

## **A Study of Tourism Sector on Employment Creation and Income Generation in Pokhara Valley of Nepal**

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This paper discusses how the investment on tourism sector created direct employment opportunities in Pokhara valley. The type of business, frequency of tourist visits; time and size of employment, investment and location information have been brought under consideration in the study. Initial survey was carried out through person to person interviews in respondent's homes and offices in all business households of Pokhara valley in the year 2009 whereas a short-term follow up survey was conducted with some key informants and major stakeholders in the year 2017. A few government officials, major stakeholders and key persons of the different business associations were also asked questions in a follow up survey about the trend of employment and income generation through tourism in July 2017.

The result of initial survey reported that total annual income generation from tourism related business is Rs. 2699.75 million. In average, with every million Rupees of investment on Hotel and Lodge, the employment of 13.66 persons can be generated. Likewise, Banks and Financial institutions also create employment of 13.34 persons with the same level of investment. The total direct employment generated by the tourism industry in Pokhara is 12343. Fooding and Lodging business occupies 54.64 percentage of employment, institutional sources occupy 17.52 percent, retail trade businesses occupy 14.53 percent, tourist product businesses occupy 7.38 percent and travel related business occupies only 5.37 percent share. It was reported that there are more than 1908 households directly involved in tourism related business. The opinions of the key informants and stakeholders involved in the survey of 2017 revealed that there is an increment of number of business households by 43.8% in comparison to 2009 and Employment created by those businesses was 85.29% more than the survey of 2009.

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Finally, the result shows that the additional investment on retail trade business and tourist product business also has high potential to generate more employment opportunities. The study also shows that there has been a tremendous increase in number of tourists and businesses due to which very big size of investments have been made in the industry.

**Key words:** Pokhara valley, tourism sectors, employment creation, primary survey and regression analysis

## I . Introduction

Tourism is one of the world's largest and rapidly growing industries. Tourism and hospitality industries create many employment opportunities in different areas like accommodation, transportation and attractions. The availability of skilled and trained manpower is a crucial element in the success of any tourism development plan or program. However, unstable employment, low job status, long antisocial working hours and low pay are seen as the constraints of employment in tourism industry. The immediate and most obvious consequence of such a situation is the difficulty of recruiting suitable staff and high staff turnover which turn out to be costly and time consuming. Foreign exchange earnings from tourism sector contribute around three percent to the country's gross domestic product in Nepal. The expansion of the tourism industry has a significant contribution in employment generation, that is composed of both self-employed and employees, said the survey.

Nepal is one of the world-renowned tourism destinations and Pokhara is the major tourist hub of Nepal. It is full of tourism attractions with closest views of lakes, rivers, gorges, green hills and majestic snowcapped mountains. It is one of the starting points for the famous Annapurna Trekking Route and a perfect place for paragliding, mountain flights, short trekking, hiking and sightseeing. Pokhara has wide range of facilities and services available for both backpackers and high-level luxury travelers. Therefore, it is most preferred destination by both low budget travelers and business travelers alike.

There has been a rapid growth of tourism infrastructures and investment on

hotels, restaurants, transport services, travel and trekking agencies and on production of tourist's consumption goods at Pokhara since the last two decades. Various types of innovative tourism enterprises and business activities are introduced here due the increasing volume of private investment along with government, bilateral and multilateral donor agencies. Recently, China and India are connected through short distance called Kaligandaki corridor which is one of the great achievements in transportation sector of Nepal. As a result of this connectivity, tourism flow and business has been multiplied further. Specially, local people are getting direct and indirect benefits through tourism.

The growth of income, employment and local opportunities in Pokhara and peripheral region is more interesting issue from local development perspective. The growing interest of tourism entrepreneurs in Pokhara signals some positive direction for the development of the sector. The growing volume of Chinese and Indian tourists and widening international connectivity through land and air transport further intensifies the business opportunities for tourism enterprises. Tourism infrastructures are well developed there and investment is rapidly increasing these days.

In this context, the researcher carried out the present study and made an attempt to address the following issues. The researcher gave attention to find the level of employment and size of income generated annually from the industry. Similarly, study also looked through to see if there is a significant impact of investment on employment and checked the difference between mean levels of employment in four different business categories of tourism sectors in Pokhara valley.

The organization of this paper is as follow; the introductory section is followed by review of literatures in section two, Research Methodology is discussed in section three whereas data analysis and presentation are made in section four and section five concludes the study.

## II. Review of Literatures

Travel and tourism have had a fascination throughout the history. The concept of tourism emerged in and around the second half of the 19<sup>th</sup> century “with per capita incomes in the developed countries increasing significantly and the development of efficient mass airport” (ICIMOD, 1995:6). It had only been in the late 1960s that a significant and substantial body of literature on tourism started to emerge (Pearce, 1993:1). However, up to the end of the 1980s, research on tourism remained almost methodically simple and could not patronize strong theoretical base (Dann, Nashand Pearce, 1988:1-28). A number of researches have been carried out about tourism industry in Nepal and abroad which constituted a heterogeneous assemblage of different information during 1970s to 1980s. In the 21st century, global economy is driven by three major industries that include technology, telecommunication and tourism. Tourism is the collection of activities, services and industries that deliver a travel experience including attractions, transportations, food and accommodations, retail shops, entertainment, business and other hospitality services provided for individuals or groups of people travelling away from home.

Burger (1978) has carried out a doctoral study on “Economic Impacts of Tourism in Nepal: An Input - Output Analysis”, the first ever academic research work in Nepalese Tourism well defined the importance of tourism and its various economic benefits for the country. The study concluded that the tourism was found to be more capital intensive, roughly three times and similar to that of manufacturing sector which can generate great employment opportunity.

Brown and Connelly (1986) studied employment in tourism using employment count method and identified other benefits from using data that is regularly published by stable sources. Combinations and hybrid approaches rely on regional science technique to alleviate empirical caveats of the two approaches. Friend (1983) made a study in the village of Tatopani, Myagdi district within the Annapurna Area, Nepal and attempted to describe the various impacts resulting from tourism. The local barter economy has been replaced by dependence on tourism and monetization. Along with the increase in the

demand for natural resources through the increase in trekkers, other impacts such as land use changes, changes in cropping pattern and a reduction in the use of traditional species and cultivators in favor of grain and fruits crops have also occurred. Although, the village consists of different ethnic groups, only Thakali community has been found mobilizing the trekking industry. Pradhanaga (1993) explored both forward and backward linkages of tourism, imports of goods and services and employment generation. He further concludes that leakage of foreign exchange earnings, high import contents, seasonal fluctuation in demand for tourism and overdependence on seasonality factors have been the major weakness of the tourism industry.

Nepal Rastra Bank (1989) estimated average per capita per day tourist expenditure at US\$15 (excluding international airfares) and the average length of tourists stay at 9.3 nights per visit. Tourism and related industries were estimated to have earned in total US\$56 million in 1986/87 of which tourism sector alone shared 92.7 percent (US\$52 million). Of the amount earned by tourism sector, earnings of hotels constituted 24.6 percent (US\$13 million), travel agencies 17.3 percent (US\$9 million), trekking agencies 2.8 percent (US\$1 million) and airlines 55.4 percent (US\$29 million). Altogether, 11176 persons were found directly employed in the tourism sector of which hotels shared 52.9 percent, airlines 24.5 percent, travel agencies 13.8 percent and trekker agencies 8.8 percent. Heng and Low (1990) find that tourism in Singapore creates over 30 jobs per million dollars of expenditure when induced effects are included and just above 25 jobs when only direct and indirect effects are calculated.

Stynes (1997) analyzed the tourist expenses in the framework of a regional or local economy are of vital importance. An array of methods for eliciting both market and non-market values from people for environmental goods and services have been developed over the last few decades. Sinclair (1998) discusses few additional features concerning employment effects of tourism (based both on case studies and multiplier analysis). Fazele, et. al (2011) investigated the sport tourism impact upon job and income generation. The research result indicated that job creation based on investment in local sport was insignificant

where as it was significant for Olympic Games. The marginal rate of job creation is associated with related facilities and infrastructures. The ILO (2017) shows that innovative companies tend to be more productive create more jobs and employ more skilled and female workers. SMEs play a crucial role in creating female employment but often lack access to the external funding they need. The latest edition of the ILO's flagship report shows that the investment in workers and innovation, boosting trade and social dialogue are key to stemming rising global unemployment. According to the report, private sector enterprises accounted for the bulk of global employment in 2016 which is about 87% of total employment.

MoCTCA (2014), through Tourism Employment Survey has revealed that trekking agencies are the largest job providers in the tourism industry. Tourism industry has provided employment for a total of 138,148 individuals – 87,980 regular and 50,168 seasonal – in the country. Trekking agencies have provided jobs for 50,004 individuals – 9,958 regular and 40,046 seasonal, according to the survey. There are around 1,636 trekking agencies in operation in the country. Based on the sample gathered from 192 tourism-related firms of all sectors, like hotels, home stays, trekking agencies, travel agencies, airlines, among others, the ministry has calculated the total employment generated by the tourism industry. In terms of regular employment generation, tourist standard hotels topped the list by providing employment for 23,566 individuals. In addition, the tourist standard hotels created 3,242 seasonal jobs. The survey has also revealed that around five percent of tourism personnel are self-employed and 95 percent are employees. Likewise, as per the survey, rafting sector and paragliding/ultra-light flights sub-sectors have created 735 and 440 jobs, respectively. As per the estimation of the ministry, around six Nepalese get employment from the arrival of one tourist in the country. The ministry has made this speculation based on the tourists' arrival in fiscal 2013-14, when a total of 797,616 tourists visited Nepal. Currently, the average tourist stay in the country is 12.8 days and a tourist spends around \$70 per day in the country.

The findings of the survey convey a message to the planner and the policy makers that tourism sector has the potential to generate more and more

compared to other sectors and that it is a vital means to alleviate poverty in many rural areas particularly in the mountain region.

Tourism with its wide range of constituent sub sectors is now world's largest industry. It is much of the labour intensive type of industry as it undertakes to provide work for a large number of people.

Arya (1999) made another important study in planning models of tourism development with reference to Nepal. The study reflected the fact that by increasing tourist numbers, the income size cannot be enlarged rather the day spent in tour and expenses per day plays important role in tourist earning. Shrestha (1999) concluded that despite various problems, the prospects of tourism are bright in generating employment in Nepal.

Banskota (2012) conducted a study about the impact of tourism on local employment and incomes in Sauraha, Nagarkot and Bhakatapur Nepal. The study concluded that accommodation sector is a good source of local employment and found fairly good linkage between tourism sector and local economy. Tourism can help poor improve their livelihoods and provide income and employment opportunities in other sectors like public transport, restaurants and various types of retail shops in the area. Xiang et. al (2013) developed a Tourism Employment Model and conducted a test with 17 years' time series data in China. The model revealed that tourism employment does not always grow with tourism investment. The results also indicate that tourism employment in China is driven mainly by the development of tourism related industries. The technological progress has a slight negative effect on tourism employment.

Similarly, Aynalem, Birhanu and Tesefay (2016) found that the tourism and hospitality create diversified employment opportunities in different sectors like accommodation, food and beverages establishments, transportation services, travel agencies, tour operation companies, natural and cultural attractions sites. They mentioned that the challenges for employment are poor pay and working conditions, sexual harassment, discrimination, unequal treatment, low education and training, undemocratic and rigid corporate cultures, seasonality and political instability.

Sharma (2017) in his news article entitled "Fifty Years of Nepali Tourism"

published in *New Business Age* mentions that the investment in travel and tourism in Nepal has been constantly on the increase in recent years, the Investment stood at Rs 15.2 billion in 2015, of which the government contributed Rs 10.9 billion. The hotel industry in particular has become a centre of attraction for new investment lately. In 2016, Nepali and foreign investors floated plans to invest Rs 60 billion in different hotel projects. It is estimated that Rs 300 billion in the hotel business till date. Various globally renowned hotel chains are entering or re-entering here partnering with large Nepali business houses and the Nepali Diaspora to manage and invest in different hotel projects.

This brief review attempts to inquire about the scope and inter-linkage of tourism and tourism employment through the review of relevant literatures. Therefore, it includes reviews on relevant literature, economic linkage or impact of tourism employment and summary and conclusions. Finally, it summarizes the discussions and review to justify the present endeavor through its instinct approach of study. However, it is still in its initial stage of development, it is striving to be a benign agent of development and endurable medium to create various contributions including employment.

It seems that businesswise data collection and headcount measurement of each business household for income, employment, investment, saving and expenditure in Pokhara is a unique and newest research technique for tourism industry in Nepal. The measurements of income and employment generation by the investment in tourism sector of Pokhara are of crucial importance to the investors and policy makers for the fast-growing tourism industry of Pokhara. The calculation of businesswise economic performance and returns on investment analysis will give important outcome to contribute in the literatures of tourism economy in one or the other ways. Therefore, researcher believes that this study will add some values on the economic impact measurement of tourism industry and fulfill the existing research gap.

### **III. Methodology**

#### **1. The Data**

The study area is solely a tourist business area in Pokhara as defined by Sarangkot Village Development Committee and Pokhara Sub-metropolis. These businesses are scattered in many areas of the city. Due to the dearth of authentic information on the number of households engaged in these areas regarding the business activities under consideration; a comprehensive baseline survey was made before administering the structured questionnaire for primary information collection. 43 types of major businesses are there in 25 different locations where 1908 tourism related business households are scattered. The survey was carried out through person to person interviews in respondent's homes and offices in all business households. The type of business, frequency of tourist visits, time and size of employment, investment in building and business and location information were included in the structured questionnaire. The base line survey period of the study was from January 2009 to June 2009 and a recent follow up representative pilot survey was conducted in August, 2017.

The main sources of the secondary data used in this research are various issues of Nepal Tourism Statistics and Economic Survey published by the Government of Nepal. Apart from these, publications of Pokhara Tourism Council, Journals and articles related to tourism industry published by various institutions, ACAP publication, International Mountain Museum publications are also used to analyze the study.

#### **2. Data Analysis Methods**

Our assumption in the analysis is that the employment in tourism industry is mainly influenced by investment. But there are many other qualitative factors which can influence employment. The impact of investment on employment in different business may be different, so it is necessary to estimate the effect of other factors like business category by using regression equation with dummy

variables. In this analysis the dependent variable is employment and independent variable is investment. The qualitative factor that may have some influence on employment is business category and this may further be subdivided into four main categories: Travel Related business, Retail Trade business, Tourist Product business and Fooding and Lodging business. We can quantify such attributes by constructing artificial variables that take on values of 1 or 0, 1 indicating the presence of that attribute and 0 indicating the absence of that attribute.

For this purpose, first, regression of employment on investment is estimated, In Second stage, regression of employment with dummy variables is estimated and in third stage regression of employment on investment and dummy variables is carried out.

### 3. Model Specification

The dependent variable of the model is level of employment created by tourism industry and the independent variables are the investment. To analyze the qualitative aspect of the tourism and its dimension, different dummies such as  $D_1$ ,  $D_2$ ,  $D_3$  and  $D_4$ , were used. They consist of different business types and business locations on which the following models are specified:

**Model- I :**  $Emp_i = B_0 + B_1 InvttlMLN_i + U_i$  (for whole business type)

Where,  $InvttlMLN_i$  = total investment in million rupees and  $U_i$  = disturbance term and  $i=1$  to 1908.

**Model - II :**  $Emp_i = B_0 + B_1 InvttlMLN_i + U_i$  (individually for 43 types of business)

**Model - III :**  $Emp_i = B_0 + B_1 InvttlMLN_i + U_i$  (individually for 25 business locations)

**Model - IV :**  $Emp = B_0 + B_2 D_2 + B_3 D_3 + B_4 D_4 + U_i$  (ANOVA Model)

Where,  $B_2$ ,  $B_3$ ,  $B_4$  are the coefficients of dummies and  $B_0$  is the intercept term.

$D_1 = 1$ , if the business is Travel related business and  $D_1=0$  otherwise

$D_2 = 1$ , if the business is Retail trade business and  $D_2=0$  otherwise

$D_3 = 1$ , if the business is related to Tourist product and  $D_3=0$  otherwise

$D_4 = 1$ , if the business is related to Fooding and Lodging business and  $D_4=0$

otherwise and  $U_i$ =disturbance term.

Here,  $D_1$  is taken as the reference variable and  $B_0$  gives the coefficient of  $D_1$ .

**Model - V:**  $Emp = B_0 + B_2D_2 + B_3D_3 + B_4D_4 + B_5Inv + tI + MLN_i + U_i$  (ANCOVA MODEL)

Where,  $B_2$ ,  $B_3$  and  $B_4$  are the coefficients of dummies and  $B_0$  are the intercept term.

$D_1 = 1$ , if the business is Travel related business and  $D_1=0$  otherwise

$D_2 = 1$ , if the business is Retail trade business and  $D_2=0$  otherwise

$D_3 = 1$ , if the business is related to Tourist product and  $D_3=0$  otherwise

$D_4 = 1$ , if the business is related to Fooding and Lodging business and  $D_4=0$  otherwise, and  $U_i$ =disturbance term

**Model - VI:**

Direct employment is one of the potential outcome of tourism enterprises in any location where it is developed. Tourism Enterprises are defined business units which provide direct services to tourists in a given tourist destination. This includes such services as hotel services, souvenir shops, tour guides, special transport services (such as boat, horse riding, cycling, motor cycles etc.).

In Pokhara region, four major tourism enterprises were identified to provide direct employment opportunities. These include Travel related business, Retail trade business, Tourist product business and Fooding and Lodging business and services. In these four categories there were forty-three business types in 25 locations. Apart from these, some other miscellaneous businesses creating direct employments were also recorded in the field survey.

The Total Direct Employment generated by these four Tourism enterprises and miscellaneous business was derived by the simple formula-

$TDE = \text{Sum of Employment in Travel business, Retail trade business, Tourist product business, Fooding and Lodging business and miscellaneous business.}$

Where TDE is the Total Direct Employment in Tourism Industry

In a similar way, the total investment, total income, total expenditure and total saving were calculated by simple addition of individual data of 43 businesses in 25 locations. Similarly, data from 28 institutions and various other sources were also collected. The surveyed data were tabulated, presented

and analyzed by using STATA 11.

#### 4. Diagnostic Testing

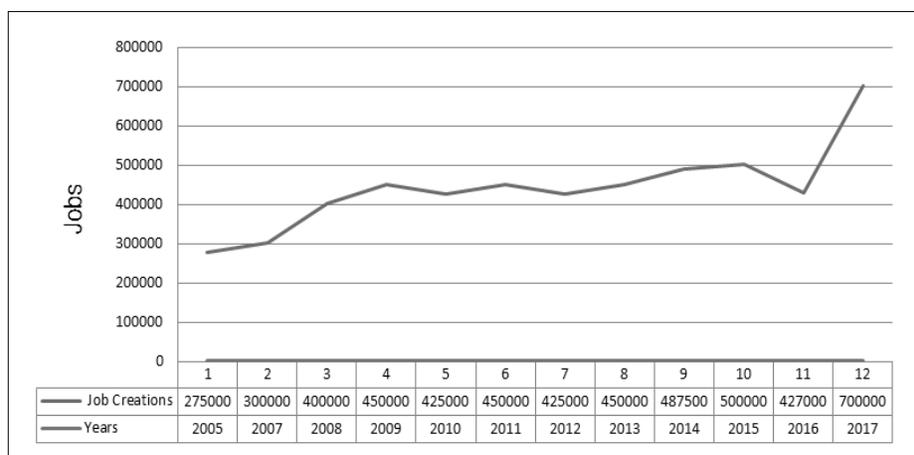
In order to run regression analysis, the diagnostic tests such as Test for Omitted Variable, Test for Multi-collinearity, Test for Outliers, Test for Normality and Test of linearity have been successfully observed.

### IV. Data Analysis and Presentation

#### 1. Employment Creation and Revenue Generation

About 797616 tourists visited Nepal in the year 2013 and as per our national survey of employment, 138148 total jobs were created as a result, the ratio of which was approximately 6:1 (MOCTCA: 2014). While comparing this information with Pokhara valley; 12343 total jobs were created by 293078 tourists visit in 2011. The ratio of tourist visits and direct job creation was about 24:1 in Pokhara. It means that every six tourists visit will contribute to one job in Nepal whereas every 24 tourists generate one job in Pokhara. This difference is due to the fact that in the past there was underutilized human resource stock in the sector. With new investment in Pokhara the excess human resource capital is used with full capacity and 2011 onwards the employment trend has been changed as past evidences as mentioned in table-1 shows that there will be 6.4% growth of employment due to tourism every year.

The report (WTTC: 2014) shows that direct contribution of Tourism in GDP is 4.3% of total GDP whereas the total contribution in GDP is 8.9% of GDP. Direct contribution in Employment is 487500(3.5% of total employment) and the total contribution in jobs-10, 59,000 jobs (7.5% of total) whereas the job rising rate is 3.1 per annum. Similarly, WTTC (2017) explains tourism accounts for 7.5 percent of Nepal's GDP and is forecast to rise 4.3 percent annually to Rs287.6 billion, or 8.3 percent of the GDP in 2027. The GDP generated

**<Table 1>** Direct Employment Creation from Tourism Sector

Source: WTTC (2016)

directly by the travel and tourism sector includes its indirect and induced impacts. The report said that the direct contribution of travel and tourism to the GDP in 2016 was Rs 85.2 billion, or 3.6 percent. This is forecast to rise by 6.8 percent to Rs91 billion in 2017. Nepal is ranked 37th in terms of travel and tourism direct contribution to GDP among 185 countries surveyed. Nepal trails behind India and Bangladesh, but is ahead of Sri Lanka in South Asia in terms of direct contribution of tourism to the economy. This primarily reflects the economic activity generated by industries such as hotels, travel agencies, airlines and other passenger transportation services, excluding commuter services. It also includes, for example, the activities of the restaurant and leisure industries directly supported by tourists. The London-based council said that travel and tourism investment in Nepal last year was Rs16.5 billion, 3 percent of the total investment. In 2016, the industry directly supported 427,000 jobs, or 2.9 percent of the total employment. This is expected to rise by 2.9 percent per annum to 604,000 jobs in 2027. The total contribution of tourism to employment, including wider effects from investment, the supply chain and induced income impacts, was 945,000 jobs in 2016. This is forecast to increase by 5.4 percent in 2017 to 996,000 jobs. The report has forecast that by 2027, the industry is expected to support 1,325,000 jobs. Foreign tourist arrivals to

Nepal jumped 39.71 percent to 753,002 in 2016. Visitor exports generated Rs48.6 billion or 17.7 percent of total exports in 2016. In 2017, this is expected to grow by 9 percent, and the country is expected to attract 801,000 international tourist arrivals. By 2027, international tourist arrivals are forecast to total 1,384,000, generating expenditures of Rs102.1 billion, an increase of 6.8 percent per annum, according to the report.

While looking through the figure of Pokhara based on the field survey of 2009, there are 123 households based on Travel Related business and the total employment generated by these is 663. The annual turnover from these businesses is Rs.8, 68, 97,500. The total investment is Rs.28, 07, 75,000. Tours and Travel business occupies the highest position in each respect. Similarly, there are 624 households of Retail Trade business. Among 15 types of Retail Trade business grocery alone occupies 398 households. Grocery business has created employment for 962 people. The annual income generated by grocery is Rs.12, 38, 55,000. Altogether the investment made on the Retail Trade business is Rs.1, 31, 62, 85,000(See Tables A1 and A2 in appendix).

There are 320 households of Tourist Product business. Among 14 types of Tourist Product Business Trekking equipment shop alone occupies 45 households. it has created employment for 158 people. The annual income generated by Trekking equipment is Rs.2, 87, 40,000. Altogether the investment made on the Tourist Product business is Rs43, 67, 41,000. The study also found that there are 823 households of Lodging and Fooding business. Among 10 types of Fooding and Lodging business, Restaurant alone occupies 310 households. Restaurant business has created employment for 1,541 people. Similarly, Hotel and Lodge has created employment for 3881 people and it is the highest employment generating business. The annual income generated by Hotel and Lodge is Rs. 1,614,150,000. Altogether the investment made on the Fooding and Lodging business is Rs13, 045,315,000(See Tables A3, A4 and A5 in appendix).

There are other various sources of income and employment like museums, temples, boating association and institutions like ACAP which can play significant role in income generation. The royalty collected by the ACAP alone in the year 2008 is Rs.13, 08, 09,400. The whole result is summarized in Table 2.

**(Table 2)** Grand Total of Employment, Investment and Revenue (in NPR)

S.N.	Business Category	No. of business households	Emp	Invttl (Rs.)	Annual revenue
1	Travel Related Business	123	663 (5.37%)	280,775,000 (1.86%)	86,897,500 (3.21%)
2	Lodging and Fooding Business	823	6,745 (54.64%)	13,045,315,000 (86.44%)	2,050,117,500 (75.81%)
3	Retail Trade Business	624	1,794 (14.53%)	1,316,285,000 (8.72%)	252,506,750 (9.33%)
4	Tourist Product Business	320	911 (7.38%)	436,741,000 (2.89%)	148,287,950 (5.48%)
5	Miscellaneous Business	18	67 (0.54%)	12,000,000 (0.07%)	4,500,000 (0.16%)
6	Various Institutional sources	28	2,163 (17.52%)	na	161,935,604 (5.98%)
	<b>Total</b>	<b>1,936</b>	<b>12,343</b>	<b>15,079,116,000</b>	<b>2,699,745,304</b>

Source: Calculation from the field survey data, 2009.

The annual revenue generation from the whole industry is Rs. 2,699,745,304. Of which Lodging and Fooding Business comprises 75.81%, Travel Related business occupies 3.21% and Retail Trade business occupies 9.33% whereas Tourist Product occupies 5.48% of the total income generated in a year.

In the national level report (WTTC: 2014), it seems that direct contribution of Tourism is 4.3% of total GDP whereas the total contribution including indirect and induced tourism sectors is 8.9% of GDP. Direct contribution in employment is 487,500(3.5% of total employment) and the total contribution in jobs-10, 59,000 jobs(7.5% of total) whereas the job rising rate is 3.1 per annum.

## 2. Regression Analysis

**Model-1:**  $Emp_i = B_0 + B_1 Invttl_i$  (for entire business type)

Table 3 shows that the adjusted R-Square is 0.72.16 showing that the 72.16% of total variation in employment is explained by investment. Having closer association between adjusted R-Square and R-Square there is honest

〈Table 3〉 Analysis of Variance (ANOVA)

Source	Sum of Squares	Df	MS	No.of observation: 1908	
Model	81868.819	1	81868.819	F (1, 1906) = 4943.59	
Residual	31564.5122	1906	16.560	Probability>F=0.0000	
Total	113433.331	1907	59.482	R-squared =0.7217	
				Adj R-squared = 0.7216	
				Root MSE =4.0695	
Emp	Coefficient	Std. Err.	t-Value	P>  t	95% Confidence Interval
InvttlMLN	0.1700517	.0024186	70.31	0.000	0.16530840.1747951
Constant	3.98709	.0951084	41.92	0.000	3.800563 4.173618

association between employment and investment. The t-value for total investment is 70.31 and it is significant at less than 1% level. Then, the estimated regression equation for employment is written as;

$$Emp_i = 3.98 + 0.17InvttlMLN$$

$$Se = (.0951084) (.0024186)$$

$$t = (41.92)(70.31)$$

$$(0.000)*(0.000)*$$

Where \* indicates p-values.

From the model, it is found that when investment increases by one million Rupees the total employment increases by 0.17 units on an average. To estimate the overall employment generation capacity of every one million Rupees investment in tourism industry, we must put the mean value of total investment in the regression equation.

**Model-2:**  $Emp_i = B_0 + B_1InvttlMLN_i$

The model is applied to estimate employment in forty-three different business types operating in tourism industry of Pokhara. The whole result is summarized in Table 4.

**(Table 4)** Regression Output of Employment Investment in Different Business Categories

S.N.	Biztyp	Regcoff.	Regconst.	Stderr.	t-value	P value %	R Square	Ad.R,SQ	F-value	Prob)F	OBS.
1	Airlines Office	Na	Na		Na	Na	Na	Na	Na	Na	7
2	Art craft and gift shop	0.165	2.383	0.056	2.92	0.6	0.2	0.181	8.52	.0063	35
3	Bakery	2.432	2.83	0.874	2.78	2.4	0.49	0.42	7.73	.0239	10
4	Bank and Finance	0.082	6.34	0.026	3.07	1.5	0.54	0.48	9.42	.0154	10
5	Barber	9.3	1.18	5.6	1.66	10.8	0.086	0.055	2.76	.1076	31
6	Beauty Parlor	0.724	2.81	0.084	8.56	0	0.93	0.92	73.19	.0004	7
7	Books/ Stationery Shop	0.51	2.81	0.106	4.87	0	0.44	0.42	23.74	.0000	32
8	Cold store	0.155	1.9	0.072	2.15	4.6	0.21	0.16	4.63	.04	19
9	Communication service	0.57	2.84	0.205	2.77	0.9	0.17	0.15	7.67	.0088	38
10	Curio Shop	-0.43	3.54	0.167	-2.58	1.9	0.28	0.23	6.67	.0194	19
11	Cycle/Motorbike business	-0.65	3.1	0.785	-0.83	41.8	0.044	-0.019	0.69	.4185	17
12	Departmental store	0.108	5.45	0.06	1.8	10.5	0.264	0.183	3.24	.1052	11
13	Dress Shop	0.06	2.41	0.314	0.19	84.9	0.0014	-0.035	0.04	.8492	29
14	Electronics Shop	0.615	2.04	0.175	3.5	0.7	0.57	0.52	12.24	.0067	11
15	Embroidery	-0.35	3.24	0.454	-0.77	45.4	0.04	-0.02	0.6	.4537	15
16	Fancy shop	0.428	3.49	0.385	1.11	31.7	0.197	0.037	1.23	.3174	7
17	Fresh House	3.82	1.66	1.11	3.42	0.2	0.274	0.25	11.72	.0018	33
18	Fruits and Vegetable Shop	0.532	1.89	0.767	0.69	49.9	0.033	-0.035	0.48	.4987	16
19	Garment shop	0.724	2.57	0.147	0.49	62.5	0.0057	-0.017	0.24	.0057	44
20	Grocery	0.1905	2.35	0.062	3.06	0.2	0.023	0.0206	9.34	.0024	398
21	Guest House	0.091	7.92	0.0184	4.97	5.5	0.2138	0.205	24.75	.0000	93
22	Handicraft Shop	0.3039	2.21	0.0313	9.7	0	0.7645	0.756	94.13	.0000	31
23	Hardware Supply	0.438	2.65	0.285	1.53	18.5	0.32	0.183	2.36	.1854	7
24	Hotel and Lodge	0.1604	7.43	0.0049	32.51	0	0.7894	0.788	1056.87	.0000	284
25	Jewelry Shop	0.7783	2.56	0.6761	1.15	26.4	0.0652	0.016	1.33	.2640	21
26	Kashmiri product shop	0.0686	3.193	0.648	0.11	91.7	0.0008	-0.070	0.01	.9171	16
27	Laundry	-0.234	3.5	0.4272	-0.55	59	0.0175	-0.0403	0.3	.5895	19
28	Massage centre	0.586	4.03	3.17	0.18	85.8	0.0049	-0.137	0.03	.8585	9
29	Medical shop	0.918	2.39	0.1512	6.07	0	0.596	0.579	36.88	.0000	27
30	Money Changer	-0.062	2.54	0.2456	-0.25	80.1	0.0018	-0.025	0.06	.8006	38
31	Music Shop	0.249	2.195	0.149	1.67	12	0.189	0.122	2.81	.1198	14
32	Paragliding	0.23	9.402	0.507	0.45	66.9	0.039	-0.152	0.21	.6691	7
33	Pashmina Shop	0.387	2.309	0.25	1.54	18.4	0.322	0.186	2.38	.1837	7
34	Photo and Accessories	0.388	2.705	0.138	2.8	2.3	0.495	0.432	7.86	.0231	3
35	Restaurant	0.52	4.389	0.067	7.67	0	0.174	0.171	58.8	.0000	280
36	Tea and Coffee Shop	-0.23	2.866	1.427	-0.16	87.4	0.002	-0.081	0.03	.8743	14
37	Thanka Shop	0.686	1.828	0.29	2.36	3.3	0.285	0.234	5.58	.0331	16
38	Tibetan good shop	-1.281	3.791	0.209	-6.11	0	0.687	0.668	37.3	.0000	19
39	Tours and Travels	0.336	4.615	0.133	2.51	1.5	0.098	0.082	6.3	.01	60
40	Trek. and Raft. Agency	0.944	3.442	0.492	1.92	6.6	0.12	0.087	3.68	.0656	29
41	Trekking equip. shop	0.282	2.919	0.114	2.45	1.8	0.122	0.102	6.03	.0182	45
42	Women's product Shop	-0.303	3.299	0.64	-0.47	66	0.053	-0.183	0.22	.6603	6
43	Yoga and meditation	0.982	2.966	0.89	1.1	31.2	0.168	0.03	1.22	.3123	8

From the analysis it is found that out of 42 models, 23 models are found significant at less than 10% level of significance. 12 models are found significant at less than 1% level of significance. Similarly, there are 8 models significant below the 5% level of significance and 3 models are significant at less than 10% level of significance. However, the value of R-square and adjusted R square are very low in all models indicating poor explanation power of the model.

**(Table 5)** Regression Output of Emponlnvtll in Different Business Locations

S,N	Location	regcoff	regconst	stderr	t-value	P value%	R SQ	Ad,R,SQ	F-value	Prob)F	No.ofobs
1	Baglung Buspark	0.927	3.04	0.0719	12.88	0	0.653	0.649	165.9	0.00	90
2	Barahichowk to shantipatan	0.153	3.193	0.01	14.53	0	0.894	0.889	211.2	.000	27
3	Barahipath	0.205	3.624	0.01	17.26	0	0.955	0.951	298.0	.000	16
4	Barahipath to Hallanchowk	0.043	5.366	0.01	2.24	2.8	0.070	0.056	5.02	.000	68
5	Srijanachowk	-0.8521	37.93	.150	-5.68	0	.7457	.7225	32.25	.000	13
6	Buspark Prithwichowk	1.232	2.902	0.04	27.45	0	0.830	0.829	753.6	.000	156
7	Chhorepatan	0.286	1.988	0.029	9.72	0	0.611	0.605	94.43	.0000	62
8	Damside	0.445	2.457	0.27	16.47	0	0.772	0.769	271.11	.0000	82
9	Fewatalpari	0.124	6.315	0.079	1.56	19.3	0.379	0.224	2.45	.1927	6
10	Fishtail gate to Hallanchok	0.3629	3.347	0.021	16.53	0	0.5029	0.5011	273.16	.0000	272
11	Hallanchowk -khahare -jarebar	0.429	2.842	0.0166	25.74	0	0.655	0.654	662.59	.0000	350
12	Jarebar to sahidchowk	0.5213	2.9104	0.041	12.51	0	0.596	0.592	156.47	.0000	108
13	Kaskikot-6 Bhakunde	0.011	3.15	0.196	0.06	95.4	0.0002	-0.0623	0	.9538	18
14	Kaskikot-6 pame	0.708	2.277	0.2011	3.52	0.2	0.3827	0.351	12.4	.0021	22
15	Khapoudi	0.557	1.875	0.554	1.01	36	0.1685	0.002	1.01	.3604	7
16	Lakeside(Proper)	0.244	3.686	0.0056	43.11	0	0.8153	0.814	1858.27	.0000	423
17	Mahendrapul	-0.015	14.465	0.008	-1.88	7.5	0.1436	0.102	3.52	.0746	23
18	Nagdhunga to Prithwichowk	0.223	-2.057	0.068	3.27	18.9	0.914	0.829	10.72	.1887	3
19	Prithwichowk	-0.004	11.435	0.024	-0.18	85.5	0.0013	-0.037	0.03	.8551	28
20	Rastrabank -Mustang chok	0.156	3.751	0.006	23.19	0	0.921	0.9195	537.79	.0000	48
21	Sabhagrihachowk	0.09	8.972	0.014	6.43	0.1	0.8733	0.8522	41.37	.0007	8
22	Sarangkot	0.657	3.767	0.121	5.41	0	0.493	0.476	29.23	.0000	32
23	Sedibagar	0.589	1.93	0.198	2.97	0.9	0.355	0.315	8.83	.0090	18
24	Shantipatan	0.349	0.718	0.165	2.11	8.9	0.471	0.3651	4.45	.0887	7
25	Srijanachowk	-0.852	37.93	0.15	-5.68	0	0.745	0.722	32.25	.0001	13

**Model-3:**  $Emp_i = B_0 + B_1InvttlMLN_i$ (individually for 25 business locations)

Stata command used: `regempInvttlMLNifloc = = "location of the business"`. Regression result of employment on investment with business location is summarized in the Table 5.

From the analysis it is found that out of 25 models, 19 models are found significant at less than 1% level of significance. Three models are found significant at less than 10% level of significance. The value of R-square and adjusted R square is above 60% except in few models. It indicates strong explanation power of the model.

**Model-IV:**  $Emp = B_0+B_2D_2+B_3D_3+B_4D_4$

Here  $D_1$  is taken as the reference variable.

**<Table 6>** Regression Output of Employment with Business Category

Source	SS	Df	MS	No.of observation: 1908	
Model	12542.90	3	4180.96951	F(3, 1904) = 78.90	
Residual	100890.42	1904	52.9886	Probability>F = 0.0000	
Total	113433.331	1907	59.4826	R-squared = 0.1106	
				Adj R-squared = 0.1092	
				Root MSE = 7.2793	
Emp	Coefficient	Std. Err.	t-Value	P> t	95% Confidence Interval
D <sub>2</sub>	-2.5434	.7158	-3.55	0.000	-3.9472-1.1395
D <sub>3</sub>	-2.5548	.7623	-3.35	0.001	-4.0499-1.0597
D <sub>4</sub>	2.7713	.7004	3.96	0.000	1.39764.1451
Constant	5.4198	0.6537	8.29	0.000	4.13776.7018

Therefore, the estimated regression equation for the employment is

$$Emp_i = 5.4198 - 2.5434 D_2 - 2.5548 D_3 + 2.7713D_4$$

$$Se = (0.6537) (.7158) (.7623) (.7004)$$

$$t = (8.29) (-3.55) (-3.35) (3.96)$$

$$(0.000)*(0.000)*(0.001)*(0.000)*$$

Where \* indicates p-values at 5% level of significant.

Calculation of mean employment by the coefficients of dummy variables

$$\text{Emp}_i = 5.4198 - 2.5434 D_2 - 2.5548 D_3 + 2.7713D_4 + U_i$$

Now Mean Emp for  $D_1 = 5.4198$

$$\begin{aligned} \text{Mean Emp for } D_2 &= 5.4198 - 2.5434 * D_2 \quad (D_2 = 1, 0 \text{ otherwise}) \\ &= 2.8764 \end{aligned}$$

$$\begin{aligned} \text{Mean Emp for } D_3 &= 5.4198 - 2.5548 * D_3 \quad (D_3 = 1, 0 \text{ otherwise}) \\ &= 2.865 \end{aligned}$$

$$\begin{aligned} \text{Mean Emp for } D_4 &= 5.4198 + 2.7713 * D_4 \quad (D_4 = 1, 0 \text{ otherwise}) \\ &= 8.1911 \end{aligned}$$

The Adjusted R-Square 11.06% showing in table 6 is that the ratio of variance in employment is explained by variations in the total investment by about 11.06%. And the proportion of the variations of employment explained by investment is 10.92% which is justified by the value of R-Square = 10.92%. The values of Adjusted R-Square and R-Square show the honest association between employment and investment. The t-value for  $D_1$ ,  $D_2$  and  $D_3$  are -.355, -3.35 and 3.96 are significant as their p-values are less than 0.05 that is they are statistically significant below the 5% level of significance. Therefore, the value of mean employment in Retail trade business and Tourist product business is somewhat similar but these values are significantly different from the Travel related business and Fooding and Lodging business.

$$\text{Model V: } \text{Emp} = B_0 + B_2D_2 + B_3D_3 + B_4D_4 + B_5\text{InvttlMLN}_i$$

Here  $D_1$  is taken as the reference variable.

Therefore, the estimated regression equation for the employment is

$$\text{Emp}_i = 5.0331 - 2.5025D_2 - 2.3794D_3 + 0.5655D_4 + 0.1636 \text{ InvttlMLN}$$

$$\text{Se} = (0.3413) (0.3737) (0.3980) (0.3670) (0.0022)$$

$$t = (14.74) (-6.70) (-5.98) (1.54) (71.28)$$

$$(0.000) * (0.000) * (0.000) * (0.001) ** (0.000) *$$

Where \* indicates p-values significant below 5% level of significance and

\*\* indicates 10% level of significance.

**Table 7** Regression Output of Employment with Business Category and Investment

Source	SS	Df	MS	No.of observation: 1908	
Model	85944.199	4	21486.0497	F(3, 1904) = 1487.42	
Residual	27489.1332	1903	14.4451	Probability>F = 0.0000	
Total	113433.331	1907	59.4826	R-squared = 0.7577	
		Root MSE = 3.8007		Adj R-squared = 0.7572	
Emp	Coefficient	Std. Err.	t-Value	P>  t	95% Confidence Interval
D <sub>2</sub>	-2.5025	.3737	-6.70	0.000	-3.2355-1.7695
D <sub>3</sub>	-2.3794	.3980	-5.98	0.000	-3.1600-1.5988
D <sub>4</sub>	0.5655	.3670	1.54	0.124	-.15421.2853
invttlMLN	0.1636	.0022	71.28	0.000	0.15910.1681
Constant	5.0331	.3413	14.74	0.000	4.36365.7026

Source: Calculation from the field survey data, 2009.

#### Model VI

Total Direct Employment (TDE) generated by these four Tourism enterprises and miscellaneous business was derived by the simple formula i.e.

TDE = Sum of Employment in Travel related business, Retail trade business, Tourist product business, Fooding and Lodging business, miscellaneous business and from institutional sources. In a similar way, the total investment and total revenue generated are also calculated.

Therefore, the Total Direct Employment (TDE) = 663+1794+911+6745+67+2163 = 12343 persons.

Similarly, total investment = Rs.15, 09, 11, 16000 and Total revenue (Income) = Rs.2, 70, 42, 45304.

#### 4. Comparison Result between Two Surveys

In order to investigate further about recent trend of tourism employment in Pokhara, a short-term follow up survey was conducted with some key informants and major stakeholders of the Pokhara Valley in August of 2017. A brief literature survey was also made on establishment based sample surveys, Latest

population census, household based sample surveys, labor force surveys, administrative records, business demography statistics and some samples of enterprise based surveys. In follow up survey, questionnaire was specially focused on accommodation services, food and beverages services, road and airplane transport services, travel agencies and tour operators, vehicle rentals and entertainment, cultural and sports activities. The type of business, frequency of tourist visits, time and size of employment, investment in building and business and location information were also included in the structured questionnaire. A few government officials and business associations and key persons of the selected tourism entrepreneurs were consulted for gathering the information of history, investment structure and employment trend of their association. It was rigorously discussed about how the investment on tourism sectors has been able to create more employment opportunities for the people in Pokhara valley.

Pokhara is one of the most preferred destinations among domestic tourists and the middle income Indian tourists. Since 2010 there has been increasing number of Chinese and Indian tourists with the betterment in road and air accessibility. Apart from that, Nepal government's tourist friendly policy has also played significant role in the growth of tourist number. As a result, there has been sharp increment in tourism related business and services, new class of enterprising youth entered in tourist's market. Sizable amount of local employment has been created with significant growth of demand for local supplies. As a consequence, development of local capacity and its utilization with its positive growth has been observed in travel related business size and volume.

The study shows that during peak season there seems to be high level of shortages in hotel rooms, food and beverage services and vehicle rentals. Foreigners are especially attracted to Nepali cultural programs and always the cultural centers, dance restaurants and street singers are crowded and found fully occupied. Retail traders reported that there is a very high demand of organic coffee, tea and other herbal products in Pokhara and local supplies are insufficient and existing suppliers business volume has been maximized to optimum level. So, the growth of retail trade business in tourism market has

created employment to local entrepreneurs. One interesting fact noticed during short discussion with concerned stakeholders was that the distortion of local marketing channel and internet technology have significantly reduced the profit margin as it is sold through internet by international channels and as a result local entrepreneur are forced to survive with little size of profit margin.

The administrative report of District co-ordination committee mentions that the recent rate of registration of new enterprises is very high in comparison to last five years records. Many firms are found to be localized in tourism area with new type of tourism service business. The same information is justified by the record of Business Demography Statistics that majority of the entrepreneurs are involved in tourism goods producing business. While broadly viewing Enterprise Based Survey it is noticed that the most of young entrepreneurs especially women were involved in Small and Medium Tourism Enterprises which produce embodied tourists garment products. Another record of Nepal chamber of commerce reported that the massive investment on tourism sector still not able to generate enough employment but the trend is positive. Due to

**Table 8** Growth of Employment Creation in the Survey of 2017

SN	Business Category	No. of business Households (2009)	Employment (2009)	No. of business households (2017)	Employment (2017)
1	Travel Related Business	123	663 (5.37%)	215	1,350(5.9%)
2	Lodging and Food Business	823	6,745 (54.64%)	1,100	12,800(55.04%)
3	Retail Trade Business	624	1,794 (14.53%)	890	2,021(8.69%)
4	Tourist Product Business	320	911 (7.38%)	500	1,400(6.02%)
5	Miscellaneous Business	18	67 (0.54%)	35	300(1.29%)
6	Various Institutional sources	28	2,163 (17.52%)	45	5,000(21.5%)
Total		1,936	12,343	2,785	22,871

Source: Follow up survey 2017 conducted by researcher independently.

the introduction of new technology in some cases of investment, the labour requirement rate for tourism industry has been found decreasing. Majority of the youth being involved are from local area, of which 85 percent are male and 15 percent are female.

The follow up survey was done with different Travel and Tourism related professional associations by researcher independently. The recent follow up survey conducted by the researcher in 2017 was only about to test the past trends of income and employment in order to find out their growth with following details.

The overall scenario as observed from discussion in field survey of 2017 depicts that energetic entrepreneurs with big volume of investment are coming up in the sector with new ideas and business model that can transform local economy with significant contribution in employment. The data shows that number of business household's growth in 2017 is 43.8% and the growth of employment creation is 85.29% as compared with the survey of 2009.

## **V. Concluding Remarks**

Direct impact of tourism on employment creation is the main focus of this study. Its contribution are on;

- i.) Tourism commodities such as accommodation, transportation, entertainment and attractions.
- ii.) Industries such as accommodation services, food and beverage services and retail trade.
- iii.) Transportation services such as cultural, sports and recreational services and spending.

Present study depicts that there are 43 types of tourism businesses in 25 different locations and these businesses of 1908 households are broadly categorized into four main groups. The study intends to view the tourism industry from the income and employment perspective. The major categories of the business are travel related business, retail trade business, tourist product

business and food and lodging business. Data gathering was carried out by conducting a survey between 1908 households in the base line study in 2009 and its follow up pilot survey was also conducted with very limited stakeholders in the year 2017.

The inferential analysis of the study shows that among the 43 business categories, hotel and lodge, guest house, bank and finance, restaurants, tours and travels and handicraft shops are most revenue generating businesses respectively. Also, the employment to 13.66 persons can be created with every million rupees of investment on Hotel and Lodge. Likewise, Bank and Finance also can create employment of 13.34 persons with the same level of investment. Similarly, paragliding business can employ 10.71 persons, Guest house 9.36 persons and Departmental House 6.44 persons with every Million Rupees of investment.

Econometric estimation shows that out of 25 locations in the study, the most employment generating locations are Nagadhunga, Prithwichowk, Sabagrihachowk, Mahendrapool and Srijanachowk. Also, there is high possibility of creating employment of 47 persons with every one Million of investment in Nagdhunga and Prithwichowk area. Chhorepatan is the worst location in terms of employment generation, which can only create 2.30 persons employment (least) with one Million Rupees of investment. Among the top five businesses creating highest revenues are Hotel and Lodge, Guest House, Bank and Finance, Restaurant and Tours and Travels. Fruits and Vegetable shop is the least income generating business which can hardly generate Rs.980, 000 of income annually.

Study also shows that total direct employment of the tourism industry in Pokhara is 12,343. Hotel, Lodge, Guest House, Bank and Finance, Restaurant, Tours and Travels and Handicraft Shops are the major sources of income and employment in the industry. The estimation shows an additional investment of a million Rupees in the overall industry can generate employment for 5.40 persons. The annual revenue generation of the industry is Rs.2, 704,245,304. The investment in Fooding and Lodging business and Travel related businesses can generate good income, but there will not be a proportional growth in

employment in comparison to income. The industry is dominated by Fooding and Lodging business and therefore needs a policy shift for business diversification. Similarly, the observation of recent follow up survey scenario also verifies that the previous trend of employment and investment in Pokhara is in rising trend continuously; it eventually proved the Pokhara is a unique example to demonstrate a mini model of employment creation through tourism. The present study has been limited to the cross-sectional data of the year 2009 and opinion survey with limited stakeholders in the year 2017 only. The results show that there is an increment in number of business households by 43.8% in comparison to 2009 and Employment created by those business was 85.29% more than the survey of 2009.

If the analysis on the topic with time series data had been carried out, the output would have been more realistic and appropriate. Therefore, the relationship between employment and income in the industry may be another important study in the area. The measurement of induced employment and income due to investment in tourism industry could also be an important study.

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## [Appendix]

**Table A1: Income, Employment and Investment in Travel Related Business (Amount in Rs)**

S.N.	Business type	No. of business	Emp	Invttl	Annrev
1	Airlines Office	7	35	17,500,000	2,450,000
2	Tours and travels	63	336	148,000,000	43,585,000
3	Trekking and rafting	29	167	71,100,000	22,350,000
4	Cycle/motorbike business	17	50	4,275,000	1,432,500
5	Paragliding	7	75	39,900,000	17,080,000
	<b>Total</b>	<b>123</b>	<b>663</b>	<b>280,775,000</b>	<b>86,897,500</b>

Source: Calculation from the field survey data, 2009.

**Table A2: Income, Employment and Investment in Retail Trade Business (Amount in Rs)**

S.N	Business type	No. of business	Emp	Invttl	Annrev
1	Books/stationery	32	130	76,600,000	21,070,000
2	Cold store	19	38	11,960,000	1,573,250
3	Bank and Finance	10	134	854,000,000	145,400,000
4	Barber	32	77	4,315,000	4,175,500
5	Departmental store	11	71	101,000,000	20,200,000
6	Electronics Shop	11	26	5,745,000	1,330,500
7	Photo and accessories	10	34	17,855,000	4,302,500
8	Fancy shop	7	27	5,900,000	1,197,500
9	Flower nursery	5	16	1,100,000	370,000
10	Fresh House	34	88	8,820,000	1,860,000
11	Grocery	398	962	123,855,000	25,641,250
12	Hardware supply	7	42	53,500,000	7,925,000
13	Medical shop	27	86	23,125,000	7,125,000
14	Music shop	14	35	17,050,000	7,481,250
15	Beauty parlour	7	28	11,460,000	2,855,000
	<b>Total</b>	<b>624</b>	<b>1,794</b>	<b>1,316,285,000</b>	<b>252,506,750</b>

Source: Calculation from the field survey data, 2009.

**Table A3: Income, Employment and Investment in Tourist Product Business (Amount in Rs)**

S,N	Business type	No. of business	Emp	Invttl	Annrev
1	Art craft and gift shop	36	98	68,725,000	13,741,000
2	Embroidery	15	45	10,400,000	4,587,500
3	Garment shop	44	117	51,430,000	20,438,500
4	Handicraft shop	31	90	69,725,000	26,432,500
5	Kashmiri product shop	16	52	13,100,000	4,530,000
6	Jewelery shop	21	75	27,200,000	8,367,500
7	Thanka Shop	16	38	12,725,000	4,197,500
8	Tibettan good shop	19	40	24,996,000	10,141,200
9	Pasmina Shop	7	21	12,500,000	5,650,000
10	Dress shop	29	71	16,290,000	5,735,250
11	Curio shop	19	56	26,300,000	12,332,000
12	Fruits and vegetable shop	16	32	3,025,000	980,000
13	Womens product shop	6	18	5,925,000	2,415,000
14	TrekkingEquipment shop	45	158	94,400,000	28,740,000
	<b>Total</b>	<b>320</b>	<b>911</b>	<b>436,741,000</b>	<b>148,287,950</b>

Source: Calculation from the field survey data, 2009.

**Table A4: Income, Employment and Investment in Fooding and Lodging Business**

S,N.	Business type	No. of biz	Emp	Invttl	Annrev
1	Hotel and lodge	284	3,881	11,030,800,000	1,614,150,000
2	Guest House	93	873	1,479,700,000	294,030,000
3	Restaurant	310	1,541	448,445,000	120,552,500
4	Tea and coffee shop	14	39	4,910,000	826,000
5	Laundry	19	65	6,655,000	2,422,500
6	Massage centre	9	38	2,800,000	1,320,000
7	Money changer	38	95	24,320,000	5,031,000
8	Bakery	10	58	12,200,000	2,235,000
9	Yoga and meditation	8	31	7,400,000	2,800,000
10	Communication Service	38	124	28,085,000	6,750,500
	<b>Total</b>	<b>823</b>	<b>6,745</b>	<b>13,045,315,000</b>	<b>2,050,117,500</b>

Source: Calculation from the field survey data, 2009.

**Table A5: Income and Employment from Various Institutions and Services (Amount in Rs)**

S.N.	Name of Institutions	No. of business firms	Employment	Annual Income in Rs.
1	ACAP Royalty	1	178	130,809,400
2	Int. Mountain Museum	1	31	3,631,235
3	Fewa boat association	1	1,500	8,760,000
4	Devi's fall	1	20	1,399,105
5	MahendraCave	1	12	1,943,263
6	PonyTrekking	1	10	400,000
7	Talbarahi temple	1	22	915,600
8	Bus, Van and Car service	19	373	5,000,000
9	Gupteswor Cave	1	29	8,892,229
10	Regional Museum	1	10	184,772
	<b>Total</b>	<b>28</b>	<b>2,163</b>	<b>161,935,604</b>

Source: Calculation from the field survey data, 2009.

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