PERFORMANCE OF THE TOURISM SECTOR

Introduction

Tourism is a new and an expanding industry in the country. The panaromic natural beauty of the country and its rich cultural heritage have been the major sources of attraction to the large and growing number of tourists visiting Nepal from all over the world. Tourism continued to be the largest foreign exchange earner in the Nepalese economy, but this position has recently been taken over by the carpet industry. The foreign exchange earned by this sector accounts for about 25 per cent of the total foreign exchange earnings of the country and its contribution to total GDP increased from one per cent in 1974 to 3.4 per cent in 1990. Tourism receipts on an average contribute 40 per cent to merchandise exports and 19 per cent to meeting trade deficits. In addition, the contribution of this sector to employment generation is also substantial as it creates direct, indirect, and induced employment through backward and forward linkages with other sectors of the economy. Furthemore, with an increasing number of tourists visiting different National Parks and Conservation Areas, rural areas, through income and employment generation, have also benefitted. Mountaineering expeditions also contribute to income and employment in selected rural areas where such mountaineering practices are annually conducted.

This study makes an attempt to analyse the performance of the tourism sector in terms of its linkages with other sectors of the economy and to identify the major problems and prospects of this sector for further development. For this purpose, the study draws heavily from two recent studies conducted by Nepal Rastra Bank ((1989) and Khadka (1993). Both studies provide detailed information on tourism and tourism-related sectors in the country, using an input-output framework based on the information obtained from surveys and supplemented by secondary information.

Tourism Development Objectives and Policies

Nepal formulated a 10-year Tourism Master Plan in 1972 with the objective of generating income and employment and increasing foreign exchange earnings through tourism. With this broad objective in mind, the plan proposed development of five different types of tourism in Nepal; namely, organised sightseeing, independent Nepal-style, trekking, recreational, and pilgrimage tourism. The plan also emphasised the need for promoting the private sector in tourism development. The Master Plan was reviewed in 1984, and it was pointed out that the Government had not fulfilled its target for promotional activities (Khadka 1993). The tourism sector was accorded priority only in the Seventh Plan (1985-90). The principal objectives of tourism development as laid down in the Plan were as follows:

- to improve the balance of payment situation through increased foreign exchange earnings by attracting high budget travellers;
- to generate new opportunites for employment by stimulating tourist-oriented industries and services;
- to increase the length of tourist stay and ensure a wider distribution of tourist receipts by promoting tourist industries in different areas; and
- to promote the domestic supply of goods consumed (i.e., import substitution) by the tourism sector.

Despite the various plans and programmes introduced so far by the Government for tourism development, there is still a lack of long-term, integrated policy formulation and planning that encompasses all aspects of tourism development (NRB 1989).

Growth of Tourism

The growth of the tourism sector in the country can be judged from the growth in tourist arrivals, foreign exchange earnings, and in the growth patterns of hotel, travel, and trekking agencies over time. The overall growth of the tourism sector in the country is encouraging as discussed below.

Growth in Tourist Arrivals

Table 1 presents the historical data on tourist arrival in the country over the period from 1975-1989 by region. Tourist arrivals in the country have fluctuated greatly, ranging from 11.8 per cent in 1984-85 to 40.8 per cent in 1977. Between 1974-1989 the average annual growth in tourist arrivals was around eight per cent. With the exception of certain years, the growth in tourist arrivals in general has been impressive.

The majority of tourists visiting Nepal were, in general, from one particular continent in the early history of tourism in Nepal, but, over time, the regional distribution of tourists visiting Nepal has seen marked changes. Tourists from Asia have been increasing in percentage terms, and those from North America have been declining marginally. Tourists from Western Europe have remained more or less the same in percentage terms from 1975 to 1990 (Table 1).

Although the majority of tourists visit for pleasure purposes, this percentage has been declining over time (Table 2). This decline can be partly explained by a gradual increase in the diversification of tourists visiting Nepal; viz: trekking and mountaineering purposes. In terms of percentage increased the increase has been from one per cent in 1970 to 16 per cent in 1990.

Table 1: Total Tourist Arrivals and Distribution of Tourists by Region

Year	Total Tourists	North America	Central & South America	Western Europe	Eastern Europe	Africa	Asia	Australia & the Pacific	Others
1975	92440	16.8	1.0	45.2	0.8	0.3	28.8	7.1	0.0
1976	105108	14.0	1.0	46.5	0.7	0.2	27.8	7.7	0.0
1977	129329	15.6	1.2	44.6	0.9	0.2	30.6	6.8	0.1
1978	156123	15.1	1.2	42.8	1.0	0.3	33.6	6.0	0.0
1979	162276	13.4	1.1	42.0	1.0	0.2	36.5	5.7	0.1
1980	162897	11.0	1.3	43.2	1.0	0.4	38.0	5.0	0.1
1981	161669	10.6	1.1	39.2	1.0	0.3	42.8	4.6	0.4
1982	175448	11.4	1.0	39.2	0.8	0.4	42.1	4.8	0.3
1983	179405	12.6	0.5	37.1	1.1	0.6	41.6	5.7	0.8
1984	176634	12.5	0.5	33.8	1.0	0.4	3.2	1.4	
1985	180989	12.6	0.9	34.7	1.7	0.3	43.3	5.9	0.5
1986	223331	12.5	0.8	38.2	1.2	0.2	38.0	6.0	3.0
1987	248080	12.7	0.7	37.5	1.0	0.2	40.9	5.6	1.7
1988	265943	11.4	0.7	37.5	1.0	0.2	42.9	5.1	1.2
1989	239945	11.7	0.8	43.6	1.4	0.3	36.0	5.8	0.4
1990	254885	10.3	0.7	43.5	1.3	0.2	38.6	5.2	0.2

Source: Ministry of Finance (1991)

The arrival of tourists is concentrated over a particular month, reflecting the seasonality factor in tourism. However, the steadily increasing number of tourists from Asia and the Pacific has, to some extent, helped resolve the seasonality problem (Table 3).

Table 2: Proportion of Tourists by Purpose of Visit

Year	Total Arrivals	Pleasure & Mountain-eering	Trekking	Business	Official	Other
1970	45970	91.1	1.2	2.0	3.3	2.4
1975	92440	75.9	13.6	5.3	4.6	0.6
1976	105108	78.6	11.1	4.7	4.0	1.6
1977	129329	82.3	10.4	3.5	3.2	0.6
1978	156123	79.4	11.1	4.3	3.6	1.3
1979	162276	79.4	11.3	3.9	3.4	2.0
1980	162897	80.2	11.8	3.4	2.9	1.7
1981	161669	79.0	13.4	3.9	3.5	0.2
1982	175448	77.9	13.4	4.2	4.1	0.4
1983	179405	73.8	13.5	5.5	4.7	2.5
1984	176634	79.6	8.5	4.6	5.3	2.0
1985	180989	70.8	15.9	5.8	5.1	2.4
1986	223331	73.4	15.0	4.9	4.0	2.7
1987	248080	74.6	14.6	4.7	3.6	2.5
1988	265943	75.5	13.9	4.5	3.7	2.4
1989	239945	75.4	16.7	1.1	5.1	1.7
1990	254885	63.5	15.7	4.6	10.4	5.8

Source: Ministry of Finance 1991

Table 3: Tourist Arrivals by Month

Month	1980	1981	1982	1983	1984	1985	1986	1987
January	6.7	7.3	6.2	7.1	7.7	5.8	6.3	6.9
February	8.7	7.8	6.7	8.6	7.9	7.6	7.9	8.8
March	10.7	11.1	9.8	10.0	10.2	9.8	10.3	9.7
April	9.0	8.4	7.9	8.0	10.1	8.1	7.3	7.5
May	6.9	9.2	9.7	6.8	8.6	7.3	7.5	7.2
June	4.9	5.3	6.6	6.1	7.2	5.5	5.3	6.3
July	6.3	5.6	6.7	5.8	5.3	4.4	6.9	5.8
August	8.7	6.0	7.7	7.7	4.6	6.4	8.5	8.1
Sept	6.1	6.8	6.5	8.3	7.2	7.9	7.1	7.8
October	11.2	13.1	13.1	13.6	12.7	13.4	13.0	12.3
November	10.5	10.3	10.2	10.3	9.4	11.6	10.9	11.0
December	10.1	9.1	8.9	7.7	9.1	12.2	9.0	8.6
Total	100	100	100	100	100	100	100	100

Source: Ministry of Finance 1991

Not only has there been an increase in the number of tourists visiting the country, but there has been an increase also in the number of nationalities along with changes in the purpose of visits. There has, however, been little change in the average length of stay (11 to 13 days). The average length of tourist stay is 9.3 nights per visit and, when trekkers are excluded, this average drops to 5.5 nights. The average length of stay of trekkers is around 25.8 nights and is about five times higher than that of the pleasure tourists that mostly visit Kathmandu (Table 4). The average length of tourist stay also varies widely by type of accommodation. The average per capita, per day tourist expenditure in the country was about US $24 in 1979 and US $27 in 1989 (Department of Tourism 1974-1989) and this has not increased over the ten year period.

<u>Growth in Foreign Exchange Earnings</u>

Based on the balance of payments statistics, the gross earnings from tourism increased from Rs 170.6 million in the fiscal year 1974-75 to Rs 3121 million in 1989-90 with an average annual growth rate of 24.1 per cent (Table 5). The share of earnings from tourism in the total foreign exchange income has increased from nine per cent in 1974 to about 16 per cent in 1987-88, while its share in the total merchandise export has more than trebled to about 60 per cent in 1989 from 19 per cent in 1973-74. Foreign exchange earnings from tourism have also helped meet the trade gaps (Table 6). The average contribution of tourism earnings to GDP has increased from one per cent in 1974 to 3.4 per cent in 1990, with an average annual growth rate of about 2.3 per cent. This contribution has been primarily due to an increased number of tourist arrivals, rather than an increase in per tourist expenditure; the latter has changed very little.

Table 4: Average Tourist Expenditure and Average Length of Stay by Purpose of Visit and Accommodation: 1986-87

	Per Tourist/Day Expenditure (Rs)	Average Length of Stay (nights)
Purpose of Visit		
Pleasure	1034	5.9
Trekking	536	25.8
Business	1148	6.0
Official	888	7.7
Diplomatic	939	5.6
Pilgrimage	235	2.0
Education	268	18.7
Others	512	3.9
Type of Accommodation		
Five Star Hotel	1997	6.1
Four Star Hotel	1472	7.9
Three Star Hotel	1070	7.8
Two Star Hotel	579	13.9
One Star Hotel	573	13.9
Non Star Hotel	429	10.1
Lodge/Guest House	411	14.1
Paying Guest	324	4.3

Source: NRB 1989

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Table 5: Foreign Exchange Earnings from Tourism

Year	Total Foreign Exchange Earnings (Rs millions)	Growth	Total Earnings as percent of Merchandise Export	GDP
1975	170.6		19.2	1.0
1976	209.9	23.0	17.3	1.2
1977	288.0	37.2	24.2	1.7
1978	363.2	26.1	27.8	1.8
1979	497.1	36.9	38.1	2.3
1980	636.8	28.1	54.6	2.7
1981	773.4	21.5	47.9	2.8
1982	841.5	8.8	56.2	2.7
1983	844.2	0.3	74.3	2.5
1984	561.0	-33.5	42.9	1.4
1985	735.4	31.1	34.7	1.7
1986	1071.0	45.6	41.2	2.1
1987	1740.5	62.5	62.8	3.0
1988	1675.7	-3.7	51.5	2.5
1989	2735.3	63.2	65.0	3.5
1990	3121.2	14.1	59.5	3.4

Source: Ministry of Finance (MOF) 1991

Level and Pattern Of Tourist Expenditure

The tourism expenditure survey result reported in NRB (1989) provides useful information about the expenditure behaviour of foreign tourists. Altogether 4,669 foreign tourists were interviewed in the survey, and out of these 86.6 per cent of the sample size were selected from Kathmandu and the rest from other parts of the country, clearly reflecting also the concentration of this sector inside the valley.

The average per capita, per day tourist expenditure was estimated at Rs 747 (excluding international air fares). The results indicate a marked variation in the level of per capita tourist expenditure by nationality, purpose of visit, type of accommodation, and the occupation. For example, the average per capita, per day expenditure of Taiwanese tourists was found to be the highest (Rs. 1,929). Similarly, tourists visiting the country for business purposes ranked first in terms of per capita expenditure (Rs. 1,148), followed by pleasure tourists (Rs 1,034). The average per capita tourist expenditure per visit was estimated at Rs 6,975. Continent-wise, Australians were found to spend the most (Rs. 13,777 per visit), while the tourists from Asia spent as little as Rs 3,258. By purpose of visit, trekkers were found to spend as much as Rs 6,888 and were found to stay for relatively longer periods. By category of accommodation, the average expenditure of tourists who stayed in star hotels was found to be 4.5 times higher than those who stayed in non-star hotels (Rs 3,950).

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Table 6: Merchandise Trade Deficit, Foreign Exchange Gap and Travel Earnings

| Year | Trade Deficit and Travel Receipt | | Exchange Gap and Travel Receipt | |
	Merchandise Trade Deficit (Rs millions)	Travel Receipt as % of Trade Deficit	Total Foreign Exchange Deficit	Total Receipt as % of Total Exhange Gap
1975	925.0	18.4	566.9	36.5
1976	812.9	25.6	409.1	51.3
1977	856.4	33.6	284.3	101.3
1978	1450.6	25.0	941.5	38.6
1979	1608.8	30.9	968.9	51.3
1980	2416.6	26.5	1740.1	36.6
1981	2830.2	27.3	1930.1	40.1
1982	3452.0	24.4	2390.8	35.2
1983	5197.0	16.2	3830.6	22.0
1984	4823.6	11.6	3285.6	17.2
1985	5022.2	14.6	3916.9	18.8
1986	6286.3	17.0	4897.1	21.9
1987	7924.1	22.0	5948.3	29.3
1988	9765.5	17.2	9577.2	22.1

Source: NRB 1989

The distribution pattern of the average per capita, per day expenditure of tourists showed that tourists spent more than half (53 %) of their money on lodging and food, 12 per cent on recreation, and about 14.7 per cent on shopping (handicrafts, curios and jewellery, carpets, garments, and books). Again the pattern of expenditure varied greatly by type of accommodation, nationality, and purpose of visit. Note that the share of expenditure on accommodation has slightly declined, while that on food and beverage has moved up over the period (1975-1988). Over this same period, average per capita, per day expenditure increased 4.4 fold in nominal terms. But, in real terms, the per capita expenditure declined by about 1.3 per cent (NRB 1989). The average per visit expenditure, per tourist is also reported to have declined sharply by about 15 per cent in real terms (Table 7).

The elasticity of tourist expenditure can provide useful information about the behaviour of tourists with respect to expenditure. By nationality, expenditures on accommodation, food, and beverages were the most elastic. That is, with every increase in overall expenditures made by tourists in the country, the share of hotel accommodation and food and beverage increased more than proportionately. Expenditure on items such as handicrafts carpets jewellery, local transport, telephone/telex, etc were found to be inelastic, indicating that these items were necessities. Thus, regardless of an increase or decrease in tourist expenditure, expenditure on handicrafts and curios does not change much. This may also reflect little scope for spending, apart from on accommodation and food, when visiting Nepal (NRB 1989).

Table 7: Composition of Tourist Expenditure

	1975	1981	1988
Accommodation	33.0	29.0	26.6
Food & beverage	23.0	22.3	26.4
Sightseeing, transport, etc	19.0	19.8	16.1
Handicrafts, curios	19.0	23.7	14.7
Miscellaneous	6.0	5.3	16.2
Total	100	100	100
Rs per tourist/day	169	390.3	747
Length of stay (nights)	6.9	14.49	9.3
Rs per visit	1,166	5,657	6,975
Rs per capita (1974/75 prices)	1,166	3,510	2,352

Source: NRB 1989, p. 136

Furthermore, the NRB study also reveals that with every Rs 100 increment in overall tourist expenditure, expenditure on accommodation increases in the range of Rs 29 to Rs 43 (for Taiwanese and Thais) and by Rs 29 for Germans. Like other commodities, the demand for tourism also depends on tourist income and the cost of travel, accomodation, and other services for which they have to pay (or simply the price of tourism). Tourism is often treated as a luxurious commodity and as such it is an item consumed by people with relatively high income levels. The demand for tourism is generally found to be very sensitive to changes in the price of tourism services and in the incomes of tourists as well as non-economic factors such as instability, political problems, negative publicity, etc.

According to the NRB study, tourist arrivals are relatively more sensitive to the income levels in tourist-originating countries and travel costs than to other factors such as exchange rates and price level differences in the host country and their country of origin. This result compared fairly well with studies conducted in other countries such as Hong Kong and Turkey.

Supply Components of Tourism

The supply side of tourism depends upon the quantity and quality of goods and services a host country can provide. Thus, goods and services provided by hotels, travel and trekking agencies, airlines, cargo agencies, restaurants, handicrafts, carpets, and garment industries all determine the supply side of tourism.

In the period from 1965 to 1970, about eight hotels came into operation, adding impetus to tourism development in the country. Since then there has been a steady growth in the number of hotels and presently there are 159 hotels of different categories in the country. Of these, about 35 are under star categories and the rest are non-star hotels. About 80 per cent of the star hotels are concentrated in the Kathmandu Valley and the rest are mainly in Pokhara and Chitwan. All the five and four star hotels are in the Kathmandu Valley. The number of all types of hotels in Kathmandu was eight in 1971 and had increased to 86 in 1989 (Table 8).

The number of hotels, rooms, and beds increased by 14.5, 13.1, and 12.9 per cent respectively between 1971 and 1989. The growth rate in accommodation outside Kathmandu has been higher than inside Kathmandu (Table 8).

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The number of star hotels in Kathmandu increased from eight in 1971 to 43 in 1989. The number of beds in star hotels increased from 644 beds in 1971 to 3,245 beds in 1989. If all hotels are taken into account, the number of hotel beds in Kathmandu increased from 644 in 1971 to 6,759 in 1989. For Nepal as a whole, the capacity has increased from 728 beds in 1971 to 9,408 beds in 1989 (Table 8).

The annual average bed occupancy rate of all categories of hotel was 53 per cent in 1987, compared to 48 per cent in 1984. The highest occupancy rate has been in the five star hotels (67%) and the lowest in non-star hotels (48%) (Table 9). Also occupancy rates have generally been highest in October and the lowest in July (Table 10).

Table 8: Hotels, Rooms, and Beds Available by Type of Hotel

Hotel Type	Hotel-1971			Hotel-1989		
	Number	Rooms	Beds	Number	Rooms	Beds
Kathmandu	8	339	644	86	3593	6759
5-Star	1	110	206	4	722	111
4-Star	-	-	-	4	388	805
3-Star	1	60	120	3	206	387
2-Star	3	110	205	13	513	999
1-Star	3	59	113	19	482	943
Tourist Standard	-	-	-	8	167	336
Others	0	0	0	35	1115	217
Outside Kathmandu	3	32	84	73	1281	2649
3-Star	-	-	-	169	136	
2-Star	-	-	2	77	158	
1-Star	-	-	-	8	166	338
Tourist Standard	-	-	-	5	66	144
Others	3	32	84	57	903	187
All Total	11	371		728 159	4874	9408

Source: Department of Tourism - 1974-1989

Table 9: Bed Occupancy Rate by Category of Hotel

Hotel Category	1985	1986	1987
5-Star	52.29	58.90	66.73
4-Star	44.18	47.96	55.82
3-Star	53.76	53.76	62.07
2-Star	46.31	50.73	50.13
1-Star	47.66	44.67	48.38
Tourist Standard	37.89	40.66	37.16
Others*	48.31	48.61	50.15

* Includes non-star hotels, lodges and guest houses
Source: NRB 1989

Table 10: Bed Occupancy Rate by Month

Month	1985	1986	1987
January	42.74	43.13	47.52
February	45.94	47.56	50.83
March	53.95	58.36	61.13
April	53.05	55.71	59.01
May	47.82	46.48	49.09
June	37.12	38.30	39.18
July	27.66	31.07	33.18
August	33.93	38.05	37.61
September	42.52	41.85	46.74
October	70.19	70.58	73.25
November	65.46	72.57	71.96
December	53.68	56.13	58.40
Average	47.96	49.88	52.47

Source: Nepal Rastra Bank 1989

The number of airlines and travel and trekking agencies has also been steadily increasing along with the growth of the hotel industry. The number of international flights has also increased. There were altogether 57 travel agencies in 1987, and the years from 1981 to 1985 witnessed the highest growth in the number of travel agencies. Growth in the number of trekking agencies has also been increasing.

Employment Generation

Direct employment generated from tourism and tourism-related sectors is presented in Table 11. Altogether 11,172 people were directly employed in the tourism sector and 53 per cent of these were found to be employed in hotels and the rest in travel and trekking agencies and airlines. The hotel industry employed the largest number of persons (5,912), followed by the airlines (2,738), and the carpet industry (2,551) in 1987. Since most of the tourism activities lie inside the Kathmandu Valley, it can be assumed that most of the employment was also generated in the valley. Other details are provided in Table 11. Table 12 presents the number of employees per hotel, room, and bed. One tourist bed in Nepal creates less than two jobs, which is fairly low compared to other developing countries (NRB 1989). This is because low-spending tourists constitute about 67 per cent of all tourists and most of these are catered for by non-star hotels.

According to Khadka (1993), the total direct employment in the hotel industry alone in 1987-88 was 10,112, which is almost double the estimate reported in the NRB (1989) study. The NRB figures are believed to be underestimated (Touche and Ross 1990).

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Table 11: Direct Employment Generation from Tourism and Tourism-related Sectors 1986/87

Sector	Total employment	Level of employment			
		% top	% middle	% basic	average
Hotel	5912	8.5	30.0	61.5	25
Restaurant	693	12.0	38.0	50.0	13
Travel Agency	1544	17.6	43.0	39.4	30
Trekking	978	12.5	26.0	61.0	20
Airlines	2738	4.4	22.0	74.0	na
Carpet	2551	1.5	5.0	94.0	na
Garment	68				
Handicrafts	475				

Source: Nepal Rastra Bank 1989

Table 12: Number of Employee per Hotel, Room, and Bed and Investment by Type of Hotel (1986/87)

Hotel Category	Number of employees per			Investment per
	hotel	room	bed	employee (Rs '000')
5-Star	472.0	2.7	1.4	156.3
4-Star	202.0	2.5	1.3	157.6
3-Star	118.3	1.9	0.9	108.2
2-Star	43.6	1.2	0.6	102.3
1-Star	19.4	0.9	0.5	47.6
Tourist Standard	18.5	1.0	1.9	70.2
Others*	7.2	0.6	0.9	45.5

Source: Nepal Rastra Bank 1989

Earnings and Expenditure

The average earnings for each hotel in 1986/87 were Rs 2,717 thousand. The total earnings of all categories of hotel surveyed were estimated to be Rs 635.9 million in 1986-87 with an estimated annual growth of 44.7 per cent, compared to 19.8 per cent in 1982-83. Of the total earnings during 1986-87, star hotels accounted for an overwhelming proportion (91.2%) and the rest was distributed among non-star hotels. Also, the earnings indicated that 38.8 per cent was in foreign currency and the rest in local currency during the year 1986/87.

The average size of investment has been around Rs 137 thousand per room and Rs 72 thousand per bed. The total expenditure of all categories of hotels surveyed was estimated to be about Rs 563.2 million during the year 1986/87, compared to Rs 189.2 million in 1982/83, reflecting a marked growth in the level of expenditure. Over two-thirds of the total expenditure of all categories of hotel in 1986/87 was accounted for by amortisation of loans, wages and salaries, taxes, food, utilities, and depreciation. Other details are presented in Table 13.

Table 13: Average Earnings, Expenditure, and Factor Intensities in Tourism-related Sectors (1986/87)

(Rs in thousand)

Sector	earnings	expenditure	capital/labour	income/labour
Hotel	2717	2407	112.4	107.6
Restaurant	772	665	26.2	56.0
Travel Agency	8742	6476	65.2	288.8
Trekking	1846	1192	28.2	73.3
Airline	5600	-	213.5	523.0
Carpet	4800	4500	13.2	51.1
Garment	156	125	34.2	71.3
Handicrafts	292	-	14.0	48.0

Source: Nepal Rastra Bank (1989)

The tourism sector industries (e.g., airline and hotel industries) are relatively more capital intensive than the tourism-related industries (e.g., carpets, handicrafts, garments, etc). For example, the average capital requirement per unit of labour was Rs 213.5 and Rs 112.4 thousand in the airline and hotel industries respectively, whereas the corresponding figures for the carpet and handicraft industries were only Rs 13.2 and Rs 14 thousand. While trekking agencies are more labour-intensive than travel agencies (Table 13), travel agencies are found to be more productive than the trekking agencies due to their high income-labour ratio. That is, the annual average income generated per unit of labour employed in travel agencies was Rs 288.8 thousand compared to the income-labour ratio of 73.3 thousand in trekking agencies. The income generated per unit of labour has been found to be the lowest in the handicraft industry, followed by the carpet industry, and restaurants. The income generated per unit of investment on the other hand has been found to be relatively higher in the airlines' industry than in the travel-related and garment industries (Table 13).

Linkages of Tourism with Other Sectors

Linkages of the tourism sector with other sectors of the economy can be viewed in terms of the multiplier effects of tourist expenditure. A dollar spent by a tourist transmits impulses to different sectors in the economy. As the domestic sectors in the economy become stimulated by tourist expenditure, the domestic sectors in turn demand additional resources to produce more and hence also stimulate increased demand. Thus, each additional income has a multiplier effect. Tourist expenditure also goes beyond the domain of the domestic economy since tourists also demand imported goods and services. These imports are known as import leakages, and their magnitude depends on the linkages, leakages, value-added, the structure of initial tourist expenditure, and supply constraints in the domestic economy. The input-output analyses conducted by the NRB study (1989) and Khadka (1993) provide information on such linkages and multiplier effects of tourist expenditure in various sectors of the economy. It should be noted here that Khadka's study differs from the NRB study in that the former has examined the impact of tourism under the conditions of both the constrained and unconstrained supplying capacities of the domestic economy, using an economy-wide input-output model. The NRB study, on the other hand, is based on a sectoral input-output model, and it is not clear whether this study examines the input-output model under conditions of capacity constraint on the domestic economy. Hence, the results emerging from these studies should be understood accordingly.

The underline output multiplier measures the extent of linkages between sectors. The output multiplier was found to be relatively lower in the tourism-related sectors (1.148) than in the tourism sector as a whole (1.187) (Table 14). The tourism sector includes hotels, travel agencies, trekking agencies, airlines, and cargo handling. The tourism-related sectors include handicrafts, garments, and carpets and other industries that are indirectly related to tourism. Within the tourism sector, the output multiplier for the hotel industry was 1.09. This means that 1.09 units from the output of other sectors are required by this industry to produce one unit of final (i.e., tourist) demand in the hotel industry. The output multiplier was found to be the highest for travel agencies and the lowest in the airline industry. A lower multiplier indicates a weaker relationship among sectors, implying either a heavy dependence on imported goods and services or that it is a self-sufficient industry or sector. Likewise, among the tourism-related sectors, the multiplier was relatively lower in the carpet industry (1.002), meaning that this industry has a very weak relationship with other domestic industries in terms of inter-industrial linkages. This is quite obvious, since most of the output of the carpet industry is exported abroad and most of the raw material is also imported, implying a low linkage level for this industry with other domestic industries.

Linkages of the tourism sector with other sectors can also be measured in terms of direct, indirect, and induced effects. Output multipliers described above show the effect of an increase in tourist demand on the input requirements of different sectors. It does not take into account the effect of change in the final demands of tourism on the demand for inputs by these other sectors. For example, if a 10 per cent increase in output from the hotel industry requires a two per cent increase from, e.g., trekking agencies then, in order to supply this increased output, trekking agencies will require additional inputs. Such induced effects have also been calculated in the NRB study and are presented in Table 14.

Table 14: Multiplier Effects of Tourist Expenditure in Different Sectors (1986/87)

Sector	Output	Income		Employment		Import	
		DI	DII	DI	DII	DI	DII
Hotel	1.09	0.33	0.47	2.67	3.36	0.38	0.53
Travel	1.43	0.63	0.91	2.77	4.08	0.45	0.74
Trekking	1.18	0.77	1.11	4.96	6.57	0.18	0.54
Airline	1.07	0.13	0.19	0.71	0.99	0.61	0.67
Handicraft	1.35	0.55	0.79	6.48	7.63	0.31	0.56
Carpet	1.00	0.27	0.39	5.85	6.42	0.68	0.81
Garment	1.47	0.57	0.83	4.40	5.60	0.30	0.56
Textile	1.05	0.46	0.67	3.32	4.29	0.27	0.49
Food	1.09	0.34	0.49	1.85	2.57	0.25	0.41
Beverage	1.06	0.23	0.34	1.57	2.18	0.28	0.41
Printing	1.03	0.65	0.94	5.36	6.72	0.16	0.46

Source: NRB 1989

Note: DI = direct and indirect effects; DII = direct ,indirect, and induced effects

As can been seen from Tables 14 and 15, the underline import multiplier (imports of goods and services) of the tourism sector is relatively higher than that of other tourist-related sectors. The ratio of import content for the tourism sector (i.e., value of imported goods and services per rupee of tourist spending) was estimated to be 62.2 per cent compared to 55.3 per cent in tourism-related sectors when direct, indirect,

and induced effects of tourist expenditure were taken into account. On the basis of direct payment to foreign factors (i.e., when only the direct effects of tourist expenditure on import were considered), the ratio of import content for the tourism sector was 29.74 per cent compared to 27 per cent in the tourist-related sectors. When both direct and indirect effects were examined the ratio was higher; 40.69 per cent for the tourism sector compared to 35.5 per cent, for the tourism-related sectors. The NRB study further revealed that over 75 per cent of the total imports' content of the tourism sector was accounted for by merchandise imports when all effects were combined.

Within the tourism sector when all effects were combined, the ratio of import content varied greatly; the highest ratio being observed in travel agencies (74.5%) and the lowest in hotels (53.45%). When only the direct effects of tourist spending on imports were considered, the ratio of import content was found to be the highest for airlines (57.6%) followed by hotels (35.45%). This clearly indicates the presence of a large import content, particularly in the tourism sector. This means that a major chunk of the foreign exchange earned by the tourism sector actually leaks out for importing goods and services to be consumed by the tourism sector itself. In absolute terms, the total in foreign exchange leakages was estimated to be between Rs 191 and Rs 444.4 million in 1987. The large amount of import leakage also implies that the domestic production of goods and services consumed by the tourism sector has no close substitutes produced in the domestic economy; i.e., a severe lack of import-substituting industries (Table 14).

Table 15: Direct, Indirect, and Induced Effects of Per Rupees of Tourist Expenditure on Imports, Employment, and Income

Multiplier	Tourism Sector	Tourism-related Sector
Import (		
-D	0.297	0.276
-DI	0.406	0.355
-DII	0.622	0.553
Employment	(Manyear per 10,0000 Rupees)	
D	2.010	3.745
DI	2.780	3.923
DII	3.754	4.818
Income/Value added		
D	0.376	0.377
DI	0.467	0.425
DII	0.675	0.614

Source: Nepal Rastra Bank 1989

Note: D = direct, DI = direct plus indirect, DII = direct indirect, and induced

Khadka (1993) also examined the import leakages, and the results obtained compare fairly well with those of the NRB study. However, when the domestic supply constraint was introduced into his input-output model, the result of the import leakage was found to be much higher. In other words, he assumed that domestic industries have a capacity constraint to increase output supplies. Under the supply constraint, the imports as a per cent of total tourist receipts were found to be 26.0 per cent when the direct and

indirect effects of tourism were considered. Import leakages further increased to 36.4 per cent when induced effects were considered under the supply constraint. When the supply capacity of the domestic sector was introduced, imports increased by about 39 per cent because of the increased inter-industry demand for imports to maintain a greater value of domestic production due to induced effects. More details are presented in Table 16. The study also indicates that the tourism sector is relatively more import-intensive than other export sectors, with the exception of the leather industries.

The employment multiplier reported in Tables 14 and 16 indicates that for every hundred thousand rupees of tourist expenditure, employment generation is higher in the tourism-related sectors than in the tourism sector. For example, when only direct and indirect effects are taken together, for every hundred thousand rupees of tourist expenditure, 3.92 manyears of employment are generated in the tourism-related sectors which is relatively higher than the 2.78 manyears generated by the tourism sector. Within the tourism sector, the employment multiplier varies widely; the highest being in restaurants and trekking agencies and the lowest in the airlines.

Table 16: Output, Income, and Employment Multipliers under Unconstrained Situations

Sector	Output DPI	Multiplier DPIPI	Income DPI	Multiplier DPIPI	Employment DPI
Tourism	1.342	3.037	0.740	1.865	2.562
Cash Crop	1.340	5.144	0.983	3.509	5.245
livestock	1.222	5.157	0.987	3.602	6.783
Carpet	1.354	3.613	0.983	2.283	3.960
Garment	1.098	2.747	0.724	1.820	1.313
Jute	1.432	3.668	0.958	2.443	4.313
Leather	1.925	5.307	0.971	3.217	5.301

Source: Khadka 1993

Note: DPI = direct plus indirect effects; DPIPI = direct plus indirect plus induced effects

Khadka's study shows that employment generation varies, depending upon capacity constraint considerations in the domestic economy (Table 16). If there was no capacity constraint to the supply side of tourism originating from the domestic sector, the direct and indirect employment multipliers were found to be 2.56. Per rupee expenditure of tourists staying in low standard hotels generated higher employment effects than those staying in high standard hotels. Similarly, trekkers generated slightly higher employment effects than pleasure tourists (Table 17). The estimated employment multiplier in the tourism sector was found to be relatively lower than that of other export sectors. With the exception of garments, the employment multiplier in other export sectors ranged from 3.9 (carpets) to 6.7 (livestock).

When the supplying capacity of the economic sector was introduced in Khadka's study, the direct and the indirect employment effects of tourist expenditure decreased by 21.7 per cent. For example, the total

tourist expenditure generated 42,732 manyears of employment in 1986/87 under an unconstrained situation, compared to 33,049 person-years of employment under supply constraints in the domestic economy. The reduction in the size of multiplier in the tourism sector within the limited capacity of the domestic economy shows the weak linkage of this sector with the rest of the economy. Furthermore, the study also revealed that the employment effect of tourist expenditure was more sensitive to the capacity of the domestic economy than the income and output multipliers.

Tables 14 and 16 show the NRB and Khadka estimates of the income multiplier resulting from a rupee of tourist expenditure in different tourism and tourist-related sectors. The income multipliers estimated by these two studies vary greatly both within and across tourism and tourism-related sectors. The direct and indirect income multiplier effects on the tourism sector estimated by Khadka under the assumption of an unconstrained supply situation was relatively higher (0.74) than that estimated by the NRB study (0.46). It is important to note that the NRB study does not incorporate all the intersectoral linkages in the economy, as does Khadka's, and hence this may be the reason for the lower income multipliers reported in the former study.

Khadka found a relatively lower income multiplier in the tourism sector than in other export sectors (Table 16). The only exception was in the garment industry where the direct plus indirect income multiplier was relatively lower than in the tourism sector. In fact, with the exception of the garment industry, the Nepalese export sector is generally agro-based; the value-added is relatively high; and the sector is less import intensive, and this explains the relatively higher value of the income multiplier (Khadka 1993). The value of the income multiplier in the tourism sector, however, increases further with the inclusion of induced effect, indicating the heavy dependence of the Nepalese economy on agriculture.

As can be seen from Table 18, the net earnings from tourist expenditure under the limited supplying capacity of the domestic sector in 1986/87 were estimated at Rs 1,253.13 million (2.3% of the GDP) which was about 14 per cent less than the net earnings estimated under the assumption of an unconstrained supplying capacity in the domestic sector. The output, income, and employment multipliers of tourist expenditure estimated under the assumption of the limited capacity of the domestic sector were found to be less by 11.6 per cent, 13.7 per cent and 21.7 per cent respectively than those estimated under unconstrained situations. Such reductions in the size of multipliers under the limited supplying capacity of the domestic sector clearly show the potential for growth of other sectors in the economy. Reduction in the size of multipliers under the constrained situation can be explained by the additional imports required to fulfill the final demands of the tourists. When capacity constraint was introduced, imports were estimated to increase to 36.1 per cent, to 26 per cent in unconstrained conditions, i.e., an increase of about 39 per cent.

On the whole, the real impact of tourism was found to be only 86 per cent of the nominal impact (i.e., impact estimated in an unconstrained situation). This implies that the multiplier effect estimated under the unconstrained supplying capacity of the domestic sector in fact overestimates the economic impact of tourism. Clearly, the results indicate that a greater proportion of the surplus generated by the tourism sector has actually flown out due to the capacity constraints in the domestic economy. This result, therefore, implies that putting emphasis only on the tourism sector is not sufficient to control import leakages, it is also necessary to develop other sectors in the economy, especially those that have a relatively low surplus capacity and sectors which have fairly strong linkages with the tourism sector.

Furthermore, the tourism sector was found to be one of the least taxed sectors in the economy. On an average this sector was found to be paying 4.1 per cent of its gross income in taxes (income tax, customs, etc) compared to seven per cent by the tourism-related sector (NRB).

Table 17: Employment Effects of Tourist Expenditure by Type of Hotel and Tourist

Manyear per Rs 100,000

Type of Hotel		Nationality	
Five star hotel	2.514	North American	2.650
Four star	2.443	European	2.597
Three	2.418	Australian	2.463
Two star	2.607	Asian	2.500
One star	2.570	Indian	2.477
Non star	2.636	Average	2.562
Lodge	2.714		
	Type of Tourist		
Pleasure Tourist	2.530	Trekker	2.588

Source: Khadka 1993

Table 18: Direct Plus Indirect Impact of Total Tourist Expenditure under Unconstrained and Constrained Supplying Capacities of the Domestic Economy

	Unconstrained	Constrained	% Change
Total tourist expenditure	1961.1	1961.1	
Import	509.7	707.9	+38.9
Compensation of employees	444.4	364.2	-18.0
Indirect tax	215.5	207.0	-3.9
Operating surplus	673.2	570.4	-15.3
Value added (net earnings)	1451.4	1253.1	-13.7
Value added as % of GDP	2.6	2.3	
Net earnings as % of export	48.5	41.9	-13.7
Import as % of tourist receipt	26.0	36.1	+38.9

Source : Khadka 1993.