephu, and Samdrup Jongkhar. The best developed of these is the one at Phuentsholing which comprises 58 acres of fully serviced sites developed in 1979. With 25 industries in the Phuentsholing site, it is fully occupied and there is no more space for additional establishments. The government does, however, wish to construct additional new sites in the Phuentsholing area close to the Indian border. The Thimphu industrial site is currently under construction 26 kms outside of the city center. Known as the Jemina Industrial estate, the incomplete site currently hosts two industries (a hollow-block manufacturing firm and a handmade paper industry). Additional serviced land for industrial development in Thimphu exists in the Changzamtog Service Center, which was established for service industries. The government is currently trying to relocate some of these industries further outside of Thimphu.

To facilitate industrial development and overcome space and infrastructure constraints, during the Ninth Five-Year Plan, the Royal Government has identified and approved the following five industrial sites:

- **Singhi Gaon** for the Southwestern Region – a new site 16 kms west from Phuentsholing on an already surveyed 267-acre site;
- **Chuwabari** for the South Central Region – at Geylegphug, the 300-acre site is 15 kms outside of the town;
- **Samdrup Jonghar** for the Southeastern Region – a 31-acre site near to Samdrup Jonghar;
- **Bodima** for the Northeastern Region – at a location 22 kms away from Mongar;
- **Tingtibi** for the Central Region – 21 kms away from Shemgang on the central highway.

Traditionally the rates charged at these industrial estates have been very low – providing an effective subsidy for industrial investors – but often with an eye to trying to direct industry away from preferred sites close to border areas in the south. This policy was motivated by the difficulty of controlling the use of non-Bhutanese workers in the border areas and a desire to diversify employment opportunities. There does, however, appear to be a recent change of policy with the government now discussing the potential of developing industrial estates near to Indian border areas – particularly around Phuentsholing and Gelephu.

7. Taxation/Auditing and Accounting Issues

In accordance with the Revenue Tax Laws of the Royal Government of Bhutan, every private sector enterprise (around 6,000) is required to prepare annual accounts and every registered company (around 125) is required to produce externally audited financial statements. The main purpose of this requirement from the public sector's point of view is to ensure that proper tax assessments can be made. Despite the legal requirement, the accounting and auditing tradition in Bhutan is extremely weak and many companies do not keep any accounts. Others keep two sets of accounts; one for the tax authorities and one for management. The lack of transparent accounts and poor accounting standards is an important impediment to growth in several ways. First, the lack of good information discourages lending or investing by making it difficult to evaluate company financial strength. Second, and more importantly, firms are not using accounting as a management tool to improve their competitiveness. It is difficult to lower costs, or be cost effective, if you don't know what your costs are.

Absence of Accounting Data. In many surveyed companies, books of accounts, as required by the Revenue Tax Policy, were not maintained. Indeed, accounting is seen as a "necessary evil" undertaken for the tax authorities rather than as a management tool. As a result, the very purpose of accounting and internal control — providing managers information so they can make decisions — is largely unrecognized and perceived as being unimportant. For example, there appears to be very little day-to-day collection of accounting information – with most vouchers and receipts being maintained until the end of the year when the accounts are compiled for the tax authorities. In addition to a lack of up-to-date financial data, in many cases firms do not maintain stock registers and fixed-asset registers, so it is not even possible to monitor the quantitative movement of materials used. Similarly, it is very difficult to obtain information on the acquisition and location of fixed assets; books of primary records, and general and party ledgers are not always kept in accordance with accounting principles and standards. Most of the companies do not prepare periodic (half-yearly/ quarterly/ monthly) trial balances, profit and loss accounts or balance-sheet information.

To fill the gap in accurate company accounts, personnel from the Revenue Department are deputed to conduct audits in most enterprises every two or three years (although the actual frequency of audits appears to vary widely). In many cases these audits result in a demand for additional tax payments because firms are often unclear on what constitutes an allowable deductible expense for taxation purposes. Areas of confusion, in this respect, include: limitations on write-off of staff expenses (tax deductions for salary payments had been allowable to only Nu20,000 per month but this was recently increased to Nu60,000); ad hoc arrangements with respect to the write-off of training expenses in firms; sales promotion and advertising are limited to 2 percent of total profits; and limitations on the write-off of substantial repairs, which do not create any new asset. The limits on tax allowances and inflexible or ad hoc application of rules by the tax authorities can have a perverse impact on the development of the private sector. They can actually discourage companies from desirable actions such as hiring skilled workers or training existing staff. The rules on tax-deductible expenses need to be reviewed to ensure that they are reasonably liberal (within prudent fiscal constraints), and they should also be made transparent and easily applicable.

Over time it is important to develop much better accounting systems within the private sector supported by well-qualified accountants and auditors. In particular, a greater emphasis on internal auditing functions will help firms develop better financial control. In addition to assisting the tax authorities, establishing better financial records, information, and control within private sector enterprises will help firms control their costs and obtain financing. These moves will require the "auditing net" to gradually expand and encompass increasingly more – and by necessity – smaller firms. To support these goals, the government needs to devote more resources to developing auditing and accounting skills; the NTTA has already made a good start on this by establishing accounting training courses. Emphasis will also need to be placed on standardizing accounting information.

Box 8.2 provides some of the main observations and conclusions regarding accounting and auditing issues in Bhutan – in many cases with specific relevance to taxation.

BOX 8.2: ACCOUNTING AND AUDITING ISSUES

1. **Accounting for the Private Sector** – accounting skills are weak in Bhutan, and the use of a formalized accounting systems as a modern management tool is missing in most private sector companies. To help improve standards, existing license holders performing accounting jobs should attach a responsibility statement with the accounts stating that the financial statements have been prepared by them in accordance with the books and vouchers maintained by the entrepreneurs and that they are in accordance with the accepted principles of accounting. Proper training should also be provided to Bhutanese students in accountancy and computers.

2. **Auditing** – private sector unincorporated entities are not audited. Indeed, well-trained audit professionals are not available in Bhutan and these skills are currently provided by Indian chartered accountants. Good young Bhutanese accountants should be sent to India or abroad to obtain their audit qualifications.

3. **Quantitative Information** – All private sector accounts should incorporate quantitative information regarding sales, purchases, production, and stocks so that there can be a verification of the financial statements and more reliance can be placed on them. This requires the maintenance of Stock Books.

4. **Cash Transactions** – very large cash transactions take place resulting in unrecorded dealings and under reporting of income. Suitable legislation should be put in place to disallow cash transactions over a threshold limit.

5. **Delay in Assessment** – tax assessments should take place annually and not with the three-to-four year gap which currently occurs. This would increase the objectivity of the exercise as well as help the private sector better plan their yearly tax liabilities.

6. **Asset Revaluations** – currently gains from asset revaluation are taxed at normal rates despite the fact that no cash accruals arise from the exercise. With the advent of potential new joint ventures with foreigners more accurate valuation of fixed assets will be important in terms of determining the equity contribution of possible Bhutanese partners. More appropriate tax treatment of revalued assets is also important for insurance purposes.

7. **Substantial repairs and renovation expenses** – these are considered capital expenditures and are not allowed as admissible expenses. This provision acts as an impediment to maintaining assets in a proper way. Tax authorities should allow such expenses either in the year in which they are incurred or as a deferred revenue expenditure to be amortized over a period of time.

8. **Tax Deduction at Source (TDS)** for loss-making firms this should be reimbursed on a priority basis to help improve the cash flow positions of such companies.

9. **Tax Deductible Expenses** for sales promotion, advertising, training, entertainment and salaries should be revised and made more transparent and automatic so as to remove negative effects that current limitations impose.

10. **Double Taxation Agreements.** Bhutan should consider the establishment of double tax agreements with neighboring countries.

11. **Installation of Modern Techniques** – internal audit and cost accounting systems are more or less absent in the private sector and should be installed.

12. **Fixed Asset Register** – a register showing the details of a firm's fixed assets is not available in most private sector companies. Such registries should be established to assist in ascertaining the location, user, and age of the fixed assets used in the business.

8. Infrastructure

In stark contrast to most developing countries, in Bhutan infrastructure is generally not perceived to be an important constraint. Power provision, for example, is regular in most urban centers and industrial sites, with few outages or brown-outs compared with neighboring countries.[37] It should be noted, however, that most of the surveys took place in larger urban areas or in specific industrial sites on the border: In more remote and rural areas (particularly in the east), it is understood that electricity supply is a considerable issue. Water provision was also reasonably reliable in the surveyed areas. Telecommunications, waste disposal, and postal services were also perceived to be operating well. This stands as no small monument to the government's considerable efforts to support infrastructure development – although continuous improvements need to be made to support an ever-growing, and increasingly demanding, private sector.

Transport. The only exception to the generally positive attitude towards infrastructure was with regard to transport. Here the complaints were considerable, both with respect to road and air transport. Over 33 percent of the sample cited transportation services as their biggest infrastructure problem (power was next with less than 21 percent). Expensive and unreliable transportation facilities, both air and road, emerged as the biggest single infrastructure problem in the sample – significantly reducing Bhutan's cost competitiveness. The costs are so high that in some industries they serve to completely overwhelm the advantage of having abundant natural resources.

Road Transport. The private sector's complaints over road transportation tended to be less critical than with regard to air transport. To a great degree this can be attributed to the fact that, despite the relatively poor condition of the roads, they are considerably improved compared to the recent past. Indeed, investment in roads has been a major undertaking of the government over the recent plan periods and will assume added importance and urgency under the Ninth Five-Year Plan.

Nonetheless, the road network greatly influences the location of industry in Bhutan. Firms that may be competitive in the border regions (because, for example, they export to India) may not be competitive in locations in the center of the country. The problems of Bhutan Agro Processing, just outside of Thimphu, compared with Bhutan Fruits in Samtse is a case in point. Indeed, most enterprises require either raw materials to come in from or finished products to be sent out to India, or both. The current road network creates a considerable cost disadvantage for producing goods anywhere except along the border. During the monsoon season, landslides, which in August 2000 cut Thimphu off from Phuentsholing for a three-week period, cause considerable disruptions to private sector activities and have a particularly pernicious effect in terms of maintaining external markets.

The physical characteristics of the country pose such a considerable constraint on road transport that Bhutan is faced with a choice or either investing extremely heavily in roads (including widening existing roads and shortening roads where possible) or focusing the development of industries that have a heavy transport component solely along the border areas. This would imply that only niche, less transport-reliant industries could be developed profitably in the center of the country.

---

[37] There was also a difference between Phuentsholing and Thimphu/Paro with respect to power. On the border, firms said that, on average, they lost power five times a month while in Thimphu is was less than one time a month. Almost one-third of firms in Phuentsholing had back up generators compared to only 17 percent in the center.

Air Transport. A major target of criticism by many companies was Druk Air and the efficiency of Paro International Airport. Concerns included: the uncertainties and unreliability of the airline itself; the vagaries of weather which impede flying in and out of the airport; the very high cost of air transport services; the constraints posed by the airfield and the type of aircraft used by Druk Air; and the lack of reliable air cargo facilities particularly from Bangkok. These limitations impact many aspects of private sector activity from the entry of foreign tourists into the country to the urgent need to ship raw materials in and finished products out of the country. The cost and unreliability of air transport is one of the major impediments faced by firms trying to penetrate markets beyond India and is also a major constraint to the development of service industries such as IT and niche export markets (such as fresh mushrooms).

The authorities are well aware of Paro Airport's limitations, the restrictions on the types of aircraft that can be used in Bhutan, and the uncertainties these problems impose on shipping goods and people. Several serious alternative airport sites are currently under consideration. Development of an international airport at Gelephu has long been one option for the government, although this has more recently been discounted as a result of the unrest that has occurred in the border state of Assam. Consequently, other less desirable alternatives are currently under consideration. In the meantime, until the airport facilities can be improved, it is critical to push efforts to upgrade service at the existing airport.

These long-term solutions for upgrading or alternative modalities are, however, exactly that – long term. The exigencies posed by the rising number of unemployed school leavers means that the development of the private sector cannot wait for the building of a new airport or even the development/upgrading of the existing road infrastructure in Bhutan. Consequently, for the short- to medium-term future, industries which have a high transport component are-only likely to be profitably developed along the border areas with India. This implies that the development plan for the center of Bhutan will probably, by necessity, have to focus more on the development of niche-type industries, where reliable and cheap transport facilities are not so crucial.

This does not mean, in the interim, that alternative options should not be actively pursued. Indeed, given the difficult physical terrain of Bhutan, the Ministry of Transport should be "thinking outside of the box" and actively reviewing all possible transport alternatives such as using private charter airlines from India and Nepal to bring tourists into Bhutan, seeking to develop helicopter services to ferry goods and passengers into and around Bhutan, and so on.

A Note on Electricity Prices. As indicated above, cheap, reliable electricity is one of Bhutan's major comparative advantages over other countries in the South Asia region. Table 8.12, shows electricity prices in Bhutan are less than half the cost of its closest competitor in the South Asia region and only one-fifth the cost of some other important regional locations. This is one area of considerable comparative advantage and several industries, such as Bhutan Carbide and Chemicals and Bhutan Ferro Alloys were established in Bhutan on this basis. Currently, the cost in Bhutan is subsidized; with power purchased from Chukka at Nu0.3 per kw hour (produced at around Nu0.25), transmission and distribution costs of around Nu1.0 per kw hour, and an urban sales price of Nu0.8 (Nu 0.5 in rural areas). However, the survey team learned that in 2002 the Government intends to establish the Bhutan Power Corporation, which will be a commercial entity responsible for power transmission and distribution. Given its commercial orientation, the current subsidy in the electricity price will disappear over time. Although this will still leave Bhutan's electricity prices well below regional levels, it will certainly reduce the profitability of existing power-intensive industries in Bhutan and is likely to impact the development of new power-intensive private sector activities.

Table 8.12: Comparative Electricity Prices in the South Asia Region for Industrial Usage, (prices in U.S. cents per kw hour)

	Price per kw hour
Bhutan	1.7
India	
Delhi	7.7
West Bengal	7.2
Assam	7.6
Maharashtra	4.2
Uttar Pradesh	8.8
Bihar	5.6
Gujarat	9.1
Pakistan	6.2
Bangladesh	6.1
Nepal	8.2
Sri Lanka	6.1

SOURCE: For India, Annual Report on the State Electricity Boards, Other countries, World Bank.

9. The Regulatory Environment

One of Bhutan's most important competitive advantages is its good governance and the friendly business environment that this creates. The government is genuinely concerned with proper administration and officials are seen as being honest and helpful. This is in stark contrast to some of its neighbors, where political instability, labor unrest, corruption, and bureaucratic burdens loom large. The good business environment and political stability will be attractive to investors, particularly foreign investors, seeking to serve South Asia.

However, during the survey it became apparent that Bhutan is at a critical point of change and could easily surrender this considerable advantage. Until recently, many government activities have operated on a case-by-case basis. Many important decisions – issuing a business license, determining allowable tax deductions, issuing permits for foreign workers, sanctioning a particular FDI application, and so on – have been made on a case-by-case basis. Laws and regulations are not clearly publicized or consistently implemented. Until now, this system has served Bhutan reasonably well. Nonetheless, as the economy grows this system will increasingly act as an impediment. The discretion that it allows could open the door to corruption and certainly to the appearance of favoritism. Bhutan must take steps to improve transparency, implement laws on a consistent and open basis, and guard against the corruption and bureaucratic burden that imposes such high costs on its closest neighbors. The survey reveals that currently most managers see the government as a benign helping hand, in contrast to other South Asian countries. That could well change in the future unless the system is made substantially more transparent. Several of the key issues are discussed below:

(a) **Creating a Level Playing Field.** An excessively large amount of private sector activity appears to be undertaken on a "case-by-case" basis. Many businessmen and women talked about "relationship dealing," knowing an individual and thereby being able to get the right approval, the proper agreements, and the quick government sign off. For the most part, these activities reflect the small nature of the Bhutanese economy and indeed Bhutanese society and are not an indication of corruption. However, there is a thin line between relationship dealing and what could become corrupt practices. Developing a

very transparent and level policy environment is therefore critical in avoiding the development of bad practices in the future.

(b) **Consistency of Government Policy.** A related issue is the consistency of government policy. This takes two forms: (a) consistency of government policy between different players in the sector; and (b) consistency of government policy over time. There was ample evidence from the survey that different players are treated differently. Some companies had little difficulty receiving work permits or access to land, while other companies in the same line of work did experience difficulties. With respect to the latter issue, some firms complained that abrupt changes in government policy towards labor, taxation, licensing, and the export of wood products, disrupted their plans and retarded their development. Although some of these complaints are certainly attributable to "sour grapes," it is important that the government strive, as much as possible, to ensure policy consistency over time as well as between different players operating in the sector. Investors and entrepreneurs are forced to deal with high levels of uncertainty from the world market, the weather, and other factors beyond their control. The added uncertainty of government policy changes will serve to further increase risk and reduce investment.

The survey results indicate that government needs to make a greater effort to become more open and consistent. In the survey managers were asked to rank the predictability of government policies on a scale of 1-5, where 1 is completely predictable and 5 is completely unpredictable. More than 26 percent rated government as a 4 or 5. In addition, a large share of the private sector finds government policies difficult to predict. More than 55 percent of the sample said that they expected the government to make changes in regulations that are important to their business without taking into account the views of their business (see Table 8.13).

(c) **Access to Clear and Concise Information on Government Policy.** To reinforce the fact that the government does have a consistent regulatory environment within which firms operate, it is important that information is written down and is easily available. Indeed, operating with government Web pages may well provide the dual benefits of providing information to private sector players while extending both the public and private sector's use of information technology as a tool for doing businesses. Hence, publishing exact policy guidelines on the government's policy with respect to the employment of non-nationals, licensing policy in the south of Bhutan, writing off training as a taxable expense, the precise schedule for the Bhutan Sales Tax, and so on would greatly improve some of the information gaps that currently seem to exist.

Table 8.13: Government Unpredictability

	Percentage of Firms in Full Sample
Rating the government as unpredictable (4 or 5 on a scale of 1- 5)	26.3
Expecting regulatory changes that will not take into account their views.	55.8
Saying they view government as an opponent (4 or 5 on a scale of 1-5)	17.0

(d) **Licensing.** One specific area of regulatory confusion appears to be the government's policy on licensing new business activities in the south of the country, particularly in Phuentsholing. Most companies spoke of not being able to license a new company at all,

others spoke of long delays, while yet others understood that the government's policy on the licensing of new businesses in the south was being reversed with a push to encourage new activities. Given the issues of transport and labor costs discussed above, some types of industries will only be profitable in the border areas. Policy on this therefore requires clarification.

BOX 8.3: THE LEGAL ENVIRONMENT – LAW AND JUSTICE

"Considerable progress has been made in the development of our legal system. The traditional system, Buddhist in inspiration and based upon the laws promulgated by the Zhabdrung and, codified during the period of the First Temporal Ruler of Bhutan, the Desi Umdze Tenzin Drugyel, and subsequently modified, well served the needs of the society. Justice was sought through structures of mediation; different hierarchy of officialdom rendered judgments. These laws were formalized in the Thrimzhung Chhenmno, the "Supreme Law", which is a comprehensive code of the categories of criminal offences and the appropriate penalties that were approved by the National Assembly in 1957.

The creation of the modern judiciary began in 1960 when Thrimpons (judges) were appointed in certain Dzongkhags. The High Court was created in 1968, and in 1985 His Majesty appointed the first Chief Justice, who is both the administrative head of the Judiciary and presides over certain kinds of cases. Under the High Court there are dzongkhag courts and dungkhag courts. At the village level, disputes are mediated by the gup and the chimi, who is the people's representative in the National Assembly.

In recent years, progress has been made in training legal staff, lawyers, jabmis (lay legal representatives well-versed in the law), mediators and other judicial or quasi-judicial personnel. Modern computer-based technology is being applied to the system and procedures for the courts are being developed and clarified.

The development of a modern legal and justice system will pose many challenges to the Royal Government. Amongst these will be the strengthening of physical infrastructure and office automation., the expansion of legal services and the integration of a modern system with Buddhist thought.

Laws enacted by the National Assembly and administered by the executive organs of the Royal Government have now become the primary instrument for the creation of the legal framework required for development. The National Assembly has passed several laws to established regularity and predictability in various fields of the economy and the market. It is expected that The Industrial Property Act, The Copyright Act, The Commercial Sale of Goods Act and The Cooperatives Act will be among those passed at the next session.

As the reach of law encompasses more and more aspects of life, laws passed by the National Assembly have become the means for setting norms of expected behavior, its regulation, the consequences of violating those norms, as well as establishing the rights of individuals in various situations and relationships. The first piece of legislation passed by the National Assembly after His Majesty came to the throne in 1974 was The Wildlife Act. Other laws that may be included in this category are, The Motor Vehicle Act, The Land Act, The Marriage Act and amendments covering rape and child support, The Inheritance Act, The Loan Act, The National Security Act and The Nature Conservation and Forest Act.

Laws have been enacted that establish or regulate the proceedings of State organs, such as The National Assembly Act, The Chathrim for the Council of Ministers, The Police Act and The Financial Act."

"*Development Towards Gross National Happiness,*" Seventh Round Table Meeting, 7-9 November 2000, Thimphu, Bhutan, pages 96 to 97.

10. The Trade Regime

In terms of the trade regime, two main issues emerged from the survey. The first is the movement of most countries, but specifically India, to lower tariff rates under the World Trade Organization (WTO), and the second is the lack of export incentives given to Bhutanese firms.

Liberalization of Trade in India. There is a growing concern among some exporting businesses over the increasing liberalization of trade in India and the impact that this will have on Bhutan. This gradual movement towards a lower tariff structure in India will reduce the benefits of Bhutan's preferential access. Without the protection of India's high tariff structure Bhutan will have to become more cost efficient if it is to retain these markets. Already some companies are complaining about Chinese producers "dumping" cheap goods in India as tariff rates come down. Although there is some expectation that the removal of tariff and non-tariff barriers in India is likely to take time, the dominant role of India in Bhutan's import and export trade means that Bhutan will be forced to become more cost efficient and competitive. Table 8.14 shows that, in 1999, around three-quarters of Bhutan's imports were from India and around 95 percent of its exports went to India.

These are events over which Bhutan has little control. It must therefore seek to adapt or gradually be excluded from these markets. Rather than see this as a threat, however, the private sector should see it as a challenge to adjust and become internationally competitive. This could have further benefits of helping gain access to markets beyond India. This will mean that the private sector will have to increasingly focus on areas of competitive advantage, while the public sector should seek to ensure that business costs are not increased by unnecessary interventions.

Table 8.14: Bhutan's Trade with India and the Rest of the World, 1996 to 1999

Year	Total Imports	Indian Imports	Indian Share	Total Exports	Indian Exports	Indian Share	Total Balance	Indian Balance
1999	7,834.88	5,845.28	74.6	4,987.96	4,711.23	94.5	-2,846.92	-1,134.05
1998	5,516.37	3,620.94	65.6	4,455.62	4,175.64	93.7	-1,060.75	554.70
1997	4,977.94	3,453.59	69.4	4,274.18	4,041.94	94.6	-703.76	588.35
1996	4,525.19	2,896.16	64.0	3,553.77	3,226.98	90.8	-971.42	330.82

SOURCE: Ministry of Trade and Industry

Export Incentives. In contrast to most countries in the region and indeed around the world, the Royal Government offers no incentives to exporting firms. This is possibly due to the historically very low level of export trade. Recently, electricity exports have taken off and now dominate export trade . But this trade is all conducted under government-to-government deals with India, so no incentives are needed. Non-electricity exporting firms therefore complained about the lack of incentives, which puts them at a disadvantage exporting vis-à-vis competitors in countries that offer incentives. The most important of these is a lack of duty exemption or duty drawback on imported raw materials for use in export processes. As most imported raw materials originate from India, these goods are subjected to Indian excise duties, which are reimbursed to the government of Bhutan under the existing trade agreement between the two countries. These rebated taxes and duties are not, however, reimbursed to the Bhutanese firm which produces for export.

The Committee for Private Sector Development is currently looking into implementing a package of incentives to stimulate development of the private sector with proposals for tax exemptions and tax holidays among other possible enticements. The committee should, however, carefully weigh

the costs of such incentives against the likely benefits. It is further understood that the Government is examining the introduction of dry port facilities in Phuentsholing so that goods destined for Bhutan can be consigned directly there, rather than through the port of Calcutta. The development of such facilities requires further investigation but it could address the concerns of some of the surveyed firms that customs clearing charges are inflated by the mandated use of Bhutanese customs clearing agents in Calcutta.

The adoption of some form of incentive package for export industries is important. Within this package the Committee should seriously consider the provision of duty exemption on imported raw materials for use in the production of exported final products. The government should also encourage banks to provide both pre-shipment and post-shipment finance in support of export activities. Establishment of dry port facilities in Phuentsholing could also assist exporting industries. Another incentive, which could encourage the growth of exports to India, is the relaxation of the current restriction on the use of hard currency to import raw materials for the production of final goods destined for India. Overall, the survey found that virtually no financial incentives were provided to exporting companies. Such incentives, in conjunction with other policy changes (with respect to FDI, for example), could provide important support to the growth of export industries in Bhutan.

11. Institutional Issues

Several important institutional issues, which warrant further discussion, also emerged from the survey.

Dominance of the Government within the Economy. Government has historically been, remains, and very likely will continue to be for the foreseeable future, the dominant economic force in Bhutan. Consequently, the private sector is heavily dependent upon government tenders and government activity for its markets.[38] This is particularly true of the construction industry, which has been one of the fastest-growing private sector activities. However, relying on the government is not a sustainable approach. Government demand is capable of supporting only a limited private sector and focusing on government contracts discourages firms from seeking ways to become internationally competitive. While the government's significance is unlikely to change rapidly, it is important that over time the private sector be permitted to play an increasingly important role, with private-to-private relationships replacing private-to-public relationships as the dominant model.

The government has been particularly laudable in establishing the visionary development path that Bhutan is now negotiating, but there does appear to be an element of paternalism in its relationship with the private sector. This is reflected in a "we know better than them" attitude or feelings that "the government is less corrupt than the private sector." While these sentiments may well be true, they are likely to impede rather than support private sector activity. Indeed, the Government has been trying to step back from private sector involvement and to provide space for private sector operators to work – the privatization and corporatization plans of the RGoB are but one important case in point. However, there may be a need for the government to accept an even slightly lower level of service (at least initially) and to expand and speed up the withdrawal of ownership and control so that the private sector will have enough space to grow and flourish.

---

[38] With respect to government tenders, some firms that rely upon government tenders for their operations complained that the RGoB placed too much emphasis on price over quality. They allege that this emphasis tended to have an adverse impact upon Bhutanese producers and to benefit Indian producers. The government, however, contends this allegation.

One way to support a better public understanding of private-sector constraints may be to set up a system of "internship" type programs for public-sector employees in key ministries and public corporations (industry, finance, banking) to work for a two- to three-year period in private-sector companies either inside or outside of Bhutan. Such an interchange would help develop a better understanding of the constraints faced by the private sector. This might also have the advantage of encouraging younger public servants to leave the public sector in pursuit of productive private-sector lives. Alternatively, given the fact that a large majority of private sector operators came from the public sector in the first place, it may be possible to consider reverse "internships" of key successful private sector operators back into the public sector for shorter periods. This might assist in providing a greater voice for private sector concerns in public sector policy making.

Bhutan Chamber of Commerce and Industry. The role of lobby groups in support of private sector interests is vital for the development of the sector. The private sector must have a voice in prioritizing needs and designing policy. For example, the lack of export incentives, inattention to training, and possible provisions in the proposed labor law are all issues that could be addressed by a strong private-sector representative. Most importantly, a strong private-sector voice is needed to help promote the continuation of good governance and to ensure that the government implements policies in a consistent and transparent manner. Lobby groups will be a key factor in helping ensure that, as Bhutan grows, bureaucratic burdens do not become the crippling problem that they have become in other developing countries.

Consequently, the Bhutan Chamber of Commerce and Industry (BCCI) and associated sectoral associations (e.g., the Wood Association) are key. Several survey participants expressed the view that the BCCI is not sufficiently proactive in pursuing private sector goals or in lobbying for private sector interests with the government. There was also a feeling that the Chamber is more supportive of commercial and trading interests than of industrial interests and that it is more interested in the concerns of the business community in Thimphu than in other parts of the county. The latter point appears to be borne out by the fact that the Chamber has held only two meetings in Phuentsholing over the past two years, despite it being the second biggest city in Bhutan and the largest industrial base in the country.

The government was instrumental in establishing the BCCI and has done much to support its development; a member of BCCI sits in the Assembly/Parliament. The onus for stronger representation, therefore, lies squarely with the BCCI and its private-sector members themselves. Possible ways to strengthen BCCI include: greater interaction with other regional chambers of commerce and the recruitment of an external private-sector representative to work with the Chamber for several years. Such alternatives need to be actively pursued if the BCCI is to fulfill its true potential as a successful lobbyist on behalf of private sector interests.

Central Coordination for Private Sector Activities. A common problem for governments dealing with private sector issues is that there is no one ministry or part of government designated to deal with the private sector. By their very nature private-sector activities are multifaceted. While the Ministry of Trade and Industry is the closest body within the Bhutanese government performing this role, its mandate does not cover the full range of activities that impact the sector. Many firms expressed considerable gratitude to the Ministry of Trade and Industry for its whole-hearted support, but expressed concern when dealing with "the other" parts of government.

As private sector activity deals with a full range of public institutions – including the Ministries of Trade and Industry, Finance, Home Affairs, Transport and Communications, Education, Agriculture as well as state corporations such as Electricity, Druk Air, Posts, and Telecommunications – there is a need to have a central coordinating body which addresses all the needs of the sector. The Committee for Private Sector Development has been an important step

in this process. However, this committee, composed of high ranking and busy government officials, cannot be expected to devote the time and resources necessary to address many of the detailed private-sector concerns. Therefore, the establishment of an inter-ministerial working group to support this committee in coordinating private-sector activities between the various components of the government is highly desirable.

12. Benchmarking Bhutan

The private sector survey in Bhutan demonstrates that many basic business environment problems are perceived to be less severe in Bhutan than they are in other South Asian countries. The following three tables present comparative findings from the World Business Environment Survey (WBES) conducted by the World Bank in 1999-2000 – providing a benchmark for the Bhutanese results. While the questions asked in the Bhutan Enterprise Survey were not exactly the same, some categories are comparable. Part of the Bhutan's better overall ranking can be explained by a reluctance of Bhutanese managers to criticize the government. Nonetheless, this does not explain all the difference, and it was clear to the interview teams that private-sector firms in Bhutan perceive the government as being more supportive than in most other countries.

The business environment in Bhutan is seen as being more transparent and more supportive of industry than in other countries of the region (Table 8.15). Only 17 percent of firms in the Bhutan sample rated laws and regulations as moderately or highly unpredictable. This contrasts sharply with South Asia generally, where 56 percent of surveyed enterprises reported laws as unpredictable. In this category Bhutan fares better than any region in the WBES. The next best group is the newly industrialized countries of East Asia and even here almost 30 percent of the sample rates laws as unpredictable. Likewise, less than 20 percent of the Bhutanese sample perceived the government as unhelpful while 39 percent of the South Asian firms in the WBES gave government helpfulness a low score.

Table 8.15: Predictability of Laws and Regulations

% firms rating	5 or 6	4 or 5
	Predictability of Laws	Helpfulness of national Government
Africa	0.74	0.33
MENA	0.52	0.13
East Asia NIC/China	0.29	0.11
East Asia Dev	0.59	0.14
South Asia	0.56	0.39
BHUTAN	**0.17**	**0.17**

Explanations:
Column A: To what degree do you agree with the statement, "Interpretations of regulations affecting my firm are consistent and predictable"? 1=fully agree; 6=never agree
Column B: 1=very helpful; 5=never helpful

These are only perceptions and it is hard to make cross-country comparisons as different countries have different frames of reference. What may be perceived as a negligible problem in one country might be considered a serious burden in another where the business environment is better overall. Nonetheless, such comparisons give some indications of regional and country differences. Currently Bhutan's business environment is seen as relatively supportive and transparent. However, many decisions are made in an ad hoc fashion. Managers expressed the

concern that the government needed to become more systematic in its approach to the private sector – as the economy grows and becomes more diverse – to avoid corruption becoming the problem that it has become in neighboring countries. The poor ratings of the rest of South Asia in the WBES demonstrate the dangers that Bhutan could face.

Most managers in the sample felt that laws were predictable and viewed the government as generally being helpful. This is reflected in the rankings that firms gave to issues related to government regulation. Table 8.16 gives the percentage of firms reporting various government regulations as significant problems. In all categories fewer Bhutanese firms report government regulation as significant problems than do respondents in any other region. Firms in South Asian have the worst perception of government regulations. The lack of regulatory interference enhances Bhutan's competitiveness and helps inspire confidence in investors. It is something that the government should strive to maintain.

Table 8.16: Regulatory Constraints
Percent of firms that rate 3 or 4 (moderate of major obstacle)

	Business Registration	Customs/ Trade Regulation	Labor	Foreign Exchange/ Currency	Environment	Tax Administration & Regulation	High taxes
Africa	0.26	0.49	0.38	0.36	0.22	0.59	0.76
MENA	0.26	0.44	0.33	0.26	0.24	0.51	0.54
East Asia NIC/China	0.22	0.20	0.27	0.18	0.17	0.21	0.39
East Asia Dev	0.28	0.36	0.35	0.35	0.29	0.55	0.74
South Asia	0.39	0.57	0.61	0.39	0.44	0.52	0.72
BHUTAN	**0.17**	**0.17**	**0.21**	**0.15**	**0.10**	**0.10**	**0.09**

Table 8.17 provides rankings for the provision of government services. As expected, a higher percentage of firms in Bhutan reported roads as a constraint than any other service. Roads were followed by water and then power. In all categories, a smaller percentage of firms in Bhutan rated government services as a moderate or major constraint than in South Asia in general. Bhutan's rankings are more in line with what is reported by East Asian developing countries.

Table 8.17: Firm's Perceptions of the Quality of Public Services
Percent of firms that rate a 4, 5, 6 (1=very good; 6=very poor)

	Customs	Public Works/ Roads	Postal Service	Telephone	Power	Water	Police
Africa	0.38	0.53	0.32	0.35	0.39	0.43	0.57
MENA	0.14	0.20	0.07	0.05	0.09	0.14	0.14
East Asia NIC/China	0.08	0.14	0.07	0.07	0.08	0.09	0.12
East Asia Dev	0.32	0.41	0.09	0.15	0.19	0.25	0.37
South Asia	0.40	0.59	0.22	0.25	0.45	0.39	0.49
BHUTAN	**0.15**	**0.40**	**0.09**	**0.08**	**0.23**	**0.30**	**0.18**

13. Alternate Development Tracks

There is a clear difference between the opportunities and business environment in the "border regions" and the "center," which calls for differing approaches to development. The center of Bhutan faces considerably more disadvantages in terms of labor costs, access to raw materials, markets for final products and transport costs. Consequently, it is more feasible to develop labor

and raw material intensive industries in the southern region than in central Bhutan where labor costs are appreciably higher and both inward (raw material) and outward (finished product) transportation costs significantly increase the cost of production for anything other than the local market. Industries in the border regions could take full advantage of Bhutan's considerably cheaper power costs and more stable labor relationships to tap the large available pool of cheap labor. Industry could use the border regions of Bhutan as a base to export to the region. The further development of heavier type industries may also initially prove easier than the private sector development strategy that would need to be developed for the center of the country.

Central Bhutan should alternatively consider focusing more on the development of services to support labor-intensive industry in the south – and on niche-type industries. Industrial development on the border will create a demand for a large support-services sector. There will be a need for managers, accounting services, IT services, maintenance services, and so on. Service-sector jobs typically demand a higher level of skill than most manufacturing jobs but also provide higher value-added per worker and thus, higher wages. The service sector could potentially provide an important source of well-paid employment, but it will require a significant investment in human resources if it is to be developed.

The central region also has potential to grow niche industries that do not have a high raw material input (particularly from outside of Bhutan) and do not produce heavy finished products that incur high transportation costs in export. Niche industries should, to the extent possible, build upon the agro processing base of the country – shitake mushrooms, wasabi, medicinal herbs, and so on. For niche industries to be successful, however, quality production will be critical. Hence it is imperative for Bhutan to establish standards and quality along with consistent production if it is to break into these types of niche markets. In this regard, it is important that Bhutan build upon certain advantages that provide a marketing niche, in particular, seeking to obtain certification for its "organic" status and "sustainably managed forests." The pursuit of such standards certification should be undertaken quickly.

In addition, central Bhutan should actively promote the development of nontraditional, niche-type industries. This grouping could gradually include the development of IT-based industries (while recognizing that this will be slow initially) and handicrafts as well as other industries that are not heavily transport reliant or dependent upon low-cost labor as an input. The development of nontraditional niche markets would be enhanced by closer interaction with international markets and the strengthening of investment and trading linkages, which promote technological transfers to Bhutanese companies.

One excellent example of such an activity is provided by Yangphel Handicrafts, which has developed an export industry based upon fishing flies (see Box 8.4). This industry is particularly instructive as it is completely nontraditional, it is based on an association with a foreign businessman, it employs a very large number of women who appear to have a "natural aptitude" in producing high quality flies, and it is a light-weight product that can be easily exported at low cost. A second possible example is provided in Box 8.5.

BOX 8.4 – YANGPHEL HANDICRAFTS
An Example of the Development of a Non-Traditional Niche Industry

The Bhutanese owner of this company originally developed the idea of producing fishing flies (a completely non-traditional product for Bhutan) through an association with an American partner from Montana who had been trying to develop fly-fishing tourism in Bhutan. The American partner expressed an interest in developing an export business based upon fly production for fly-fishing. This was considered an ideal industry as the product was light weight, could be handmade in Bhutan, and could be easily exported by air to foreign markets. The business was started with two American experts coming to Bhutan in September 1989 to work with and train 12 Bhutanese workers. The Bhutanese workers – most of whom are women – appear to be particularly adept at producing high quality flies.

Competition in the industry comes from China and Southeast Asia as well as from Africa and South America. Workers in Bhutan were relatively highly paid and so they could not compete on the basis of price – but did appear to have a quality advantage over other competing markets. A producer in the factory can produce 120 to 200 simple flies per day or between 12 to 20 complicated flies per day. Retail prices in the United States and the United Kingdom (the two principal export markets) range between US$1.50 and US$3.50 each. The company mainly employs women – out of 50 employees, only ten are men – and workers are paid on a piece-rate basis which seems to suit women workers with children particularly well.

The main impediment to the development of the company has been a lack of duty concessions on raw material imports – which, in combination with Bhutan sales tax, amounted to 30 percent. These duties reduced the competitiveness of the Bhutanese export and seriously hindered the company's relationship with their foreign buyers who initially wished to source the bulk of their business from Bhutan. Problems with Druk Air have also proved to be a challenge for the company as production turn around has to be quick to be competitive (whereas it takes 3 days to get raw material to Bangkok from the United States of the United Kingdom, it takes an average of one month to bring this material from Bangkok to Paro). The company has been greatly assisted by the Government's decision to grant duty exemption – no BST and no import duty – since July 2001.

However, the development of nontraditional export markets faces significant challenges. Bhutanese entrepreneurs have few contacts with the outside world and finding markets, buyers, and specifications for products are huge hurdles. Few buyers travel to Bhutan and, given the difficulty traveling to the country, this is not likely to appreciably improve in the near future. There are no sources of pre-shipment or post-shipment finance available. Letters of credit, transferring money, and other financial services are inefficient, expensive, and probably beyond the reach of small enterprises. The unreliable transportation system makes importing, raw materials expensive. More important, the unreliable transportation system, particularly air shipment makes it nearly impossible for exporting firms to adhere to strict production and shipment schedules. As noted earlier, the lack of export incentives puts potential exporters at a competitive disadvantage. Finally, the further development of such industries is constrained by a lack of learning mechanisms that makes technological transfers slow and difficult. Many of these problems could be ameliorated through foreign investment or matching-grant schemes.

Naturally, in both central and southern Bhutan, the development of industries based upon the local availability of high-quality raw materials should also be encouraged. Examples of these include the further development and expansion of wood-based industries, the development of mining opportunities throughout the country, and the further growth of tourism. The first of these activities – and agroprocessing – will, however, continue to be impacted by high transportation costs to bring both raw materials and finished products to market.

14. Privatization

A final issue relates to the government's privatization policy. As government gradually extracts itself from the productive sectors of the economy and increasingly focuses on the social sectors and other sectors where the market fails to provide requisite services, the private sector will be able to play a larger and more dominant role. Good progress has been made in privatization over the past decade, with the sale of shares in several important corporations to the private sector and the corporatization of some state-owned enterprises. It will be important to continue, and possibly accelerate, this process during the next Five-Year Plan – preferably within the framework of a more precise and transparent privatization structure. This could include selling the remaining minority stake holdings that the government still retains in some companies as well as commencing the privatization process of additional companies and corporations. In addition, the government should be seeking strategic partners to take over purely productive activities and increasingly investigate private-sector involvement in traditionally public-sector areas such as the social services (health and education) to the maximum extent.

BOX 8.5: INCENSE PRODUCTION – A POSSIBLE NICHE MARKET?

In the course of the survey, the team met with a company hand-producing traditional incense using a closely guarded Tibetan formula. Its case illustrates the problems faced by potential exporters of niche products. This is an established enterprise with a well-known product in the local market. The potential to export incense has been growing in the Western world along with an increasing Buddhist population and the popularity of all things Eastern. There would certainly be a strong demand for hand-made incense in the high-end market. However, in discussions with the owner it was clear that without extensive assistance this small enterprise would not be able to access the export market.

The first issue is that the owner has absolutely no contacts abroad or any idea of how to find buyers. From, Bhutan this is a nearly impossible task, even in the days of Internet and good telephones. Unlike, India and other countries, there is not a large Bhutanese community living overseas that could provide potential contacts. There are also almost no buyers who travel to Bhutan, because of the cost and the lack of possible producers. A second issue is that the owner knows nothing of the foreign market and would not know how to package or design his product. For this information, he would have to rely on buyers. But attracting buyers for a poorly designed or packaged product is difficult.

If the owner were to get an order, the local packaging technology would not be adequate and importing packaging on such a small scale would be expensive. Given the unreliable transportation system, the company would not be able to absolutely guarantee delivery dates. The transportation of raw materials within Bhutan could be delayed and trucking or flying out the final product is also dependent upon the vagaries of weather and available transportation.

The biggest problem, after finding a buyer, would be obtaining financing to support the manufacturing process and shipment. Even if the company obtained an order, given the poor information systems and enforcement mechanisms in Bhutan, it is unlikely that any lending institutions would be willing to incur the administrative costs, or take the risk, of providing a small working-capital loan, even with substantial security. This is especially true, because depositing funds into Indian banks is an almost riskless alternative. It is unlikely that foreign buyers would risk making pre payments to finance production due to the difficulties of communicating and the inefficient legal system.

Thus, while there is almost certainly a market for niche products such as incense, the small Bhutanese manufacturers are not positioned to enter them. Matching grant schemes that subsidize technology transfer, improved travel facilities, additional financial instruments along with increased competition in the financial sector, and less restriction on FDI (allowing foreign partners), are all ways to help small producers take advantage of Bhutan's unique culture and natural resources.

CHAPTER NINE
CONCLUSIONS AND RECOMMENDATIONS

1. Cross-Cutting Issues and Conclusions

To absorb the rapidly expanding pool of educated labor and raise living standards for the general population, the private sector must gradually replace government as the engine of economic growth in Bhutan. The government is capable of providing suitable employment for only a limited number of people and the private sector must increasingly be relied upon to supply increased investment, production, and employment opportunities. However, for the private sector to grow substantially and expand into new markets, Bhutanese industry must become much more competitive by cutting costs, improving quality, accessing improved technologies, and raising productivity. In light of the dramatic changes wrought by trade liberalization and the gradual loss of preferential trade access to India, industry must become more competitive just to maintain existing markets.

The high ranking that survey respondents accorded to "lack of demand and competition" as one of their biggest business problems – indicates a lack of competitiveness within Bhutanese industry. Although Bhutan may have relatively low consumer purchasing power, it is next door – and still has preferential access – to one of the world's largest consumer markets. In addition, the domestic demand for consumer imports is growing rapidly. That Bhutanese firms cannot successfully tap these markets means that they are not competitive producers. RGoB's challenge therefore is to provide an environment in which industry can become internationally competitive. The following represent some of the main cross-cutting areas of concern emerging from the survey.

Governance and Regulations

As a result of the relatively recent development of the private sector in Bhutan, much of the business which has been conducted – by both the public and the private sectors – has not been undertaken on a systematic basis. Hence, books of accounts are not maintained, external audits do not take place regularly, FDI applications are approved on a case-by-case basis, tax concessions sometimes appear to be granted in a non-transparent manner, and so on. This situation has largely grown out of the closed nature of the economy and the smallness of existing business networks. While Bhutan has not particularly suffered from such ad hoc business arrangements, as firms venture into new and more complicated areas of business, they need to increasingly operate in a more rules-based, rather than a relationship-based system. And so does the Government. Business information systems need to be well known and understood both by the users of the regulations and by those who apply and enforce the regulations.

In the survey there is evidence of concern in this area – with over a quarter of the interviewed firms portraying the government as being unpredictable. Clear and transparent regulations and their consistent interpretation are crucial to enable firms to concentrate on their businesses. In addition, regulations should take account of the legitimate needs of industry. However, firms do not appear to believe that this is happening as over half of them expect regulatory changes to be implemented which would not take account of their needs. In this regard, it is important that the Chamber of Commerce and other industry associations (which are only in embryonic form at the current time) should play a more proactive role in lobbying government on issues of interest to the private sector. Support to assist them in more effectively representing the views of industry and in providing services to members should be given a high priority.

There is a perception that Bhutan now stands at an important crossroads. It can systematize government regulations and business practices in a structured, phased, and consistent manner or it can continue with ad hoc and opaque operating methods which will take the country down the path of increased rent seeking – as witnessed in much of the rest of South Asia. Taking a firm stand on these issues is important in terms of avoiding the corrupt practices of other countries in the developing world as well as assisting in building a strong and vibrant private sector. Uncertainty is anathema to the private sector and the more the rules of the game are clearly laid out and transparently and consistently applied, the greater the chance that the private sector will be able to operate in an effective manner.

Regulations that emerged in the survey as issues include, *inter alia*:

1. Labor regulations including minimum wage regulations; the employment of non-nationals; the proposed new labor regulations; and incentives to encourage firms to invest in training.

2. Taxation regulations including tax deduction at source; tax-deductible expenses; double taxation agreements; asset revaluations; and annual tax assessments.

3. Information technology regulations to support online business and other uses of IT, encompassing issues such as on-line fraud, unauthorized access and confidentiality.

4. Wood-sector regulations including the ban on semi-finished products and Articles in the regional trade agreements which prevent access of wood products into Bangladesh.

5. Regional regulations which lead to the unreasonable trans-shipping of goods from one haulier to another at border crossings.

6. Business start-up/development regulations including the ban on business licenses in Phuentsholing.

7. Visas, which are not available on arrival, particularly for foreign technicians and buyers who often need to make unplanned visits.

8. Approvals for foreign direct investment which is currently carried out on a case-by-case basis.

In moving to an increasingly rules-based system of private-sector management and regulation it is important, however, that the government not overburden the private sector with a plethora of bureaucracy and red tape. It is not uncommon in developing countries for the officers implementing new regulations, which are intended to help private-sector development, to actually impede development. Without a proper understanding of clear rules and regulations, there is an opportunity for variations in interpretation, bureaucratic impediments, and corruption to develop. South Asia is replete with examples of government bureaucracy and regulations resulting in long delays and significant rent seeking by public-sector officials. Establishing an appropriate balance between an insufficiently rules-based system and too much bureaucracy will be an important challenge.

Labor, Skills, and Employment

A growing number of Bhutanese workers are now entering the work force. Bhutanese workers with higher education still find it relatively easy to secure employment, however, school leavers who do not complete high school and do not proceed onto tertiary education are increasingly finding it more difficult to get jobs. These workers have high expectations in terms of wages and type of work to be undertaken with a strong inclination not to be engaged in menial, difficult, dirty, or labor intensive-type occupations. These "mid-level" workers with some education – but with no tertiary qualifications – represent the group of individuals among whom future unemployment is likely to be most pronounced in Bhutan. Approximately 65,000 school-leavers (without a tertiary education) are expected to come onto the work force over the next nine years.

On the other hand, the private-sector labor market in Bhutan is characterized by a large number of relatively low-cost Indian workers – both skilled and unskilled – working at menial jobs that the Bhutanese shun and high-level, skilled occupations where adequate skills have not yet been developed within the domestic work force. Non-nationals are thought to account for around one-half of all formal-sector employment and possibly around 60 to 80 percent of all formal private-sector employment.[39] Salaries for unskilled, non-national workers are some of the lowest in the world, and salaries for skilled workers also compare very favorably with commensurate wage levels in other countries.

The labor market is also noteworthy for an almost complete absence of labor unrest – with no strikes, agitation, or other disruptive worker activity being reported by the survey respondents. Labor markets are also extremely flexible; firms can hire and fire at will – and workers can leave with virtually no notice. Although skills are generally in short supply, the private sector undertakes very little training to raise the skill level of its work force.

Faced with a growing unemployment problem, the government understandably wishes to reduce the numbers of non-national workers employed in Bhutan. However, the target group of Bhutanese school-leavers who are most likely to be seeking employment over the next decade are unlikely to either want to undertake the menial work performed at the low-skill-end of the work spectrum – or to be able to do the skilled work at the high end of the spectrum. Meanwhile, the private sector requires a comprehensive range of skills if the wheels of industry are to keep turning and the private sector is to grow.

Hence, for Bhutan to become increasing competitive in a fast globalizing world, it will need to retain the cost advantages conferred by its access to low-cost, non-national labor and simultaneously increase the productivity of its Bhutanese workers so that Bhutan can produce cost-competitive products for sale both domestically and into export markets. Indeed, increasing Bhutanese productivity is key to gradually replacing non-national workers – rather than pursuing government-mandated regulations to arbitrarily reduce the level of the non-national work force. Ways of increasing worker productivity are discussed in greater detail below.

Consequently, non-nationals are currently needed in the work force – if the private sector is to develop a competitive edge – and it is recommended that any reduction in their numbers should be very carefully based upon productivity enhancements in the local work force rather than by other measures. An increasing number of Bhutanese, it is believed, will be absorbed by industry, not by replacing Indian workers, but by changing the structure of industry.

---

[39] Although non-national employment was only 36 percent in the surveyed firms this, in part, reflects the fact that there was a bias against interviewing large numbers of construction firms which dominate the formal list of registered companies. These firms typically have very high levels of non-national employment – frequently above 90 percent.

In addition, while the adoption of appropriate technologies (as discussed below) is one of the ways to enhance worker productivity, it is important that the private sector not be forced to abandon more appropriate labor-intensive production methods for overly capital-intensive methods of production. In an environment in which labor is relatively cheap and capital is comparatively expensive (certainly in comparison with the region), it makes little sense to pursue an overly capital-intensive strategy of private-sector development. Such a strategy also mitigates against increasing employment – a key initial objective of private-sector employment.

Training. Two very important ways in which worker productivity can be enhanced are by increased worker training and by adopting more appropriate technologies. Currently, however, very few firms engage in training and most firms rely on old Indian technology. Hence, worker training and the introduction of new technologies could substantially improve productivity within Bhutanese industry. Even more important than worker training is management training. Few entrepreneurs in Bhutan are experienced, and they themselves do not know the latest techniques or understand the training needs of their firms.

Managers say they do not train because they believe (a) there is no need to train them; (b) there are no government incentives for training; (c) trained workers will leave; (d) training cannot be afforded; and (e) there is a lack of training providers. Companies also do not train because a large share of their work force is Indian and the Bhutanese workforce is considered to be "too mobile" (hence training benefits are not recouped easily). As firms increasingly specialize to penetrate niche markets and to gain economies of scale, they will require workers who have a general work ethic plus specialist, firm-specific skills. Individual firms, or groups of firms, will have to provide many of these specialist skills through a mix of formal and on-the-job training. Efforts must also be made to closely align the education system with the needs of the private sector and for the government to share the costs of training by providing carefully designed incentive programs.

Finance

Bhutan's financial sector can be, at best, described as rudimentary. This has made it difficult for the private sector to get access to the funds it requires for investment; almost 43 percent of firms claimed to be credit constrained. The underdeveloped financial system also results in a substantially higher cost of doing business because of inefficient service, high service fees, and most importantly, high interest rates relative to competitor countries. With two banks and two non-banks – all dominated by the state – there is little competition or innovation in the system. High levels of liquidity have further exacerbated these problems and have perpetuated a lack of creativity within the sector. A 2001 study by the Asian Development Bank of Bhutan's financial sector will hopefully provide some policy directions for the way forward in this sector. Some of the main complaints of the private sector concerning the financial sector are discussed below.

Lack of Access/Demand. Interestingly, around 40 percent of survey respondents did not have access to bank finance. This is particularly high. In part it can be attributed to the unsophisticated nature of the private sector and its unwillingness to take on debt to leverage its productive potential to the fullest. However, without debt it is extremely hard for companies to grow. It is also attributable to the extremely conservative nature of the banking system in Bhutan, and its inability to reach out and support the private sector in developing bankable projects. Although some welcomed signs of innovations were evident – these were, unfortunately – few and far between.

Uncompetitive Banking System. The four interlinked financial institutions in Bhutan are characterized by high levels of liquidity, operation in a non-competitive market, and a lack of creativity and innovation. Even simple and well-accepted innovations such as the introduction of ATM machines and the wide use of credit cards have not yet taken place in Bhutan. This lack of competition is also reflected in high and inflexible interest rates, regardless of prevailing economic conditions. The banks do reasonably well without competing on margins and without trying to woo a new, and possibly more difficult, customer base. Increasing competition, possibly from the growth in non-bank sources of finance (such as leasing companies, venture-capital companies, finance companies), should be an important objective for the immediate future.

Lack of Financial Instruments. Along with the unsophisticated nature of the banking system, there is a concomitant lack of adequate financing instruments to meet the needs of a growing private sector. Hence, for example, leasing finance is almost totally absent in Bhutan, despite its excellent attributes, which make it ideally suited to support smaller- and medium-scale type business activities. Similarly, only one example of factoring (provision of credit against bills receivable/invoices) was found, despite the fact that it can also offer particular advantages to companies that require important injections of working capital to meet immediate production demands. Similarly, venture (risk) capital is hardly evident in the market – although some of the entrepreneurial skills-development programs have provided new start-up companies access to finance which has come close to being venture capital. Lastly, the high cost and the low-penetration rate of credit cards is an impediment to increased sales, faster and more convenient transactions, ventures into e-commerce, and has been an important drawback to some aspects of tourist industry development. Developing new and innovative instruments tailored to meet private-sector demands will be an important challenge for the banking system over the medium term.

Payment Systems. In common with the general lack of sophistication of the financial system, payment systems are slow and cumbersome. The private sector reports that it takes over a week to transfer funds within the same bank between Thimphu and Paro (and even longer for more remote regions in the country). Quick access to funds for payments purposes through ATM machines is not possible in Bhutan as such facilities do not yet exist. Use of credit cards as a method of payment is either not available or exceedingly costly when it is available. This lack of robust payments systems slows down the operation of the private sector and adds to its lack of competitiveness vis a vis other world producers. This weak payment system will also impede the growth of e-commerce and e-business in Bhutan since such systems rely upon use of credit cards and other electronic means of payment – systems which have not been developed at all in Bhutan.

Competitiveness and Technology

Firms' complaints about lack of demand reflect their lack of competitiveness and inability to win market share. This lack of competitiveness is not just a matter of high price and cost, but also of other factors including: the inability of firms to adhere to shipping schedules, maintain quality, or produce up-to-date designs. These failings can often be solved if firms adopt appropriate technologies (where technology is broadly defined and includes not only production techniques but management systems, quality control systems, design procedures, etc.). In some cases, for Bhutan to become internationally competitive, it is necessary for companies to look beyond the Indian technologies that they have traditionally relied on and adopt international best practices. Unfortunately, the learning mechanisms that companies use to acquire new technologies are extremely weak and if Bhutanese industry is going to grow, it is vital to strengthen them.

A product's competitiveness depends upon a mixture of price, quality, and delivery. It has been noted earlier that firms, in all sectors, are often not price competitive. While price is not the only

factor, it tends to be a major factor in initial market penetration. Bhutanese firms are not price competitive for a number of reasons – low productivity, lack of economies of scale, inadequate infrastructure, expensive capital, and geographic isolation – all of which serve to increase costs relative to competitors. As noted in the sector reviews, output per worker in some agroprocessing companies is only 9 percent of U.S. levels and in furniture making, productivity is among the lowest in the region. In addition to high costs, Bhutanese industry also suffers in non-price areas such as quality and delivery.[40] Firms, have not developed the capability to assure quality or produce popular designs. The poor infrastructure and inefficient payments system make it hard to meet delivery schedules.

Management Capability. A main constraint on increasing productivity and competitiveness is that many managers are technically unqualified and inexperienced. A very high share of Bhutanese entrepreneurs formerly worked in government and have not been able to build up extensive experience. Almost no entrepreneurs have worked in industry outside of Bhutan or for foreign-owned firms. Thus, they are unfamiliar with best practices or the requirements of international trade and they have difficulty transferring relevant technology into their firms. Even when firms have no immediate aims to export, this exposure is crucial. In an increasingly liberalized world, firms must compete against growing imports, and they have to know the competition in order to defend their markets. Managers also frequently have difficulty in choosing appropriate production and marketing personnel as well as employees with other required skills. Thus, improving management capabilities and adopting better management techniques is a key element in any attempt to improve competitiveness.

Equipment and Processes Used. Many companies in Bhutan operate with dated and ineffective equipment and production processes. For example, many sawmillers use sawmilling technology from India which is decades old. A majority of firms still do not use even rudimentary information technology as a business tool. This report makes frequent reference to the need to "leapfrog" Indian technology in the agroprocessing and wood sectors in an effort to develop niche market products capable of penetrating international markets. However, all firms take a long time to acquire, buy, deliver, and commission required technology. While even large firms face difficulties acquiring new technology, it is a particularly severe challenge for small firms that do not have adequate capital or many external connections.

Commonly, firms cannot ascertain the appropriate capacity of machinery to be purchased as they are unable to research the market to forecast demand. They are also often unable to access modern equipment and must use second-hand machinery which is less costly. As observed, in the wood sector, it may take twice as long and cost twice as much as planned to acquire and absorb a new production technology. Finally, production managers often have difficulty in adapting to the new technology in terms of maintaining the equipment, obtaining spare parts, and planning the increased quantities of raw materials needed. Similar problems occur in absorbing new technologies. The vendors of the hardware may not provide good training services; skills to develop or customize software may be lacking; and after-sales services may be inadequate.

Marketing and Design. As noted in the section on agroprocessing, firms can offset high input costs and labor-intensive processes and compete internationally if they focus on niche markets with low-volume, high-value products. This is equally true in other sectors. In tourism, for example, more and more high-income earners are participating in minority sports, such as water-rafting or high-altitude trekking, where Bhutan has a comparative advantage. For all these niche markets, there are well-defined needs, prices, and channels of distribution. Yet, in all of the sectors surveyed, marketing skills are weak, due to Bhutan's isolation and the dominance of the

[40] In one survey of 500 U.S. importers, 95 percent put on-time delivery as the most important buying criteria.

government and India in market relationships. Product delivery and packaging is also an important consideration. Products that have a low transport cost will need to be developed and packaging must be designed to facilitate transport as well as hold consumer appeal. Frequently, products must conform to international standards and retail packaging is required to include certain mandatory information. Commonly, firms have to import packaging technology not only to break into export markets but also to defend local markets from imports.[41] Bhutanese industry needs to adopt new technologies that will help marketing, product design, and packaging. Unfortunately, there are few sources of information on such technologies currently available.

Learning Mechanisms. To stay competitive in existing industries and to enter niche and other high-value markets, firms must upgrade their technology – all types of technology, including management, production, marketing, and design – making sure that the technology which is adopted is appropriate. It may be necessary to leap over the Indian technology on which companies currently rely and find the internationally most competitive technology. Finding and absorbing technology is an expensive and difficult task, and the mechanisms that help firms do this are also weak in Bhutan. There are no networks of suppliers or international buyers to teach firms about new technologies. There are few consultants or technical experts, and Bhutan's isolation makes it difficult for firms to find them abroad. In addition, one of the most important ways that technology is transferred between countries – foreign direct investment – is almost non-existent. The government must take steps to strengthen the mechanisms that firms use to access new technologies. Establishing matching-grants schemes, making visas for technical experts easier to obtain, providing tax incentives for technical improvements, and most importantly liberalizing FDI are all actions that will help firms improve their technology, raise productivity, and make domestic industries more competitive.

Infrastructure

The survey confirms that most infrastructure in Bhutan is good compared with other countries in the region and is adequate to meet current needs in most areas. However, in more remote locations of central and eastern Bhutan, infrastructure is still a significant problem especially in the provision of electricity. The only, and major, exception to this general rule, is the transport infrastructure – both road and air.

Road Transport. Transport is particularly important in an environment where on-time delivery is a key determinant of international success. Transport problems lead to delays in taking receipt of incoming raw materials and intermediate goods – as well as deliveries out of the country. The difficulties are aggravated by seasonality, being worse and more expensive during the monsoon season (which also coincides with the fruit season). During the monsoons, the cost of transport can double and there are delays in getting trucks. The absence of loads for return trips further leads to delays and increases costs. Trucking firms put much of the blame on the roads, observing that their poor condition increases transport costs by around 30 percent. Law and order problems – particularly in Assam – have also increased costs considerably in Bhutan. For example, transport costs for hauling goods from Phuentsholing to Sarbhang have tripled recently as they formerly used to travel through India but now have to travel within Bhutan. On- and off-loading at the border due to regulations, including axle-weight restrictions, also causes time delays and increases costs.

---

[41] In the early 1990s, Zimbabwean firms realized the importance of retail packaging when the market was liberalized and generic biscuits, imported from South Africa, started to penetrate the local market even though they were three times the price.

Transport infrastructure will be influential in the location of industry. It will, for example, constrain the development of agroprocessing firms that use high-altitude crops. In the wood sector, it is costly to make high-value hardwood products in the inland areas as hardwood is grown along the border areas. On the other hand, conifers are processed in the border areas, but the trees come from the inland areas. Twice as many tourists enter Bhutan from the "lowlands," but the main attractions (festivals and trekking routes) are in the "highlands." Policy development must take account of such anomalies, and there is an important need for strong coordination between ministries responsible for transport, industry, tourism, and agriculture.

Air Transport. Air service was also a major target of complaint by the private sector. This will become more of an issue as firms increase the level of technology used in their firms. More and more, third-country technology will be required and engineers and parts will need to be flown in. Moreover, high-value exports in niche markets will rely on air cargo as is the case, for example, with the fishing flies exported by Yangphel Handicrafts. It is critical that reliability of air service be improved, particularly cargo service. In the case of tourism, it is desirable to develop new products and marketing strategies to reduce the seasonality so that less strain is placed upon Druk Air and/or charter tourism developed.

Other Infrastructure. Although electricity is cheap and, reportedly, plentiful, power outages cause some difficulties. It is not uncommon for firms to report production losses of 2-6 percent due to such outages. These loss levels are unsustainable for low-margin and delivery-sensitive firms. These problems were most notable in Phuentsholing during the rainy season. A lack of water is also a constraint for some firms, particularly in Phuentsholing during the monsoon. Although the telecom systems is relatively good, as noted in the section on IT, there is no data network. The basic message is that, even though the Government has established a strong infrastructural base, there is an important need to ensure that this base is extended to cover increasingly more of the country and that it is continuously upgraded to meet the more sophisticated demands that will inevitably be placed upon it as the economy grows.

Private/Public Dialogue

Establishing a strong and ongoing dialogue between the government and the private sector is necessary as a first step to addressing issues raised by the private sector. In this, the private sector needs a strong voice that can confidently and competently put forth its concerns. The private sector must be involved in identifying impediments, prioritizing how they are addressed, and then in helping design policy prescriptions. If the private sector does not have input, it is possible that policies and solutions, though well intended, could hamper rather than help the private sector.

The natural candidate for this role is the BCCI and the local chambers, along with the various trade associations. The government has been supportive of BCCI but this has led, in the eyes of many of its members, to it almost being co-opted by the government. Many private sector managers who spoke to the survey team stated that they do not think that BCCI presented their views sufficiently strongly. The regional chambers and industry trade groups are just forming and are not strong enough to have a large impact yet. However, they promise to develop into good representatives of the private sector. The private-sector representatives need to make more efforts to organize and strengthen local chambers and trade groups and to push BCCI to become more responsive to their needs.

2. Sector-Specific Conclusions

The conclusions and recommendations of the four sector-specific chapters are summarized below:

Agroprocessing. Agriculture contributes about 35 percent to GDP, and 85 percent of the population depends on some form of agricultural production. However, only 3 percent of output is processed for commercial use – mainly fruit and vegetables. The agroprocessing industry is dominated by 104 small firms. There are only three large companies that export over 65 percent of their production. More than 90 percent of the industry (excluding alcoholic beverages) is fruit processing and worth some US$3.0 million. With respect to domestic demand, imported produce is increasing as urban populations grow and tastes move to higher-value products.

Raw materials are uncompetitive because of poor land utilization, low crop yields, low productivity, and high transportation costs. Downstream value-adding is adversely affected by an absence of scale, old technology, bad packaging, a lack of branding, and costly freight. Management is insufficiently qualified or experienced to offset these higher costs by innovation and marketing. In the main, agroprocessing firms depend on Indian labor, which they feel is more skilled than Bhutanese – although the most non-national dependent firms are the least profitable. Some 90 percent of the agroprocessing work force around Phuentsholing is Indian.

Processed foods are the fastest growing component in world agri-food trade – comprising 75 percent of trade in 1996 (and worth US$384 billion). If Bhutan could overcome impediments to growth, it has potential in two areas. First, in low-volume, high-value products selling into niche markets based on comparative advantages such as the range of microclimates, biodiversity, and organic production. Products in this area could include essential oils, traditional medicines, mushrooms, incense. Second, larger-scale, foreign-investment businesses in border areas based on the comparative advantages of flexible labor, a stable political environment, and competitive infrastructure, predominantly using imported raw materials.

To exploit this potential, firms will need access to competitive, consistent, and high-quality raw materials in a timely manner; supportive policy on transport, labor, and investment; innovation in products, processes, packaging, and product positioning; and improved productivity through better management, improved processes, and enhanced labor skills.

Wood-Based Industry. Forestry contributes some 11 percent to GDP and generates over 25,000 informal- and formal-sector jobs. But wood-based industries, including some 120 sawmills, furniture workshops, and board manufacturers, employ no more than 2,000 individuals. Management in firms is inadequately qualified and experienced, technology levels are low, and labor is unskilled resulting in low productivity. There are no economies of scale in the sector, and firms make a diverse range of products for "walk-in" clients. The government, which buys up to 60 percent of the sector's output, drives down quality and margins. Two recent government policies have influenced the sector – a 1999 a ban on the export of logs encouraged firms to move downstream to add-value; and, in mid-2000, a further extension of the export ban to also cover the export of semi-finished products was put in place. In addition, firms are required to buy timber in mixed-species' lots from FDC auctions, which means that they cannot get the type and quality of the wood they need.

The sector has potential to serve regional markets, particularly Bangladesh, in specialist categories not adequately served by local producers or by the increasing volume of imports from Southeast Asia and Europe. Some niche markets in third-countries could be penetrated with easily-transported, low-volume, high-value products. To realize this potential, however, firms

must be allowed to access single-species timber in appropriate sizes and quality; the ban on semi-finished products must be relaxed so that firms can gain experience and gradually move downstream; productivity must be raised through improved management, the use of appropriate equipment, and properly trained labor; and market awareness and marketing skills must be increased. In the medium-term, as a selling point for Bhutanese wood products, it will be desirable to ensure that Bhutanese forests are certified as being sustainably managed.

Tourism. Tourism has grown by 4 to 36 percent each year for the last decade. In 2000, a record was set with 7,559 arrivals by air and 13,000 by road, providing over US$10.5 million in direct foreign-exchange earnings. Hotels employ some 1,400 persons, and there are about 75 (mostly small) tour operators. The market is highly seasonal, with average hotel occupancy under 20 percent, and repeat tourism low. Two Singaporean-based joint ventures have recently been approved and are likely to influence the development of the industry. A key policy issue for tourism is the pricing policy, which requires tourists pay up to US$200 per day ahead of their holiday (and US$165 in the "lean season"), from which the government collects US$65 (US$63/lean) as a royalty. Better calibration of these rates – particularly the government royalty – in non-peak seasons could encourage a more steady stream of tourists into Bhutan throughout the year.

Tourism marketing is weak – the private-sector lacks resources and the government plays a passive role – and the country is concerned about balancing income generation and maintenance of cultural identity. Holidays in Bhutan are comparatively expensive, but good service is not provided. Service is usually friendly in hotels, but it is poor quality and amenities are lacking . This is partly because tourists must pay before arrival and they have little choice once they enter Bhutan, so competition is lacking to drive up standards. The range of tourism "products" available to tourists is limited, though some improvements have recently been introduced. Access to Bhutan – particularly air access – is inadequate and problems are exacerbated by seasonality.

Tourism has considerable growth potential because of its comparative advantages and the problems in other potential destinations in the region. This potential can be realized if an unambiguous strategy with appropriate policy and regulations is developed; pricing policy is adjusted (particularly lean-season pricing); government and firms are more proactive in marketing; access to Bhutan is improved; seasonality problems are addressed; new products are developed; and standards of accommodation and service are improved.

Information Technology. IT can impact on the economy in two ways – it can be used as a business tool in firms or produced as a tradable service. Computers are under used in the private sector: almost no firms have local area networks; only 15 percent have Web sites; and while 62 percent of firms have e-mail, fax and telephone dominate communications. An Internet service provider was started two years ago and, although lease lines are available, few companies use them. Impediments to development include comparatively high connectivity charges; a lack of IT professionals – most must be sourced in India; undeveloped regulatory and financial systems – online banking business, for example, is not possible; and comparatively high labor costs.

Opportunities being targeted in other developing countries include small niche firms selling services such as software development, and larger firms selling data entry or operating call centers. However, in Bhutan the sector is still in its infancy and several challenges have to be overcome before it can deliver internationally competitive services. These include increasingly using IT as a business tool within the public and the private sectors; developing skilled IT professionals; introducing appropriate regulations, (for example, to permit business online);

establishing an environment in which services to the IT sector can develop; and improving the infrastructure by adding data networking infrastructure.

3. Vision for the Development of the Private Sector in Bhutan

With the accession of Bhutan and its main trading partners into the WTO, barriers to trade are falling. Several of Bhutan's traditional markets in India have already been successfully penetrated by third-country exporters. For example, the Indian market for wooden panels is being serviced by both high-labor-cost producers from Europe and by lower-labor-cost producers from Southeast Asia. Cement, calcium carbide, and ferro silicon (representing the main production from Bhutan's three largest private sector companies), as well as other traditionally important product markets for Bhutan, are also facing increasing competition from China and South East Asia in India.

On the one hand, globalization means that Bhutan and the wider Indian market have to face imported products made by producers with large economies of scale and cheap inputs. On the other hand, it means that Bhutan has access to inputs and technology, which are as advanced as any in the world. While globalization brings increased competition, it also provides opportunities as an increasing number of consumers will become aware of, and can buy, niche-market products – products that large-scale producers may not have an interest in.

Given increased globalization, as well as the dictates of geography in Bhutan, it would be most appropriate for Bhutan to develop a dual track path for the private sector. Areas along the border can continue to exploit industries which have high labor and transport cost components. Proximity to large and important markets in India for raw materials, intermediate inputs, and finished products – as well as access to cheap, low-skilled, non-national labor – permits Bhutan to aggressively leverage its other considerable advantages of good governance, political stability, abundant and low-cost electricity, and lack of labor unrest. These attributes should permit Bhutan to produce cost-competitive products for export into India and beyond. The further development of these types of industries could support some import substitution activities as well as assist in further extending and diversifying export markets. They could also form a core of businesses which would increasingly rely upon the services provided from central locations in Bhutan.

In the center of the country, where labor costs are comparatively high and transport costs frequently prohibitive, the development of cost competitive industries needs to focus on the service industries (IT, tourism, transport, and so on) in combination with niche markets (mushrooms, medicinal herbs, wasabi, essential oils, artifacts, intermediate products, etc). Bhutan has many of the attributes required to be a niche-market player – producing low-volume, high-value products – in particular its small size, its distinct identity, its climatic diversity, and the prospect of synergies between its positive attributes. The further development of services such as IT (initially for the domestic market) and the expansion of tourism also show considerable promise, as do a continued reliance upon other fast-growing service industries such as transport and construction.

However, it is critical that Bhutan maintains and optimizes its potential while simultaneously not creating any potential impediments to private-sector development. Presently, Bhutan is at a crossroads and, depending on the actions it takes over the period of the Ninth FYDP, it can either become an important, albeit small, player on the world stage, giving opportunities for its increasingly-educated population, or continue to languish as an irrelevant player with respect to private-sector activities, with all the implications that that has for generating future employment opportunities for its growing population.

In developing both additional heavy industries in the south of the country and the service and niche markets in central Bhutan, several factors will be critical. Increasing worker productivity will be key and this requires worker training, management training, the adoption of new and appropriate technologies, and the expansion of FDI. Second, supporting the development of a more competitive and innovative financial sector that provides new financial instruments to support the increasingly complex private sector will also be key. Third, ensuring appropriate technology linkages and better management in all stages of the product development, production, design, and marketing phases will be critical for success All of these goals can be furthered by supporting appropriate flows of FDI. In addition, and as a prerequisite to continued growth of the sector, it is necessary to establish good governance and a transparent policy environment.

To support such a vision, the government will need to put in place a series of support measures. Such measures would include (a) support and encouragement for worker and management training to rise productivity levels through generous tax rebates or industry levies; (b) serious implementation of the AsDB study's recommendations on financial sector reform in support of private sector development (c) establishment of a matching grants scheme to assist in appropriate technology transfers to private companies; (d) development of export incentives including duty drawback schemes, pre-shipment and post-shipment financing; (e) promulgation and regulation of an increasingly open FDI law; and (f) establishment of dry ports and fully serviced industrial estates at strategic locations throughout the country.

4. Main Recommendations

Consequently, the main recommendations in support of private sector development for the Ninth Five Year Development Plan include:

- **TRAINING.** Establishment of a transparent system of tax relief and possibly a system of industry levies to support radically increased worker and management training – in an effort to increase overall productivity;

- **LABOR.** Develop a transparent, time-bound, policy for the recruitment of non-national workers with an eye to ensuring the on-going cost competitiveness of Bhutanese industry;

- **FINANCE.** Encourage the development of innovative financial instruments and payment modalities – based upon the AsDB study – including, *inter alia,* ATM machines, greater use of lower-cost credit card transactions, introduction of leasing finance, extension of factoring services. Simultaneously make every effort to encourage greater financial sector competition and greater interest rate sensitivity;

- **TECHNOLOGY.** Support technology transfer mechanisms to enhance the private sector through, *inter alia,* the immediate establishment of a Matching Grants System, use of retired executive schemes, and so on. Incentivize technology transfer through the establishment of, for example, tax breaks on research and development;

- **FOREIGN DIRECT INVESTMENT.** Ensure that the new FDI Law is finalized and approved in the next session of the Assembly and that supporting regulations are put in place shortly thereafter. Actively encourage potentially high impact FDI ventures in an early phase of implementation;

- **EXPORT INCENTIVES.** Immediately implement a system of duty drawback on imported raw materials used in the production of export products (including exports to

India) and immediately begin a dialogue with the banks on the provision of pre-shipment and post-shipment finance to the private sector;

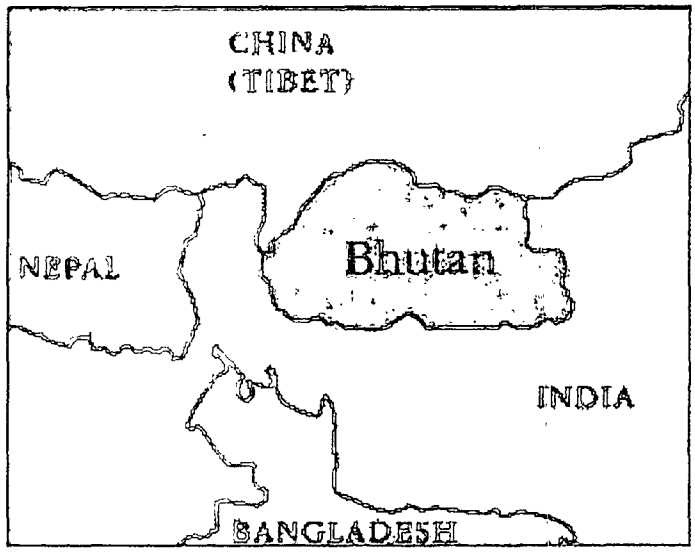
- **POLICY ENVIRONMENT.** Develop a clear, consistent, and transparent policy environment for the private sector, within the context of the NFYDP, which takes into account private sector views. Ensure proper and clear systematization, codification, and regulation of private sector strategy, laws and regulations;

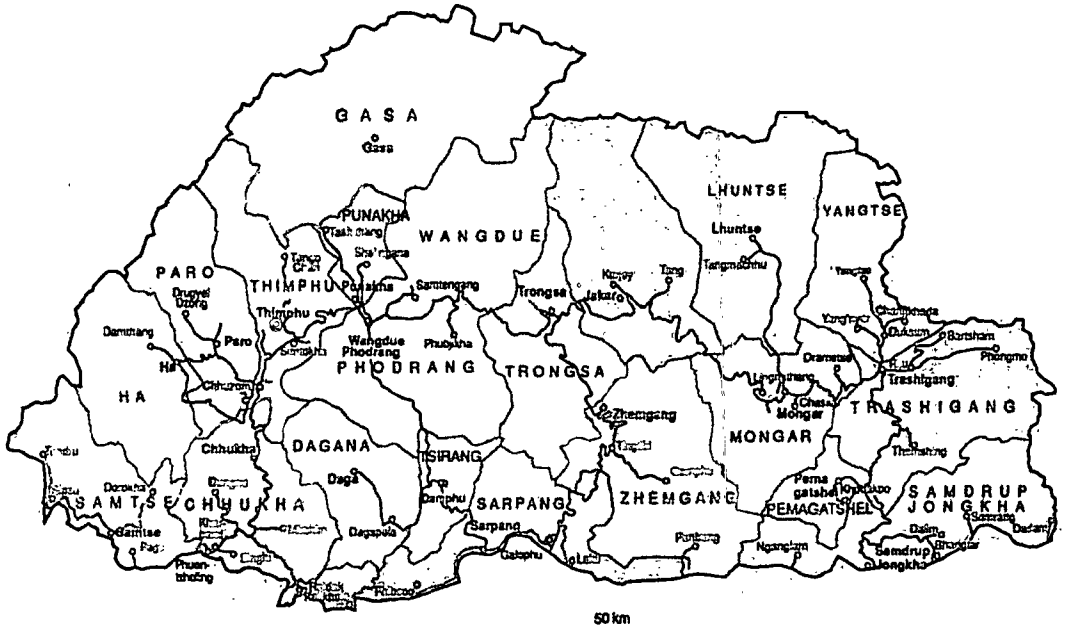
- **AUDITING AND ACCOUNTING.** Increasingly include a wider group of private sector companies in the auditing net to encourage the greater use of financial management information as a tool of MIS for firms – as well as to assist the tax authorities;

- **INDUSTRIAL ESTATES AND DRY PORTS.** Further support private sector development through the establishment of strategically located (for the private sector) industrial estates as well as dry ports at strategic border locations;

- **DIALOGUE.** Immediately put in place support mechanisms for private sector industry interests such as the Bhutan Chamber of Commerce and Industry as well as sector associations – by bringing in experienced professionals from external chambers and the private sector.

ANNEXES
TO THE REPORT





Annex One

List of Registered Companies in Bhutan, 2001

	NAME OF COMANY	POST BOX	LOCATION	Registration Number	DATE OF REGISTRATION
1	Bhutan Polythene Company	-	Phuentsholing	1	27-12-90
2	Penden Cement Authority Ltd.	-	Gomtu	2	27-12-90
3	Bhutan Development Finance Corporation	-	Thimphu	4	27-12-90
4	Forest Development Corporation	-	Thimphu	5	27-12-90
5	Handicrafts Development Corporation	-	Thimphu	6	27-12-90
6	Bhutan Board Product Ltd.	-	Phuentsholing	7	27-12-90
7	Druk Japan Himalayan Co.	-	Thimphu	8	27-12-90
8	Bhutan Engineering Co. Pvt. Ltd.	-	Thimphu	9	27-12-90
9	Bhutan Carbide & Chemicals Ltd.	-	Phuentsholing	10	27-12-90
10	Bhutan Ferro Alloys Ltd.	-	Phuentsholing	11	27-12-90
11	Bhutan Fruit Product Ltd.	-	Phuentsholing	12	29-03-91
12	Bhutan Marble & Minerals Ltd.	-	Thimphu	14	10-04-91
13	Druk Air Corporation Ltd.	-	Thimphu	15	16-04-91
14	Bank of Bhutan	-	Phuentsholing	16	1-05-91
15	Chukha Hydro Power Corporation	-	Chukha	17	2-07-91
16	Royal Insurance Corporation	-	Phuentsholing	18	11-10-91
17	Bhutan Agro Industries Ltd.	P.B. 329	Thimphu	20	24-10-91
18	Yangzom Cement Industry Ltd.	-	Samtse	21	3-12-91
19	Zana Bliss International Pvt. Ltd.	P.B. 145	Phuentsholing	23	7-01-92
20	Bhutan Tourism Corporation Ltd.	-	Thimphu	25	22-04-92
21	Food Corporation of Bhutan	-	Phuentsholing	27	8-07-92
22	Dangling Company Ltd.	P.B. 105	Trashigang	28	3-07-92
23	Etho Metho Tours & Treks Ltd.	-	Thimphu	29	14-08-92
24	Malo Corporation (P) Ltd.	P.B. 145	Phuentsholing	30	1-09-92
25	Chapcha Engineering Co. Ltd	P.B. 641	Thimphu	31	21-09-92
26	Charry Engineering Company	-	Thimphu	32	29-10-92
27	Wood Craft Center	P.B. 581	Thimphu	34	30-11-92
28	Chimi Wangchuk Construction Co.	-	Thimphu	35	11-11-92
29	Lomnekha Construction Co.	-	Chukha	36	30-12-92
30	Tandin Import & Export (P) Ltd.	P.B. 455	Thimphu	37	22-01-93
31	Environment Friendly Construction Co.	-	Bumthang	38	2-03-93
32	Mindu Company (P) Ltd	-	Thimphu	39	16-04-93
33	Radag Company	-	Wangdue	40	28-04-93
34	Druk Lothuen Company Ltd.	-	Thimphu	41	12-05-93
35	Druk Stone & Mineral Export Co. Ltd.	P.B. 230	Phuentsholing	42	3-06-93
36	Lama Tours & Treks Pvt. Ltd	P.B. 704	Thimphu	43	14-06-93
37	Gahsel Pharmaceutical Pvt. Ltd.	P.B. 495	Thimphu	44	17-06-93
38	Rigsar Construction Co. (P) Ltd	-	S/Jongkha	45	27-07-93
39	Royal Securities Exchange of Bhutan Ltd.	P.B. 154	Thimphu	46	18-08-93
40	Jomo & Shaykhar Co. Ltd.	-	Trashigang	47	18-08-93

41	Kuenphen Wangchuk Co.	-	Trashigang	48	18-08-93
42	Gangri Tours & Treks Ltd.	P.B. 607	Thimphu	50	20-08-93
43	Daga Kuenphen Enterprise	-	Phuentsholing	51	20-08-93
44	Drook Securities Ltd.	-	Thimphu	52	2-09-93
45	Pagsam Company Ltd.	-	Lhuntse	53	4-10-93
46	BNB Securities Ltd.	-	Thimphu	54	12-10-93
47	Yurung Company Pvt. Ltd.	P.B. 235	S/Jongkhar	55	12-10-93
48	Druk Satair Corporation Ltd.	-	S/Jongkha	56	14-10-93
49	Chituen Construction Co. Ltd.	P.B. 470	Thimphu	57	18-10-93
50	Lhomen Tours & Trekking Co. Ltd.	P.B. 341	Thimphu	58	21-10-93
51	Etho Metho Construction Co	P.B. 341	Thimphu	59	22-10-93
52	Lhaki Cement Pvt. Ltd.	-	Gomtu	60	17-11-93
53	Army Welfare Project	P.B. 92	Phuentsholing	61	18-11-93
54	Bank of Bhutan Securities Ltd.	-	Thimphu	62	8-12-93
55	RICB Securities Ltd.	P.B. 77	Phuentsholing	63	8-12-93
56	H & K Company	P.B. 74	Phuentsholing	64	27-12-93
57	Bhutan Diary Ltd.	P.B. 196	Phuentsholing	65	27-12-93
58	Bhutan Adventure Pvt. Ltd.	P.B. 231	Thimphu	66	28-12-93
59	Druck Petroleum Corporation Ltd.	P.B. 298	Phuentsholing	67	25-01-94
60	Yeti Tours & Trekking Pvt. Ltd.	P.B. 456	Thimphu	68	25-01-94
61	Shongar Construction Co. Ltd.	-	Mongar	69	16-02-94
62	National Construction Co. Ltd.	P.B. 398	Thimphu	70	28-04-94
63	Chukha Construction Co. Ltd.	-	Chukha	71	10-05-94
64	Kinga tours & Treks Ltd.	P.B. 635	Thimphu	72	23-05-94
65	Ratna Transport Co. Pvt. Ltd.	P.B. 149	S/Jongkhar	73	5-07-94
66	Gayjur Construction Co.	-	Mongar	75	29-07-94
67	Eastern Bhutan Coal Co.	-	S/Jongkhar	76	3-08-94
68	Druk Norlha Co.	P.B. 631	Thimphu	77	8-08-94
69	Hotel Kelwang Pvt. Ltd.	P.B. 350	Thimphu	78	18-08-94
70	Kelwang Consultancy & Construction. Ltd.	P.O. 350	Thimphu	79	24-08-94
71	Nansay Company	-	Gelephu	80	7-09-94
72	Perfection Engs. & Consultants Ltd.	-	Gomtu	81	29-09-94
73	Bhutan Shangri-La Adventure Ltd.	P.B. 532	Thimphu	82	27-10-96
74	Phuensum Import & Export Co. Ltd.	P.B. 772	Thimphu	83	30-11-94
75	RSA Pvt. Ltd.	P.B. 321	Phuentsholing	84	9-05-95
76	International tours & Treks Ltd.	-	Paro	85	25-07-95
77	Druk Construction Company	P.B. 204	Thimphu	86	26-07-95
78	Kuensel Corporation	-	Thimphu	87	16-08-95
79	Tsenphu Company	-	Mongar	88	20-09-95
80	Phub Bro's Construction Co.	-	Thimphu	89	16-10-95
81	Namgail Cement Co. Ltd.	P.B. 138	Phuentsholing	90	30-10-95
82	Stade Trading Corporation of Bhutan	-	Phuentsholing	91	5-03-96
83	Dragon Nest Ltd.	-	Wangduephodrang	92	29-03-96
84	Phuensum Construction (P) Co.	-	Thimphu	93	29-07-96
85	Bhutan Broadcasting Service	P.B. 101	Thimphu	94	15-08-96
86	Goendrap Eng. Company	-	Punakha	95	6-09-96
87	Bhutan National Bank	-	Thimphu	96	2-09-96

88	Bhutan Postal Corporation	-	Thimphu	97	25-10-96
89	National Transport Company	-	Thimphu	98	9-12-96
90	Sakteng Health Club & Saloon Ltd.	P.B. 825	Thimphu	99	8-01-97
91	T&K Construction Co.	P.B. 881	Thimphu	100	4-03-97
92	Bhutan Tours & Travel Pvt. Ltd.	P.B. 224	Thimphu	101	18-04-97
93	Himalayan Plastic & Chemicals	-	Thimphu	102	21-04-97
94	Yarkay Oxygen Ltd.	P.B. 134	Phuentsholing	103	22-04-97
95	Green Wood Mftg. Corporation	-	Phuentsholing	104	28-04-97
96	United Construction Co. Pvt. Ltd.	-	Thimphu	105	29-04-97
97	Alpine Builders	-	Thimphu	106	28-05-97
98	Bhutan Polymers Co. Ltd.	P.B. 321	Gomtu	107	12-06-97
99	Kubera Tours & Treks Pvt Ltd.	-	Thimphu	108	13-06-97
100	Bhutan Board Exports Ltd.	-	Phuentsholing	109	3-07-97
101	Druk Silicon Carbide Ltd.	-	Thimphu	110	11-07-97
102	Choden Chemical & Industry Ltd.	-	S/Jongkhar	111	21-07-97
103	Rabsel Construction Co. Ltd.	P.B. 488	Thimphu	112	1-08-97
104	Namcha Construction Pvt. Ltd.	-	Thimphu	113	8-10-97
105	Royal Society for the Protection of Nature	-	Thimphu	114	29-10-97
106	Bhutan Construction Co. Ltd.	-	Thimphu	115	5-02-98
107	Euchok Construction Co.	-	Thimphu	116	11-05-98
108	Bumthang Brewery Ltd.	-	Bumthang	117	29-05-98
109	Hotel Druk-Yul,	-	Thimphu	118	30-07-98
110	Gongphel Construction Co. Pvt. Ltd.	-	Thimphu	119	16-12-98
111	Pinewood Builders	-	Thimphu	120	8-01-99
112	Goong Construction	-	Phuentsholing	121	23-02-99
113	Lhaki Wood Industries Ltd.	-	Thimphu	122	
114	Rainbow Tours & Travels Pvt. Ltd	-	Thimphu	123	28-04-99
115	Osang Electrical Company Pvt. Ltd.	-	Thimphu	124	16-06-99
116	Druk Chlorate Company	-	Thimphu	125	9-08-99
117	Peljorekhang Pvt. Ltd.	-	Thimphu	126	9-08-99
118	Tshungmed Solar Inc	-	Thimphu	127	13-08-99
119	N.D. Construction	-	Thimphu	128	25-08-99
120	Hotel Riverview Pvt. Ltd. Thimphu	-	Thimphu	129	22-12-00
121	Pelchen RandinReal Estate	-	Thimphu	130	10-04-01
122	BTB Pvt. Ltd. Thimphu	-	Thimphu	131	8-05-01
123	Singye Group of Companies Pvt. Ltd.	-	Thimphu	132	
124	Bhutan Agrotech Research and Development	-	Thimphu	133	14-05-01

Annex Two

Tax Regime/Policies

Corporate/Income Tax. The key features of the corporate/business income tax are:

- 30 percent on net profit on resident companies.
- 3 percent of the turnover for non-resident companies withheld at source.
- Business expenses are allowable deductions provided they are supported by documentary evidence. Ceilings on salary, donations, and entertainment expenses apply.
- Depreciation of assets within the maximum prescribed limit is allowed on a straight line method
- The personal income tax replaced the Salary Tax in 2001. Tax on Salary is charged at rates ranging from 10 to 25 percent on the basis indicated in the table below. No tax is payable on individual incomes below Nu100,000 per year.

New Personal Income Tax Rates (effective from 2001)

Gross Salary Range	Tax Rate
Up to Nu100,000 per year	Exempted
Between Nu100,000 and Nu250,000 per year	10 percent
Between Nu250,000 and Nu500,000 per year	Nu10,000 Plus 15 percent over Nu250,000
Between Nu500,000 and Nu1,000,000 per year	Nu25,000 Plus 20 percent over Nu500,000
More than Nu 1,000,000 per year	Nu65,000 Plus 25 percent over Nu1,000,000

In 2001-02, the Corporate Income Tax is forecast to generate government revenues of Nu939 million (20.4 percent of total government revenues); the Business Income Tax is forecast to generate government revenues of Nu201 million (4.4 percent); and the Salary Tax is expected to raise Nu62 million (1.3 percent).

Tariffs. The current rates of import duties ranges from 0 to 30 percent, except for some higher tariffs on imports of beer, alcoholic beverages, and tobacco products. Under the long-standing free trade arrangement with India, these tariffs are applied only on third-country imports.

The benefits of trade liberalization are particularly important in Bhutan due to its small size and the costs incurred from trade diversion from continued imposition of duties on third country imports in conjunction with free trade with India. The main elements of the trade liberalization program include a reduction in the number of tariff slabs and a reduction in their levels. During 2001-2002, budget tariffs were abolished on a wide range of domestic electrical appliances with the expectation that, with rural electrification, individuals in rural areas will be able to take advantage of time and labor savings devices. Tariffs on computers were also abolished during the budget, an indication of the growing importance placed upon the development of IT in Bhutan.

Tariffs in Bhutan tend to be lower than corresponding rates in India

Bhutan/Business Sales Tax. Trade is also impacted by the Business Sales Tax (BST) imposed originally on imports from India (and on sales of selected hotels and restaurants and cement from

Penden Cement Authority Ltd.) but subsequently extended to imports from third-countries as of September 1998. Indian exporters to Bhutan can claim the Bhutan BST as a rebate against the Indian sales tax, and the BST has not been treated as an import tariff by Indian authorities. Since producers of import substitutes in Bhutan do not pay this tax, it has a protective effect similar to a tariff. Since the BST ranges from 0 to 20 percent (with higher rates restricted to beer, alcoholic beverages, and tobacco), the actual rates of import duty on third-country imports are in the 0-to-50 percent range, rather than the 0-to-30 percent range for import tariff schedule.

The BST already accounts for most of the taxes collected on imports. In the medium term, consideration will be given to a reduction of the BST tax – except for a few items such as vehicles and alcoholic or tobacco products. This will eliminate much of the protectionist component of a BST imposed on imports but not on sales of domestically produced goods. Such a system will eliminate the trade diversion effects of the present system, since India has a rebate system for the sales tax and most other countries do not charge a sales tax on exports. The medium-term goal is a commodity tax system based on a BST being applied on a non-discriminatory basis on both imports from third-countries and from India.

In the longer run, consideration will be given to the imposition of an excise tax on domestically produced goods at the point of production. With a relatively uniform BST applied on imports from both India and other countries and a similar rate of excise tax imposed on at the factory gate, Bhutan will have a very efficient, low, and relatively uniform commodity tax system in place.

The structure of import tariffs and BST duties shows the normal cascading where rates are generally highest on final products (except for some essential goods), lower on intermediate products and lowest on raw materials. The cascading effect of tariffs can give high levels of effective protection to import competing activities. Thus, for instance, a 50 percent tariff on a final product produced with an imported input that accounts for half of the costs of production with a 20 percent tariff, results in an effective rate of protection of 90 percent. Since there is considerable scope for waiving duties on intermediate and raw-material products as an incentive, effective protection rates often can be even higher than suggested by the stated rates. The BST contributes 7.2 percent to total government revenue.

Export Taxes. There are some export taxes in effect, but these contribute only a very small share of total government tax revenue (0.3 percent of total government revenue) – and the government has decided to eliminate these taxes. Export bans exist on antiques, animals, and plants classified as endangered species and their parts and products, and on timber.

Excise Taxes. Excise taxes are restricted to sales of alcoholic products from the Army but are relatively important in terms of collections – excise tax represents 10.0 percent of total government revenues and is the most important indirect tax in Bhutan.

State Controls on Trade. There are, in general, no quantitative restrictions on imports – although some exceptions do exist. Import licenses are required, and there is supposed to be 'automatic approval' of licenses for the import of all commodities outside a narrow negative list, for which 'special permission' is required.

Although import licensing is supposed to be automatic, there is some complaint from the private sector that this is not so. The government's concern over aggravating the trade deficit with hard currency countries plays some role in this regard. Some businessmen complain about long delays in getting import licenses to import inputs from hard currency areas, especially if these inputs are to be used in producing goods for export to India. Investors also complain of difficulties in

getting approval for investments in which imported inputs from hard currency areas are destined to be used for producing exports to India.

The government maintains an effective monopoly by importing quota items such as LPG, fertilizer, and kerosene and providing these goods to domestic users at subsidized prices. There is an excess demand for most of these commodities at the established prices so the goods are rationed to users.

Annex Three

Yields of Major Crops in LDCs and Other Developing Countries

Crop	Average annual yield in 1995-99 (tons per ha)		Average Yield in LDCs as percentage of yield in all developing countries
	All Developing Countries	LDSs	
Wheat	2.64	1.48	66.0
Rice	3.70	2.54	68.0
Maize	2.86	1.23	43.0
Coarse grains	1.94	0.81	42.0
Fiber Crops	0.64	0.52	81.0
Oil Crops	0.48	0.22	47.0
Pulses	0.67	0.51	77.0
Roots and Tubers	11.80	6.60	56.0
Vegetables	14.60	7.20	49.0

SOURCE: Computations based on data from FAOSTAT (2000)

Bhutan – Cash Crop Report, 1995 – 1998 (Quantity in MT Value in million)

	1995		1996		1997		1998	
Commodity	**Quantity**	**Value**	**Quantity**	**Value**	**Quantity**	**Value**	**Quantity**	**Value**
Potato	14,603,698.00	72.266	16,478.600	88.785	17,030.971	55.394	18,193,596	147.201
Apple	519.231	4.125	252.945	1.869	281.435	1.799	972.745	7.113
Orange	4,010.058	16.525	3,639.693	18.211	2,915.403	14.538	3,657.400	15.879
Ginger	719.496	6.536	1,023.279	6.285	1,084.368	4.181	640.131	4.124
Dry Chilly	40.821	1.349	22.639	1.244	32.678	1.366	36.274	1.348
Rajma	36.319	0.517	69.54	0.882	102.916	1.357	38.798	0.736
Soybeans	90.957	0.742	92.356	0.726	142.921	1.425	87.008	0.692
Arecanut	192.354	1.086	182.522	0.646	104.343	0.585	75.763	0.731
Pipla	86.886	1.197	8.286	0.829	17.399	1.324	16.069	0.981
Other Fruits	3.405	0.018	1.215	0.008	3.832	0.017	2.465	0.021
Cardamom	14.785	5.526	5.838	0.376	26.630	1.972	1.34	0.07
Garllic					0.502	0.008	0.834	0.016
Lemon	54.637	0.315	47.264	0.343	34.974	0.237	2.333	0.027
Kalai Dal					3.710	0.040		
Pulses	3.560	0.037	4.702	0.046	4.297	0.038	1.549	0.013
Mustard	0.629	0.006	1.314	0.013	0.683	0.006	1.721	0.016
Chirota (Herb)	6.277	0.202	0.999	0.029	2.395	0.091	3.738	0.330
Dry Bean			3.630	0.022			0.060	0.001
Stararis			0.288	0.011	0.019	0.001	0.270	0.010
Lac					0.558	0.23		
Vegetables	1,136.903	7.06	1,970.567	7.950	1,362,478	6.752	1,366.566	7.651
Total	**21,520,016**	**117.507**	**23,805.677**	**128.274**	**23,155,512**	**91.156**	**25,101.664**	**186.962**

Annex Five

SWOT Analysis of the Tourism Sector

STRENGTHS	WEAKNESSES
• Unique destination • Natural beauty • Moderate climate • Friendly people • History • A monarchy • Scope for fine-tuning the visitor experience with product enhancements • Professionalism and skills of Bhutan Tourism Corporation and other tour operators • Opportunity for outdoor activities, trekking, bird watching, fishing. • Great opportunity for cultural tourism including history, towns, monastic buildings, museums, collections, music dance, costumes, and folklore • Close proximity to India an important market • Existing established tourist plan, including services, such as access, internal transport, guides, accommodation, restaurants, outdoor, and cultural tourism activities.	• Undue increase in existing throughput of visitors could be self-destructive, due to sensitive nature of product • High-priced destination, but support services are below expectations • Insufficient attention in some hotels to detailed aspects of customer service • Absence generally of tourist information literature, undue emphasis on tour group, to the exclusion of individual traveler • No good range of postcards, souvenirs, books available • Range of visitor accommodation confined to two-star and lower accommodation (in course of correction) • Government royalty on visitors is not reinvested in tourism • Unduly complex trade and state structures for tourism • Absence of focused, well-financed state body to concentrate on overseas tourist marketing and product development • Access limitations (one surface and one air), issues with air service include poor capacity, complex booking arrangements, and unreliability arising from weather conditions.
THREATS	**OPPORTUNITIES**
• Conservatism by trade and government • Sensitive balance required between demand and available resources • Virtual absence of repeat business • Safety fear generally, international air transport • Political instability in adjoining countries	• Further growth of visitor numbers on a limited scale • Focus further on top market, high-spending visitors • Attract further international-branded hotels to establish in Bhutan • Devise a Tourism Master Plan • Establish a national tourism training organization • Undertake ongoing market research – particularly customer satisfaction surveys

Annex Six

Pilot Visitor Survey

.	Item	%	No.	Item	%
	Nationality			**Occupation**	
7	USA	41	5	Professional	29
4	British	24	6	Retired	35
3	Israeli	17	4	Management	24
2	Italian	12	1	Technical	6
1	Norwegian	6	1	Mill worker	6

	Income			**What influenced your visit?**	
10	USD100,000 plus	59	10	Personal recommendations	59
4	USD50,000-USD100,000	23	5	Been to region before	29
1	Under USD50,000	6	2	Brochures (1 geographic expedition)	12
2	No answer	12			

	Traveling in Bhutan			**Kind of tour package**	
15	In group	88	10	Cultural tour	59
2	With friend or relative	12	5	Cultural and trekking	29
			1	Cultural and adventure	6
			1	Biking	6

	Enjoyment of visit			**Fulfillment**	
13	Excellent	76	8	Reached expectations	47
2	Exceptional quality	12	7	Exceeded expectations	41
2	Satisfactory	12	2	Did not reach expectations	12

	Obligatory regulations			**Value for money**	
11	Reasonable	65	8	Reasonable	47
4	Not acceptable	23	5	Expensive	29
2	Fully acceptable	12	2	Excellent	12
			1	Very very expensive	6
			1	No answer	6

	Arrangements in Bhutan			**Quality of meals**	
10	Excellent	59	5	Satisfactory	29
4	Good	23	1	Poor	6
2	Poor	12	9	Good	53
1	Faultless	6	2	Excellent	12

	Types of accommodation			**Hotel services**	
14	Hotels	82	5	Satisfactory	29
1	Guesthouse	6	5	Excellent in superior room / poor in standard room	29
2	Various	12	1	Excellent	6
			2	Good	12
			1	Very unsatisfactory	6
			2	Poor	12
			1	Mixed	6

No.	Item	%	No.	Item	%
	Internal transport			**Visit Bhutan again?**	
6	Satisfactory	35	15	Yes	88
8	Excellent	47	2	No	12
3	Poor	18			

	Recommend to a friend			**Highlights**	
15	Yes	88	5	Festivals	29
2	No	12	6	N/A (visit uncompleted)	35
			2	Terrain	12
			2	People and landscape	12
			1	Biking through countryside	6
			1	Punhaka Monastery being rebuilt	6

	Items purchased			**Spending (USD)**	
3	Textiles	17	8	200	47
1	Arts	6	1	1,000	6
1	Souvenirs	6	1	1,500	6
2	Handicrafts	12	2	500	12
1	Books and stamps	6	1	90	6
5	Textiles/weaving/painting/paper/jewelry	29	1	50	6
1	Car rings and bells	6	2	0	12
3	Nothing	18			

	Objective of visit			**How arrived in Bhutan**	
6	Culture	35	5	Air	88
1	Nature	6	2	Road	12
1	Nature, religion and culture	6			
4	Culture and trekking	24			
2	Culture and philosophy	12			
1	Religion and culture	6			
1	Everything except trekking	6			

General comments by visitors	
Improve the hotels	Limited choice for meals and accommodation
Reduce the number of dogs	Prices fixed, but standards vary
Organize tours better	Undue restrictions on photography
Communications cost too high and poor	No public access to most religious buildings
Buses poor	
Tourist information should be in rooms	

Annex Seven

Tourists Entering Bhutan by Nationality, 1995-2000

Nationality	1995	1996	1997	1998	1999	2000
Japanese	1,192	1,211	1,173	1,032	1,102	875
USA	865	963	910	1,471	2,122	2,754
Germany	500	722	533	520	574	662
United Kingdom	418	358	642	686	646	595
French	338	331	229	366	236	399
Italian	202	242	186	218	276	156
Austrian	200	156	156	270	197	131
Thai	57	181	140	19	71	92
Swiss	220	161	186	170	296	137
Dutch	100	131	234	370	362	359
Australian	142	71	121	64	131	179
Belgian	79	77	75	95	107	95
Canadian	55	57	89	82	149	194
Spanish	22	49	33	109	118	141
Korean		41	31	11	14	3
Norwegian		43	6	12	33	7
Singaporean		45	78	77	26	31
Taiwanese		32	83	135	179	175
Danish	42	26	61	45	13	30
Finnish	8	15	21		5	60
Nepalese		15	32	23	23	50
Portuguese		13	11		43	19
Luxembourg		11	14			2
Swedish	45	7	18	58	37	48
Israeli				81	80	68
Polish				45	35	26
Russian				36	17	13
New Zealander				28	22	31
Turkish					49	34
Philipino					20	13
Brazilian				27	14	10
Czech				24		12
Greek				16		25
Chinese				12	11	10
Argentina				11	12	29
Irish					16	10
South Africa					12	7
Mexican					49	37
Malaysian						16
Others	280	180	301	90	61	24
TOTAL ARRIVAL	**4,765**	**5,138**	**5,363**	**6,203**	**7,158**	**7,559**
TREKKERS		1,851	746	1,343	830	926
CULTURAL		3,287	4,617	4,860	6,328	6,633

Source: Department of Tourism, Ministry of Trade and Industry, Thimphu, BHUTAN

Annex Eight

Tourist Arrivals by Month and by Tour Operator (2000)

	Agent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
1	Bae Yul Excursion			43	21	20	3		25	6	51	26	1	196
2	Bhutan Adventure													0
3	Bhutan Expeditions									10				10
4	Bhutan Cultural Tours			1								1		2
5	Bhutan Dorji Holidays							1	5	3				9
6	Bhutan Heritage		8	7		5		2				22	1	45
7	Bhutan Himalaya Tours	7			3				1					11
8	Bhutan Holiday Tours							2	3	3	10	14	9	41
9	Bhutan Lhayul			5								2		7
10	Bhutan Mandala Tours		17	65	71	11	26	34	34	68	31	3	25	385
11	Bhutan Millennium													0
12	Bhutan Tours and Travels													0
13	Bhutan Travel Service				1	1	1	2	3	1	31	2		42
14	Bhutan Treks and Tours			19	6		1							26
15	Bhutan Vacation Inc							1			4			5
16	Bhutan Travel Bureau	2	5	10	8	1	5		12	15	44	4	4	110
17	BTCL	1	22	143	137	56	4	2	17	83	331	96	17	909
18	Chundu Tours	2	2	22	21	6	3	1		8	77	23	4	169
19	Dechen Cultural			16							20		7	43
20	Deodgu Yangkhil					7								7
21	Discovery Bhutan					6			3	2	4	2	1	18
22	Dragon Tours			19	18		31		14	3	17			102
23	Druk Adventure			5										5
24	Eagle Tours											7		7
25	Equator Expeditions			2		3		2		4	59	32		102
26	Etho Metho Tours	11	57	197	172	114	18	34	43	110	406	121	39	1,322
27	Exotic Destination				1	3				2			4	10
28	Ezekiel Tours			3								5		8
29	Gangri Tours		3	44	75	5	18	3	11	74	149	48		430
30	Himalayan Adventure										3			3
31	Himalayan Kingdom		2		11				2			2		17
32	International Tours	8	14	120	102	43	24	19	35	34	272	105	31	807
33	Jamphel Tours				19				2	2	15		2	40
34	Khuju Tours			1	6									7
35	Kinga Tours													0
36	Kubera Tours			3										3
37	Lama Tours									4	19	19		42
38	Lotus Tours				1									1
39	Lhomen Tours			4	16	6	2		2	13	13	5		61
40	Lingkor Tours	3	3	15	1	1	3	2	2		30	18	5	83
41	Masagang	2			3	4	5				2	3	4	23
42	Namsey Tours			16	25	6		3		7	8	38		103
43	Osang Tours					2								2
44	Prestine Yul Druk			2										2
45	Rabsel Tours	2	5	2	1	4		6	3	11	36	8	5	83

46	Rainbow Tours		2	9	8	21	3	25		6	20	6	3	103
47	Ratna Tours							1		2		9		12
48	Riki Tours				3									3
49	Rinchen Tours				11						30			41
50	Sakten Tours	3		27	14	7	5	6	7	10	24	52	8	163
51	Shangrila Tours			4	5	1			1	9	5	5		30
52	Siddarth Tours													0
53	Sky Travels									1	7		2	10
54	Snow Leopard		4		31	14				17	67	8		141
55	Sophun Tours												2	2
56	Taktsang Tours	8	8											16
57	Tara Tours													0
58	Tashi Delek Tours													0
59	Tashi Tours		15	30	69				44	14	23	58		253
60	Thimphu Tours									1				1
61	Thoesam Tours		16	10	19	2	2		1	19	18	3		90
62	Thunder Dragon		15	25	32	2				21	35	37	1	168
63	Travel Bhutan													0
64	Thunder Bolt										3			3
65	Vajra Tours						4	3						7
66	White Lotus Tours											13	2	15
67	White Tara Tours			4	1									5
68	Wangchuk Tours					4								4
69	Wings Tours	4	5	14	5	3	3	6	27	11	2	4	6	90
70	Wild Horse Tours			4		2		1	1	6	5	4		23
71	Yangphel Tours	4	11	100	50	31	4	4	6	59	249	103	19	640
72	Yarkey Tours			2							2	3		7
73	Yeti Tours	1	1	5	1		2		1	14	29	25	4	83
74	Yodsel Tours	4	5	24	19	6	3	2		3	31	38	1	136
75	Yudruk Tours	3	2	44	5	15	17		2	27	63	22	6	206
76	EXPATRIATE GUEST					3					2			5
77	TAB GUEST		1		3									4
	TOTAL PAX	65	223	1,066	995	415	187	162	307	683	2,247	996	213	7,559
	TOTAL FAMS	4	4	5	5	5	8	1	2	12	16	4		66
	TOTAL FOCS			3	3	1	1						1	9
	ACTUAL FAX FOR 2000	61	219	1,058	987	409	178	161	305	671	2,231	992	212	7,484
	Arrivals in 1999	148	322	1,145	604	395	108	132	348	1,069	1,856	841	190	7,158
	Arrivals in 1998	96	154	542	1,167	267	97	152	340	1,107	1,329	678	274	6,203
	Arrivals in 1997	108	254	1,062	662	275	90	123	231	276	1,488	640	154	5,363
	Arrivals in 1996	133	304	605	689	215	91	160	306	788	1,128	508	211	5,138

Source: Department of Tourism, Ministry of Trade and Industry, Thimphu

Annex Nine

Tourist Arrivals, 1984 to 2000

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
January	35	40	43	59	26	21	35	25	91	67	101	120	133	108	96	148	65
February	76	39	45	63	43	39	34	82	118	139	175	134	304	254	154	322	223
March	91	237	409	122	390	250	146	270	346	232	643	341	605	1,062	542	1,145	1,066
April	406	214	172	466	230	118	265	152	265	587	274	1,022	689	662	1,167	604	995
May	114	130	134	145	140	87	99	110	140	124	373	337	215	275	267	395	415
June	52	22	49	16	31	38	12	32	68	60	115	81	91	90	97	108	187
July	62	94	92	91	62	32	44	47	118	51	99	119	160	123	152	132	162
August	208	182	306	235	147	133	84	181	117	161	301	183	306	231	340	348	307
September	204	237	338	253	298	164	262	402	355	494	465	466	788	276	1,107	1,069	683
October	459	452	573	709	670	375	249	426	701	426	787	1,168	1,128	1,488	1,329	1,856	2,247
November	134	160	112	268	118	179	205	268	300	475	418	599	508	640	678	841	996
December	59	88	132	97	44	44	103	111	144	168	220	195	211	154	274	190	213
TOTAL	**1,900**	**1,895**	**2,405**	**2,524**	**2,199**	**1,480**	**1,538**	**2,106**	**2,763**	**2,984**	**3,971**	**4,765**	**5,138**	**5,363**	**6,203**	**7,158**	**7,559**
Growth		-0.26%	26.91%	4.95%	-12.88%	-32.70%	3.92%	36.93%	31.20%	8.00%	33.08%	19.99%	7.83%	4.38%	15.66%	15.40%	5.60%
Trek													1,851	746	1343	830	926
Culture													3,287	4,617	4,860	6,328	6,633
Foreign Exchange Earnings in US$																	
Gr Earnings							1.91	1.99	2.97	3.23	3.97	5.83	6.52	6.55	7.98	8.88	10.50
Government Revenue								0.31	0.98	1.13	1.39	2.04	2.32	2.48	3.02	3.46	4.10

Source: Department of Tourism, Ministry of Trade and Industry, Thimphu

Tashi Tagye

Many homes and temples are decorated with *tashi tagye*, the eight auspicious signs of Himalayan Buddhism. Each has a deep symbolic meaning and represents an object used in religious observances.

Precious Umbrella
The *duk* symbolises the activity of preserving beings from illness and negative forces.

Victory Banner
The *gyaltshen* represents the victory of the Buddhist doctrine over harmful forces.

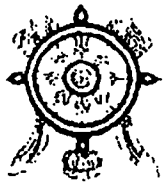
White Conch
The *dungkar* winds to the right and is a symbol of the deep and melodious sound of the Dharma teachings.

Endless Knot
The noose of eternity, *pelgibeu*, represents the mind and the union of wisdom and compassion.

Golden Fish
The *sernga* represents the auspiciousness of all beings in a state of fearlessness without drowning in the ocean of suffering.

Lotus Flower
The *pema* is a symbol of the purification of the body, speech and mind.

Vase of Treasure
The *bumpa* represents long life, wealth and prosperity.



Golden Wheel
The *khorlo* is the precious wheel of Buddha's doctrine.