

Estimating The Economic Contributions Of Tourism Sector By Using Tourism Satellite Account (TSA) In Hunza-Nager District Of Gilgit Baltistan-Pakistan.

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Abstract: Gilgit Baltistan (GB) Pakistan, is one of the most scenic parts of the world, which is blessed with unique natural resources. The major income of the people of the region is derived from tourism which is growing exponentially. However, no consistent and reliable data is available about the contributions of the tourism sector to the socioeconomic development of the area, both at local and national level. To address, this problem a research was initiated in the Hunza-Nagar districts of GB. The standard Tourism Satellite Accounting (TSA) procedure and Tables were used for the purpose. A questionnaire survey was used to collect data for various inputs to the TSA. The respondents included inbound tourists, domestic tourists, day tripper, hotels and restaurants, passengers Transport Service providers, retailers etc. A total of 428 questionnaires were filled from various segments of respondents randomly selected from various cluster, and the response rate was 78.96%. The study was unique in its nature both at the regional and national levels. The study revealed that, there is high leakage of the revenue from tourism and hence the trickle down effects of the tourism sector is minimal. Huge investment has been made in last two decades in the construction of concrete structures with no regulation from building control authorities, leading to high unsustainable built environment in the region. The heavy influx of tourists and subsequent construction of new hotels and restaurants, has created heavy pressure on the land and trend of rapid urbanization. The local productivity has not been linked with the tourism sector and hence the socioeconomic development of the region is not happening in line with the expansion of the tourism sector. Based on the findings and observations of the study, policy recommendations have been made to the provincial and federal governments.

Index Terms: Tourism Satellite Account, Hunza, Nager, Gilgit-Baltistan, Built Environment, Rapid Urbanization

1 INTRODUCTION

Tourism has the potential to generate a substantial income and employment opportunities in Gilgit Baltistan (Nigar.N,2019). Globally, tourism provides one out of every eleven employment positions resulting into 277 million jobs in 2016 (UNWTO, 2017). In the case of Pakistan, tourism contributes only 2.8% of the total GDP making Pak Rs. 328 million (USD 2 Million), which is far less than the global average. This also shows that the tourism and hospitality sector of Pakistan has not been exploited for economic development of the country (WEF, 2015). Pakistan has the tremendous tourism potential to capitalize. Current Government has shown a great commitment to leverage and take advantage of the sector. The Government of Pakistan expects that tourism can contribute Rs.1 trillion to the economy by the year 2025 (Forbes,2018). Gilgit-Baltistan (GB) is a favorite tourism destination in the world, due to its composite attractions reflected in culture, heritage, nature, adventure, sports, water, clean air, landscape, leisure, wildlife, and biodiversity. It is in fact a treasure trove with mighty mountains ranges- Hindu Kush, the Himalayas and the Karakoram (HKH) ranges, water towers a major source of ecosystem services upon which millions people livelihoods depend.

The tragic incident of 9/11, severely affected both the domestic and foreign tourism in Pakistan and this region. In 2007, a total of 23,770 domestic and 10,338 foreign tourists visited the region while in 2015, revival in the growth of tourism was witnessed with the flow of 200,651 domestic and 4,082 foreign tourists respectively (Saqib et al., 2019). During the years 2017 and 2018 total tourists visit to this region, exponentially increased to 1.8 million and 2 million respectively (Express Tribune, 2019). During current year (2020), for the initial 6 months, the tourism in the region remained highly impacted by the COVID-19, due to lock down and physical distancing policies of the Federal and Provincial Government to combat the spread of the deadly novel corona virus. However, with the recent relaxation of the lock down and gradual opening of the tourism sector and other economic activities, large number of tourists are pouring into the region. The pattern of tourism in various districts of GB are given in Table 1, which shows exponential increase in the tourism trends in the region.

Table 1: District-Wise Tourist Inflow in GB (2014-2019)

| District | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|----------|--------|--------|---------|---------|---------|------|
| Domestic | | | | | | |
| Gilgit | 26,712 | 79,291 | 181,271 | 162,855 | 457,315 | |
| Skardu | 16,049 | 38,855 | 47,789 | 301,086 | 303,325 | |
| Diamer | 2,427 | 3,614 | 103,409 | 84,454 | 91,091 | |
| Ghizer | 3,334 | 2,536 | 3,093 | 5,817 | 5,755 | |
| Ghanche | 1,118 | 13,001 | 17,910 | 6,731 | 7,590 | |
| Astore | 104 | 3,552 | 5,667 | 22,933 | 45,774 | |
| Hunza | 14,610 | 59,484 | 80,592 | 175,000 | 430,000 | |
| Nagar | 0 | 0 | 0 | 12,448 | 320,778 | |

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| | | | | | | |
|--------------------|--------|---------|---------|---------|-----------|-------|
| Total Domestic | 64,354 | 200,333 | 439,731 | 781,224 | 1,391,628 | |
| International | 4,501 | 3,442 | 4,082 | 4,082 | 6,212 | 9,262 |
| Total Tourist flow | 68,855 | 203,775 | 443,813 | 785,306 | 1,397,840 | |

Source: (GBTD, 2019)

2 LITERATURE REVIEW

Many sectors in the economy cannot be measured directly due to lack of appropriate data and documentation. Tourism is not identified as a conventional industry or product in international statistical standards (ABS,2007). A large proportion of the expenditure is spent over products and services related to tourism and hospitality segments, such as accommodation, transportation, car hire, duty free purchases, restaurants, tours, and attractions, tourists also spend money in other sectors when they gamble, buy hats, clothes, gifts, newspapers, sunglasses, cinema tickets, and such like. Since it is not possible to identify tourism as a single 'industry' in the national accounts, its value to the economy. is not readily revealed. The growing importance of economic activities due to tourism industry cannot be overlooked (David and Philippe, 2011; Cristi, 2018). In National Accounting System, tourism sector is not taken as distinct entity and thus, tourism related activities are hidden within other industries. Also the informal sector adds to tourism in the form of production and consumption resulting more in complications in its measurements (Odunga, Manyara & Yobesia, 2019). Furthermore, as argued by Beynon et. al. (2009) data on different segments of economic activities related to tourism available in the statistical infrastructure are dispersed and fragmented. Due to such complications, usually, the value addition of tourism sector is underestimated in the country's economic data or national economic data used by decision makers in the government and non-governmental organization (Odunga, Manyara & Yobesia, 2019). In such cases, System of National Accounts (SNA) suggests to develop a satellite account within the framework and concepts of SNA, indicating/focusing on the particular aspect (tourism, in this case) of an economy (Kolli, Munjal and Sharma, 2014). The measurement of contributions of tourism sector to the economic development always remained a challenge, however with the introduction of Tourism Satellite Accounting (TSA) back in 2008, and its approval by international statistical and economic bodies, it was adopted as a standard procedure for tourism accounting (IRTS,2008; RMF,2008). Douglas C.F (2010) provided a comprehensive premier debate on the use of TSA for the tourism sector, travel consumption, investment in the tourism sectors etc. Hence TSA has been widely used for measurement of the economic contribution in the economic development of the region, though many questions about its validity remain. This approach is designed to record and measure the final consumption made by visitors during their trips (tourist type trips away from their usual environment) as it has direct influence on employment and GDP of a country or economy of the region in the specific period of time (Frechtling and Smeral, 2010). TSA provides measurement of direct and indirect benefits to the destination due to tourism and useful information to the local authorities for revisiting and designing their tourism policies and strategies (Giannopoulos and Boutsinas,2016; Frent,2018). TSA can also be used to measure the direct and indirect impacts of the tourism on ecosystem, thereby helping in planning and development for

the ecotourism and sustainable tourism in the region (Sun,2014). Despite of the rich data provided by TSA Tables, its use in practice by the planners is still limited and there is a need to develop effective dissemination of such studies to the end users and stakeholders (OECD,2010). Web based approaches were also used for data collection of TSA, which can be used as an innovative tool and a new perspective (for development of regional tourism (Doris et al, 2019).

Some of the important attributes of TSA have been reported as follows:

- **TSA's identify 'tourism' and 'tourist'**

The product and services of tourism sector have been highly diversified over the years. Travelling for the purpose of conducting businesses, for education and training, etc. can also be part of tourism if the conditions that have been set up to define tourism are met (IRTS, 2008, para. 3.17).

- **TSA's identify a tourism 'industry'**

TSA's identify tourism's component products and industries through the concepts of Tourism Characteristic and Tourism Connected products and industries (RMF, 2008; IRTS, 2008).

- **TSA's measure the key economic variables**

TSA's bring together all the size and the economic contribution of tourism products and services in an internationally accepted format and thereby reflect these into National Accounting System (Frechtling, 1999).

- **TSA's support inter-industry comparisons**

TSA also allows the private sector investors in the tourism industry to compare their performance, productivity, development, growth and incomes (Libreros et al., 2006).

- **TSA's can provide a base to develop different measures of tourism performance**

While using TSA, tourism yields in terms of expenditure, profitability, Tourism GDP, employment, value addition can be measured (Salma and Heaney, 2004). At the same TSA's are used for measuring the profitability and productivity of the tourism sector as a whole (Dwyer et al., 2007). TSA's give 'credibility' to estimates of the economic contribution of tourism TSA's also provide a credible picture of the contribution of tourism sector at the national level, which forms the base for credible information about political decision making and improvement of the tourism sector at national level (Cockerell and Spurr, 2002). TSA's provide a tool for tourism research and policy analysis. The credible, objective economic data given in TSA's provide a clear road map for research and policy making in the tourism sector (Jones et al., 2005). The contribution of the tourism to the macroeconomics of the country are shown in Fig 1 (Douglas,2010).

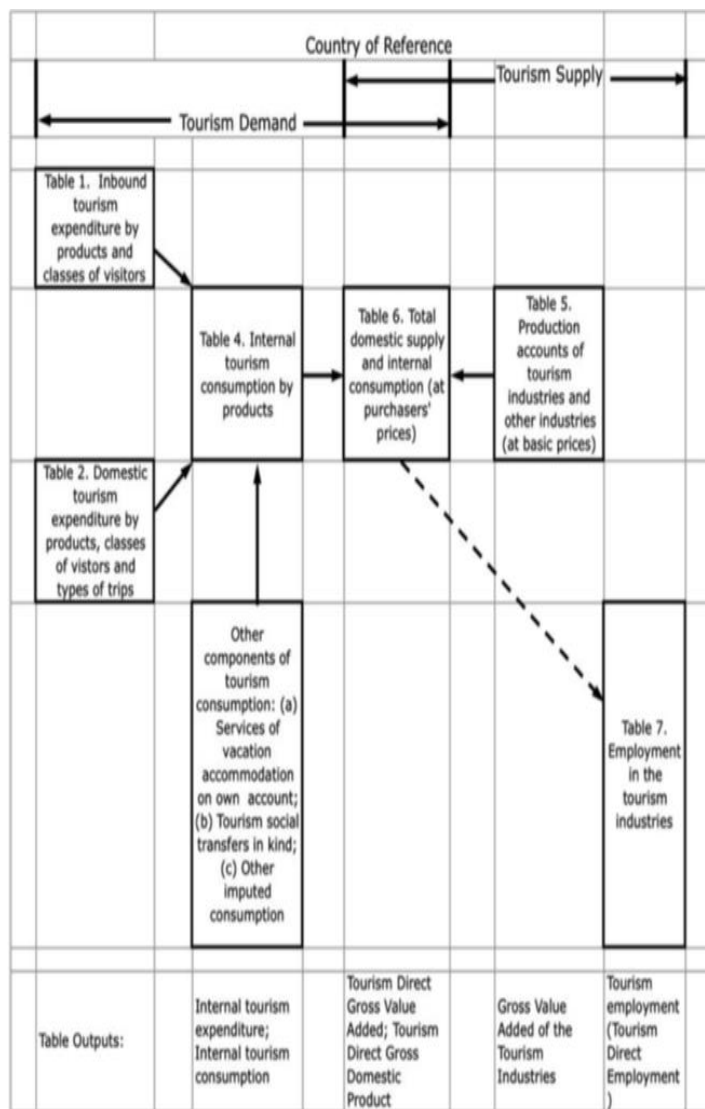


Fig 1: Tourism Satellite Account Tables Required for Estimating Macroeconomic Aggregates
(adopted from Douglas, 2010)

By measuring the demand for different commodities, tourism industry is identified from demand side and it can be linked with the supply side of tourism industry via identification of tourism commodities. The balance between demand for tourism goods and services by visitors and supply of these goods and services then form the structure of TSA (Mahesh, 2012; Aydin 2008). After knowing the relationships among various tourism related activities can allow the policy makers to build stronger linkages within the economy which in turn contribute more to the development (Dwyer et al., 2012). TSA has been widely used for measurement of economic contribution of tourism sector in the developing countries (Suich, 2001; Jone and Munday, 2010). The Input-out model has been reported with limitations and Computable General Equilibrium (CGE) has also been recommend by some researchers (Chou and Huang, 2011).

3 MATERIALS AND METHODS

Given, the extent and limited availability of literature and expertise in Gilgit-Baltistan relating to research in tourism, World Wildlife Fund (WWF) Pakistan, Integrated Mountain Development (ICIMOD), and Karakorum International University (KIU) with independent experts joined hands to conduct an independent study on Tourism Satellite Account – a baseline for Hunza District and Hoper valley (Nagar District). The standards procedure and Tables were used for data collection as recommended by UNWTO (IRTS, 2008; RMF, 2008, Douglas, 2010).

3.1 Sampling Method

3.1.1 Sampling Distribution and Size

To carry out this study, purposive sampling technique was used to distribute the questionnaire among the respondents from the sampling process to get maximum and relevant information for the Tourism Satellite Account at two tourism nucleus sites; Hunza and Negar (Hoper), based on the large influx of tourists in the areas. The researchers ensured that all relevant sample groups (Tourists; Domestic and Foreign, Hotels/Guest Houses, Vegetable Seller, Restaurants, Retailers and Transporters) required for this study are adequately represented in the sample. The sample size was worked out with the following equation;

$$SS = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

Where;

e = margin of error (calculated at 5%), Confidence level = 95%
N = Population size

Sample measurement, distributions, size and response rate against each category is shown in the Table 2 which highlights overall 78.76 % response rate with total 428 number of respondents to be surveyed; following the TSA standards during the month of November, 2019. It indicates that 235 domestic, 33 international tourists and 19 Daytripper and excursionists were surveyed. Likewise, 75 hotels and guest houses, 33 restaurants, 12 vegetables sellers, 11 transport companies and 10 retail shops were also included in the survey. The relevant TSA Tables and sample size are given in Table 2.

Tables 2: TSA Indicators and Proposed Data Sources

| TSA Tables | | Indicators | Data Source |
|--------------|--------------------------------------|--|--|
| TSA Table 01 | Inbound Tourism Expenditures | Total inbound Tourism expenditure | Survey Data on inbound tourists at the exit point of study sites |
| | | Inbound tourism expenditures by tourists | |
| | | Inbound tourism expenditure by same day visitor/excursionists | |
| | | | |
| TSA Table 02 | Domestic Tourism Expenditure | Total domestic tourism expenditure | Survey data domestic Tourists at exit point of study sites |
| | | Domestic Tourism expenditure by tourists/overnight visitors | |
| | | Domestic tourism expenditure by same day visitor/excursionists | |
| | | | |
| TSA Table 4 | Internal tourism consumption | total internal tourism consumption | Survey data domestic Tourists at exit point of study sites |
| | | Internal tourism expenditure (inbound tourism expenditure and domestic tourism exp.) | |
| TSA Table 07 | Employment in the tourism Industries | Number of jobs | Survey data hotels, restaurants, vegetables sellers, transport companies and retail shops at study sites |
| | | Number of hours worked | |
| | | number of full-time equivalent jobs | |
| | | Number of people employed | |
| TSA Table 10 | Non-Monetary Indicators | Inbound Tourism (Number of same day trips, No of overnight trips and No of overnight stays) | Survey data accommodation at study sites |
| | | Domestic Tourism (Number of same day trips, No of overnight trips and No of overnight stays) | |
| | | Accommodation | Survey data accommodation at study sites |
| | | Number of establishments | |
| | | Number of rooms | |
| | | Number of beds | |

The sample sizes, response rate under each category of the respondents are given in Table 2, which shows that the out of total of 542 samples, 428 responses were received, having combined response rate of 78.96%.

Table 2: Total samples, response rate under each category of respondents for TSA

| Sample Distribution | Calculated Sample | Responded Sample | Response rate | Distribution Percentage |
|---|-------------------|------------------|---------------|-------------------------|
| Inbound (International) Tourist | 292 | 33 | 98.28 | 7.71 |
| Domestic Tourists | | 235 | | 54.91 |
| Day-Tripper/Excursionists | | 19 | | 4.44 |
| Hotels/Guesthouses (Accommodation Services) | 121 | 75 | 61.98 | 17.52 |
| Restaurants (Food and Beverage) | 81 | 33 | 40.74 | 7.71 |
| Vegetables Sellers | 17 | 12 | 70.58 | 2.80 |
| Passenger Transportation Services (travel & transport companies operate in Hunza/Nager) | 16 | 11 | 87.50 | 2.57 |
| Retail Shops (main utility stores who supply in Hunza/Nager) | 15 | 10 | 66.66 | 2.34 |
| Total | 542 | 428 | 78.96 | |

Data was collected through by using both quantitative and qualitative techniques; questionnaires were used to obtain the quantitative data whereas focus group discussion, policy dialogue and stakeholders' workshop were conducted to get the insight about tourism challenges and future prospects in the district Hunza and Nager particularly and Gilgit-Baltistan generally. Since, November in Gilgit-Baltistan is considered to be off season, therefore, maximum data was collected by deputing enumerators along with the efforts of researchers, so that required data can be obtained before the tourisms season completely gets off.

4 RESULTS AND DISCUSSION

Data was collected through by using both quantitative and qualitative techniques; questionnaires were used to obtain the quantitative data whereas focus group discussion, policy dialogue and stakeholders' workshop were conducted to get the insight about tourism challenges and future prospects in the district Hunza and Nager particularly and Gilgit-Baltistan generally. Since, November in Gilgit-Baltistan is considered to be off season, therefore, maximum data was collected by deputing enumerators along with the efforts of researchers, so that required data can be obtained before the tourisms season completely gets off. Results of the study have been presented in Tables and graphs. Figure 2 presents the gender distribution of inbound and domestic tourists which shows majority of the surveyed tourists are Male representing 82% of the total tourist (n=287) whereas, 18% of respondents are Female.

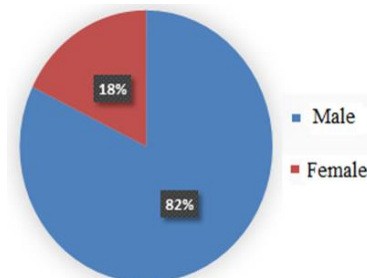
**Fig 2: Gender distribution of inbound and domestic tourists to Hunza and Nager areas of GB**

Table 3 depicts the various professions of the tourists sampled for this study. It is found that majority of the tourists (34.1%) are engaged with private sector jobs followed by personal business (30.0%). Students and employment in government institution are also found as major profession of the respondents representing 18.1% and 13.2% respectively.

Table 3: Profession of the Tourists (n=287)

| Profession | Freq. | Percentage |
|------------------------------------|-------|------------|
| Employed in private institution | 98 | 34.1 |
| Employed in Government institution | 38 | 13.2 |
| Personal Business | 86 | 30.0 |
| Student | 52 | 18.1 |
| Retired | 2 | .7 |
| Currently Unemployed | 7 | 2.4 |
| Other | 4 | 1.4 |
| Total | 287 | 100 |

Table 4 shows the income category reported by tourists during tourists' survey in November 2019. The results show that in the case of domestic tourists, income of majority (31%) of the tourists falls in the income group of Pak Rupees (PKR) 50000 to 100000 follow by income group below 50000 (represents 29% of domestic tourists). It is further revealed that income of 3% of the domestic tourists fall in the income group of above 500000. In the case of international tourists, income of majority (54.84%) of the tourists fall under the income group of above 500000 whereas, monthly income of 12.91% international tourists ranks second fall in the income group of PKR 450000-500000. This analysis shows that 67.75% of the total international tourists belong to monthly income group of above 450000. Income of majority of Daytripper and excursionists fall under the income groups of below 500000 and 50000-100000 respectively.

Table 4: Monthly Income Group and Tourists Category

| Income Group (Range in Rupees) | Domestic Tourists (n=209) | International (n=31) | Daytripper (n=10) | Excursionists (n=7) |
|--------------------------------|---------------------------|----------------------|-------------------|---------------------|
| Below 50000 | 29 | - | 60 | 28.57 |
| 50000-100000 | 31 | - | 20 | 57.13 |
| 100000-150000 | 14 | - | 10 | - |
| 150000-200000 | 8 | 6.45 | - | - |
| 200000-250000 | 4 | 6.45 | - | - |
| 250000-300000 | 3 | 6.45 | - | - |
| 300000-350000 | 1 | 6.45 | - | 14.3 |
| 350000-400000 | 3 | 6.45 | - | - |
| 400000-450000 | 2 | - | - | - |
| 450000-500000 | 2 | 12.91 | - | - |
| above 500000 | 3 | 54.84 | 10 | - |
| Total | 100 | 100 | 100 | 100 |

Figure 3 shows the profession of the tourists who have reported their monthly income greater than PKR 500,000 and it is shown that 45.83% of the high income tourists are engaged in private institutions follow by personal business which represents 37.5% of the total tourists. Similarly, 16.7% high income tourist work in governmental organizations.

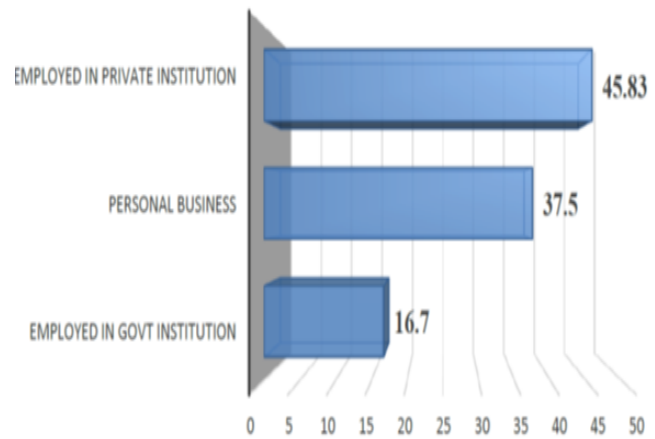


Fig. 3: Professions of High Income Domestic Tourists

Figures 4 shows the trip arrangement of the tourists visited Hunza and Nagar and the results indicate that majority of the tourists representing 72.1% travelled to Hunza independently i.e. travel arrangement by themselves. 26.1% have visited Hunza through a package by tour companies.

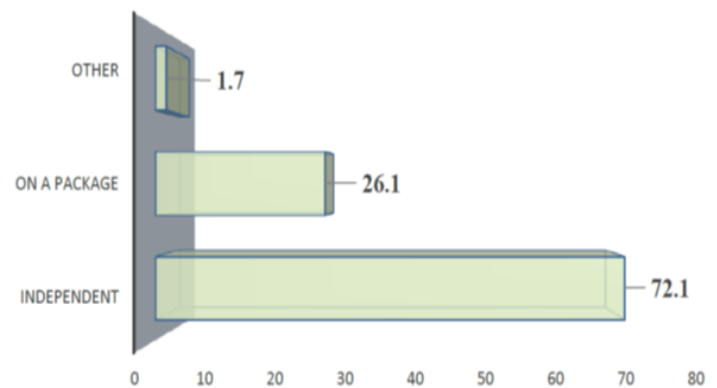


Fig. 4: Trip arrangements by the tourists to Hunza-Nagar Region

Respondents were also asked to indicate their number of visit to Hunza valley during the last one year and it is found that 58.5% of the visitors reported the current visit to the study area is their first ever visit whereas 23.3% have visited 2 times to Hunza valley in a year. Likewise, 7% of the respondents indicated that they have visited Hunza third times during the last one year (Table 4).

Table 5: Frequency of Trip to Hunza

| Trip Frequency | Freq. | Percentage |
|-------------------|-------|------------|
| First time | 168 | 58.5 |
| 2 times | 67 | 23.3 |
| 3 times | 20 | 7 |
| 4 times | 11 | 3.8 |
| More than 4 times | 21 | 7.3 |
| Total | 287 | 100 |

Table 6 indicates average planned and average actual expenditure of various categories of tourists during their visit to Hunza. It is interesting to know that the average planned expenditure for Hunza visit is significantly higher than the average actual expenditures incurred except in the case of excursionists. The average planned expenditures for domestic tourists are found PKR 97302.13 whereas, their average actual spending during their visit to Hunza are PKR 91633.19 and thus, the average difference between planned and actual expenditure are found PKR 5668.94. Similarly, this average difference is found PKR 40000 for Daytripper and PKR 18696.97 for international tourists. This analysis shows that tourists have higher willingness to pay for tourism activities and they could not spend all the trip within the planned expenditure. This may be partly due to the fact that visitors don't find the opportunities /options for money spending in Hunza and hence they took back a significant amount their planned trip budget. This is also due to poor market of local products and handcrafts, souvenirs and gifts.

Table 6: Average Planned and Actual Expenditure (in Rupees)

| Tourists Type | Planned Expenditure | Actual Expenditure | Difference |
|---------------|---------------------|--------------------|------------|
| Domestic | 97302.13 | 91633.19 | 5668.94 |
| Daytripper | 98000.00 | 94000.00 | 4000.00 |
| Excursionists | 61142.86 | 64428.57 | -3285.71 |
| International | 106121.21 | 87424.24 | 18696.97 |

Figure 5 indicates that trend of investment on hotel by hotel owner over the last 10 years. The investment trend is seen as increasing however, the increasing trend is significantly higher during the last five years (2014-2019) as compared to the initial five years (2009-2014). This analysis shows people are investing on hotel significantly and this investment trend has been increasing at increasing rate for the last five years.

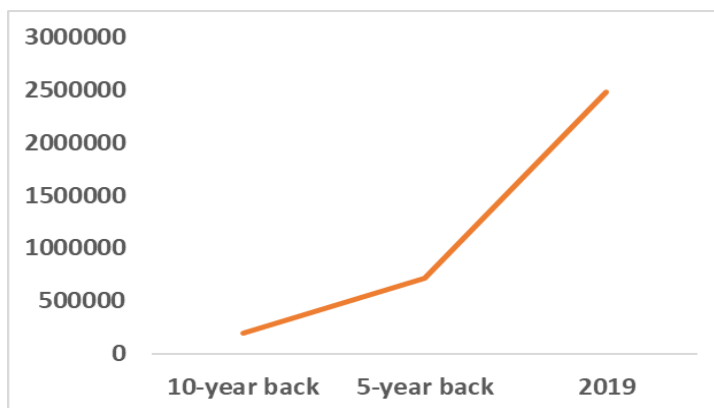


Figure 5: Trend of Hotel/Guesthouse Investment in Hunza

Hotels and guest house owners were also asked about expansion of their hotels in future and their responses are reported in Figure 6. It is revealed that 80% of the hotels owners have reported that they are going to expand their hotels in near future and these 80% hotels owners were

further asked to state the reasons of hotel expansion. It is found that 91% have reported that they are going to expand their hotels in order to meet the increasing demand of hotels due to tourists' inflow into the region. Figure 6 and Figure further reveals that 20% of the hotels owners did not wish to expand their hotels in near future and they were also asked to state the reasons for not expansion of hotel and the study found that 74% of the respondents stated that owing to already enough hotels in Hunza, they are not going to expand their hotels in near future.

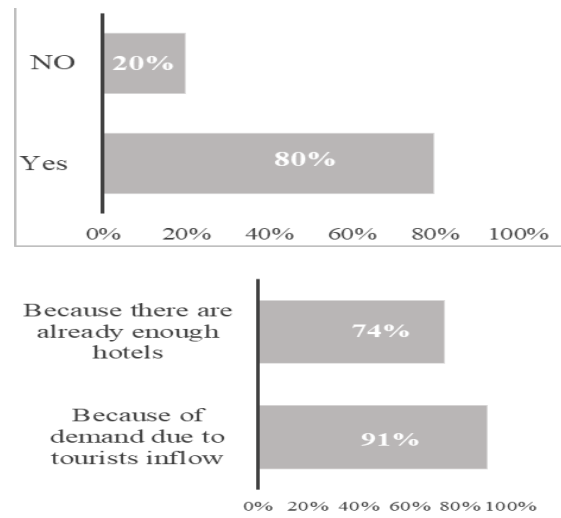


Fig. 6: Expansion and non-expansion plans of hotels in Hunza and their reasons.

Hunza has been recognized for various tourism activities which has been highlighted by the samples tourists of current study. Figure 7 shows, major purposes of the visits reported by the tourists. It reveals that around 59% respondents informed that their preference of visit as adventure tourism specially focusing on hiking and trekking.

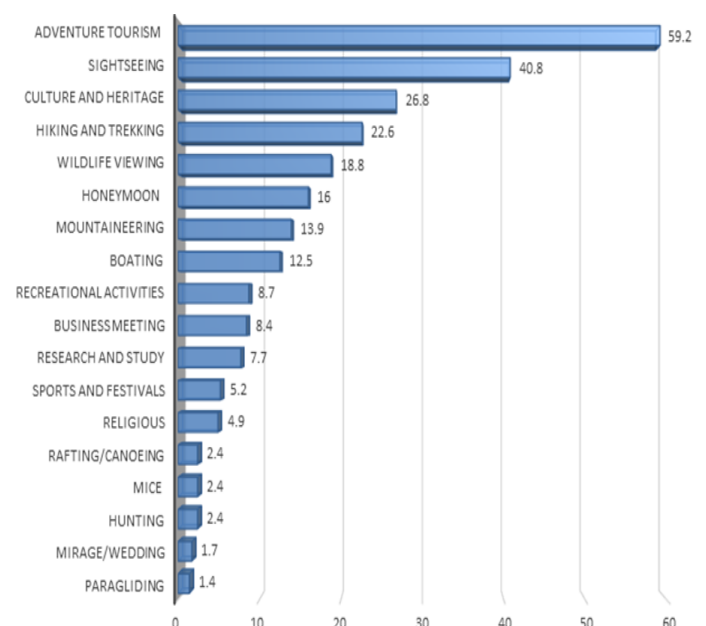


Fig. 7: Major Purposes of Visits of Tourists to Hunza-Nager

Although Hunza is suitable for both hard and soft adventure tourism. Domestic tourists who are the majority sample of current study, highlighted walking to Baltit Fort, Altit Fort and Hussaini Suspension Bridge etc. as trekking and hiking as they consider the activity a hard adventure for them. Since there were multiple responses against each category of purpose of visit, therefore, 23% of tourists also highlighted their intentions to visit Hunza for hiking and trekking and 14% for mountaineering activity which include majority of foreign tourists enjoy the mountaineering at Ultar peak (7388 mtrs.), Passu Peak (7284 mtrs.) and Spantik/Golden Peak (7029 mtrs.) etc. This shows that adventure tourism is one of the key tourism activity in Hunza.



Source: Qureshi; <https://www.gettyimages.com>

Figure 8: Tourists in Karimabad Hunza

As per responses from the sample tourists in the given study; 41% tourists highlighted their purpose of visit for sightseeing. Hunza remains one of the fascinating spots for the visitors in terms of viewing e.g. sunset at duiker, four seasons' colors, glacial viewing at Passu, Passu Cones and many more. While wildlife viewing in upper Hunza has also been significantly highlighted by 19% tourists specially in the Khunjarab area.



Source: <https://www.cep.com.pk>

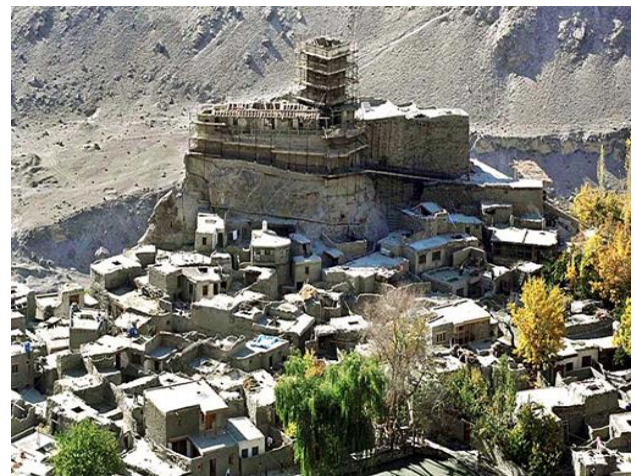
Fig. 9: View of Ultar Peak in Hunza

Hunza is rich in its cultural diversity and heritage resources. Two UNESCO certified heritage sites (Baltit fort and Altit fort) are located in Hunza; 27% respondents significantly showed their purpose of visit to know about the cultural and heritage resources of Hunza, specially to visit old heritage settlements in Baltit and Altit Hunza.



Source: alamy.com

Fig. 10: View of Baltit Fort



Source: imgur.com

Fig. 11: View of Altit Fort

Honey moon and wedding tourism activity is becoming an emerging tourism attraction in Hunza. Although this concept is very old in rest of the globe but this is completely a new tourism activity which has been conceptualized in Hunza for last two years. Many couples along with their families and friends travel all the way from down cities to Hunza for honey moon and weddings as almost 17% of the respondents also highlighted their purpose of visit for honey moon and weddings.



Source: <https://pakistantraveltour.com>

Fig. 12: Wedding Tourism in Hunza



Source: <https://pamirtimes.net> and
<https://forestrypedia.com/>

Fig. 13: Ibex hunting under Trophy Program by Wildlife Department

While other purposes to visit Hunza were highlighted by respondents as boating at Ataabad Lake (13%), recreational activities (9%), business meetings (8%), research and studies (8%), sports and festivals (5%), religious tourism (5%), rafting/canoeing (2%), MICE (2%), hunting (2%) and paragliding (1%). Although hunting shows low percentage of engagement but its tourism value is very high. Winter is almost off season for tourist in Hunza but not for hunters and hunting lovers. Trophy hunting is wild game for tourists especially professional hunters. Generally, only parts of the animal are kept as the trophies (usually the head, skin, horns or antlers) and the carcass itself is used for food or donated to the local community. This game is played mostly in upper Hunza where domestic and international tourist visit for hunting purpose. They get the license of Ibex, Blue sheep and Yolk hunt which significantly contributes in the economy. Some tourist pay visit to just enjoy the seen and see the wild animals with their naked eyes especially snow leopard.



All these tourism activities can be promoted to leverage the potentials existed in Hunza for the mentioned tourism attractions. Information is key in attracting tourists to any destination. Various sources of information about the destination (Hunza) has been highlighted by the respondents. As per acquired data, majority of tourists (73%) get the information about Hunza from social media sources which include; Facebook, Instagram, Twitter etc. Since domestic tourists are major respondents of the current study, therefore, it can be revealed that many of the relatives and friends of 69% respondents had visited Hunza and through word of mouth, they further disseminate the information about Hunza as tourists' destination. Although 18% respondents got the information from reports, magazines and newspapers but it seems a vital source of information for the visitors since the trend of reading reports, magazines and newspapers to find a destination is decreasing. Surprisingly, only 18% sample tourists highlighted the contribution of travel agencies disseminating the information about the destination Hunza which shows the weak marketing strategies of travel agents. Travel guide books, exhibitions and fairs and Pakistan embassies contribute 11%, 6% and 4% respectively which shows low marketing efforts of these institutions (Fig. 14).

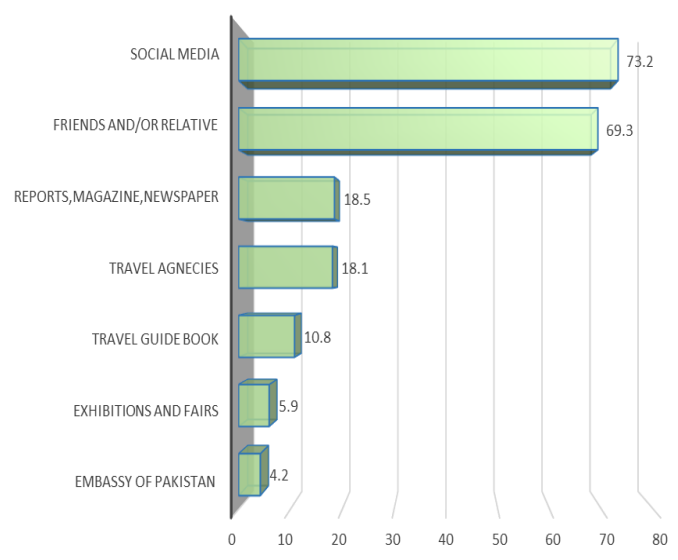


Fig.14: Sources of Information about Hunza

The results of survey show that majority (35%) visitors in the given sample availed only room facility during their visit to Hunza whereas (33%) highlighted that they availed inclusive services of hotels/guest houses. As per given data 26% visitors avail room and breakfast, 3% room and dinner while only 2% avail room and lunch (Figure 15). The results revealed that many hotels in Hunza rely on accommodation services and they are not offering additional amenities specially food services whereas few hotels/guest houses offer complimentary breakfast. In some cases, visitors want to experience variety of cuisines, local food etc. therefore they do not avail inclusive services.

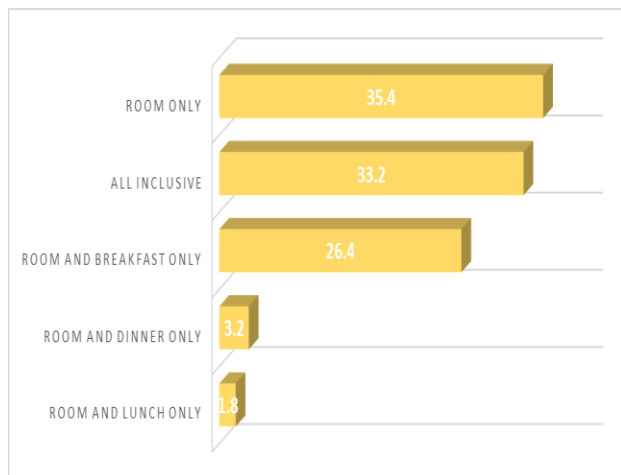


Figure 15: Hotel Services Availed by Tourists

The acquired survey data showed (Figure 16) that majority of visitors (89%) eat their food at hotels and restaurants whereas 11% respondents highlighted they cook by their own during their visit to Hunza. There are various reasons of self-cooking during visit to Hunza. Some visitors travel without basic information about the destination, food taste and host community. They perceive that it will be difficult for them to find low price food and spicy/delicious food, sometimes halal food because many visitors cannot differentiate among the people of Kelash and Hunza. Therefore, they feel that they will not get halal food. Many domestic tourists who travel in bachelors' groups tend to cook by their own to save money but it has negative impacts on local economy as well as environment.



Figure 16: Tourists' Preferences about Food Consumption

Import leakage is one of the critical issues of tourism economic at any destination. The current study shows an alarming condition of import leakage as it shows the comparative analysis of two key tourists' spots on District Hunza and District Nager of Gilgit-Baltistan. In the current study, import leakage was assessed in three product categories vegetables, general items and meat. General items included all the consumers' goods except vegetables and meat. Data revealed that there is 85% import leakage in Hopper (Nagar) whereas 95% leakage in Hunza for vegetable items which show majority of vegetables provided in tourism supply chain are purchased from outside the local economy and money goes outside. Moreover, there is more critical condition in terms of general items which shows 89% leakage in Hopper and 99% leakage in Hunza which means that there is no any concept of local value chain/supply chain. There is no concept of local productions in both tourist spots. While the results show different scenario for meat supply to the tourists' market. According to acquired data 50% of meat in Hoper comes from outside and 70% of meat is being imported from outside economy in Hunza. Although, results show low import leakages of meat as compared to other two product categories but majority of the mentioned yak meat comes into the market during tourism off season; November-March which means that major portion of meat sales cover the local market not tourists market. Therefore, there is dire need to establish proper linkage of local economy and tourist market.

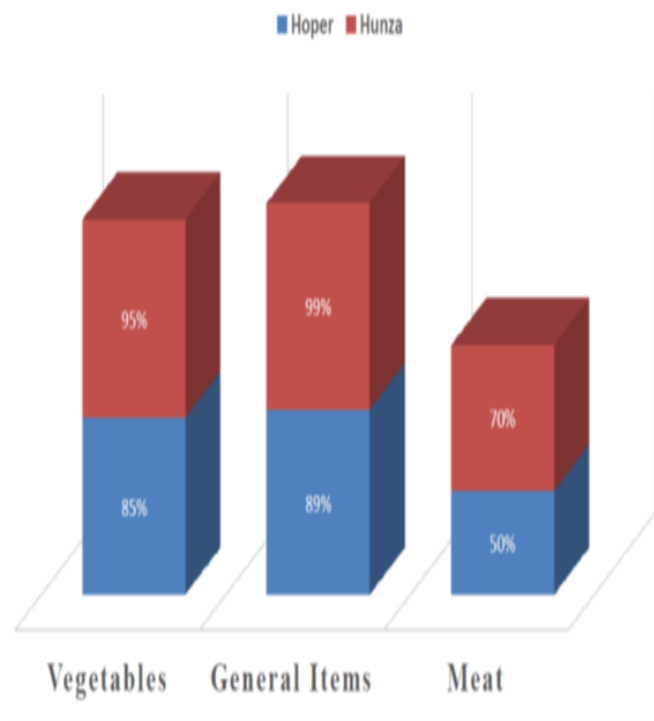


Figure 17: Import Leakages of vegetables, general items and meat in Hunza and Hopper

4.1 Tourism Satellite Account Tabulation

This section shows the TSA Tables which have been constructed by using the methodology of Tourism Satellite Account (TSA). The data used in this study have been collected by various surveys conducted during the month of November 2019. The data are collected on the bases of

consumption, investments done, and the employment opportunities generated by the tourism industry under the umbrella of TSA. The initial data based on inbound tourism in 2019 and the total income generated during this period. Hunza is far-flung area in mountains of Karakorum, Hindu Kush and Himalayan mountainous region. In the result of that the tourists have only by road access this region which through Karakorum highway (KKH). Thus, we can say that hundred percent of tourist use land transport to access this region. The standards TSA Tables 1, TSA-Table 2 and TSA-Table 4 show (Prefix TSA is used to differentiate these from other Tables), the expenditure made by tourists in different means in tourism industry during the month of November 2019. The spending is based on resident and non-resident travelers who come and spend money in Hunza for recreational activities. Following the standards of TSA, the expenditures of various types of tourists on tourism characteristics and tourism related products have been reported below in the combined TSA Table 1, 2 and 4. Results of the study show that on accommodation domestic tourists have spent around PKR 3.482 million and inbound tourists have spent PKR 0.489 million, thus, making the total expenditure on accommodation PKR 3.97 million. Further, the total amount spent on food and beverages are accounted for PKR 1.94 million whereas, PKR 1.59 million have been spent on shopping and souvenir by tourists in Hunza. The detail of expenditures by tourists on various tourism characteristics products and tourism related products are reported below in TSA Tables 1, 2 and 4 where all figures are measured in Pakistan Rupees (PKR).

TSA Table 1: Inbound Tourism Expenditure (in PKRs)

| Consumption Products | Inbound Tourism Expenditure (PKR) |
|--|-----------------------------------|
| Accommodation | 489032 |
| Expenditures on Food and beverages | 276566 |
| Expenditures on Shopping and souvenir (excluding local made goods) | 210855 |
| Expenditures on Entertainment | 35242 |
| Expenditures on cost of sightseeing tour | 26187 |
| Expenditures on Transportation | 508407 |
| Expenditures on Handicrafts | 126050 |
| Expenditures on Dry fruits | 148259 |
| Expenditures on Gemstone | 70013 |
| Expenditures on Equipment (mountaineering gears etc.) | 9613 |
| Expenditures on Sea-buckthorn juice | 977 |
| Expenditures on Apple juice | 4139 |
| Expenditures on Cherry juice | 5025 |
| Expenditures on Yak meat | 23462 |
| Expenditures on walnut cake | 46091 |
| Expenditures on local guide | 54000 |
| Expenditures on Miscellaneous | 110722 |
| Total | 2144640 |

TSA Table 2: Domestic Tourism Expenditure (in PKRs)

| Consumption Products | Domestic Tourism Expenditure (Pak. Rupees) |
|--|--|
| Accommodation | 3482503 |
| Expenditures on Food and beverages | 1645205 |
| Expenditures on Shopping and souvenir (excluding local made goods) | 1345250 |
| Expenditures on Entertainment | 210875 |
| Expenditures on cost of sightseeing tour | 241580 |
| Expenditures on Transportation | 3620474 |
| Expenditures on Handicrafts | 642980 |
| Expenditures on Dry fruits | 678500 |
| Expenditures on Gemstone | 498577 |
| Expenditures on Equipment (mountaineering gears etc.) | 68453 |
| Expenditures on Sea-buckthorn juice | 6960 |
| Expenditures on Apple juice | 29477 |
| Expenditures on Cherry juice | 35782 |
| Expenditures on Yak meat | 167079 |
| Expenditures on walnut cake | 328222 |
| Expenditures on local guide | 207365 |
| Expenditures on Miscellaneous | 788478 |
| Total | 13997760 |

TSA Tables 4: Internal Tourism Consumption (in PKRs)

| Consumption Products | Domestic | Inbound | Daytripper | Excursionists | Total |
|---|----------|---------|------------|---------------|---------|
| Accommodation | 3482503 | 489032 | - | - | 3971535 |
| Expenditures on Food and Beverages | 1645205 | 276566 | 13450 | 11500 | 1946721 |
| Expenditures on Shopping, Souvenir (excluding local made goods) | 1345250 | 210855 | 13580 | 22395 | 1592080 |
| Expenditures on Entertainment | 210875 | 35242 | 12815 | 7476 | 266408 |
| Expenditures on cost of Sightseeing | 241580 | 26187 | 3800 | 5150 | 276717 |
| Expenditures on Transportation | 3620474 | 508407 | 21500 | 14500 | 4164881 |
| Expenditures on Handicrafts | 642980 | 126050 | 3200 | 1450 | 773680 |
| Expenditures on Dry fruits | 678500 | 148259 | 1820 | 2400 | 830979 |
| Expenditures on | 498577 | 70013 | 800 | 4100 | 573490 |

| | | | | | |
|-------------------------------------|----------|---------|-------|-------|----------|
| Gemstone | | | | | |
| Expenditures on Equipment | 68453 | 9613 | 1495 | 1039 | 80600 |
| Expenditures on Sea buckthorn Juice | 6960 | 977 | 355 | 207 | 8499 |
| Expenditures on Apple juice | 29477 | 4139 | 1505 | 878 | 35999 |
| Expenditures on Cherry juice | 35782 | 5025 | 1827 | 1066 | 43700 |
| Expenditures on Yak meat | 167079 | 23462 | 8532 | 4977 | 204050 |
| Expenditures on Walnut Cake | 328222 | 46091 | 3150 | 2400 | 379863 |
| Expenditures on Local Guide | 207365 | 54000 | 3500 | 2800 | 267665 |
| Expenditures on Miscellaneous | 788478 | 110722 | 4263 | 3487 | 906950 |
| Total | 13997760 | 2144640 | 95592 | 85825 | 16323817 |

Tourism Satellite Account (TSA) Table 7 shows the number of the employment generation made by tourism industry. Five major sectors that provide directly employment to the people are shown as accommodation and services, food and beverages services, vegetables sellers, transportation and retail shops. The major employment generation was done by accommodation providers. This sector includes hotels, Guest houses, camp services and hostels. It is evident from table 07 that accommodation sector provided employment to 1606 male and 49 females during the year 2019 whereas, transportation sector ranks second in terms of providing employment opportunities to people (providing employment to 427 persons). Likewise, food and beverages services sector provided employment to 137 males and 8 females, vegetables sectors provided employment to 41 whereas, retail shops provided the same to 107 persons during the year 2019 (TSA Table 7).

TSA Table 7: Employment Generations from Tourism Industry

| Tourism Industries | No of establishments | Male | Female | Total |
|-------------------------------------|----------------------|------|--------|-------|
| Accommodation Services for visitors | 75 | 1606 | 49 | 1730 |
| Food and Beverage serving services | 33 | 137 | 8 | 178 |
| Vegetables Sellers | 12 | 28 | 1 | 41 |
| Passenger Transportation Services | 11 | 415 | 1 | 427 |
| Retail Shops | 10 | 97 | 0 | 107 |
| Total | 141 | 2283 | 59 | 2483 |

The Tourism Satellite Account (TSA) Table 10i shows the

number of inbound and domestic tourism total trips done and stays made by the tourists. It is found that total 33 international tourists were surveyed during the month November 2017 and the number of night stays in Hunza/Nagar are found 106. It indicates that on average, an international tourist stays 3 days in Hunza/Nagar. Similarly, in the case of domestic tourists, this study found that 19 domestic same days/excursionists and 235 domestic tourists have visited Hunza/Nagar during the month November 2019 and the total number of night stays are found as 660 which indicates that the average night stays of domestic tourists is 2.8 which is slightly lower than the average night stays of international tourists.

TSA Table 10i: Number of Trips and Overnights by Tourism Characteristics and Types

| | Inbound Tourism | | | Domestic Tourism | | |
|--------------------------------------|-------------------------|----------|----------------|-------------------------|----------|----------------|
| | Same Day/ excursionists | Tourists | Total Visitors | Same Day/ excursionists | Tourists | Total Visitors |
| No of Trips | 0 | 33 | 33 | 19 | 235 | 254 |
| Overnight stay (No. of nights spent) | 0 | 106 | 106 | 0 | 660 | 660 |

Tourism Satellite Account (TSA) Table 10ii indicates that accommodation capacity of hotels in Hunza and Nagar. It shows that total 75 hotels were surveyed and it is found that there are total 225 single rooms, 440 double rooms, 2058 deluxe room and 50 suit rooms. This analysis indicates that on average each hotel has 03 single rooms, 06 double rooms and 2.7 deluxe rooms.

TSA Table 10ii: Accommodation Capacity in Hotel (n=75)

| Single Room | Double | Deluxe | Suite Room |
|-------------|--------|--------|------------|
| 225 | 440 | 208 | 50 |

Tourism Satellite Account (TSA) Table 10iii shows the occupancy rates during the year. September to December is low season were tourist travel for autumn season the occupancy rates are low. January to April is similar like September-December occupancy rates are very low. Where May-August is peak season were the occupancy rate increasing from 80 to 100 percent. This is peak season when more tourist travel towards Hunza which shows the boom in tourism industry. TSA Table 10iii shows that average occupancy rate during the year 2019 and reported by 75 hotels and guest houses in Hunza and Nagar. It is found that May-August remained as peak tourist seasons where hotels occupancy rate is highest (50.7%), hotels have reported that their occupancy rate remained 80-100 percent during this season, whereas, 42.6% hotel reported 60-80 percent occupancy rate. During the season January-April 2019, 38.7% hotels reported their occupancy rate remained less than 20% which shows that there is no sustainability in tourism industry in Hunza

TSA Table 10 iii: Season-Wise Hotels Occupancy Rate (n=75)

| Occupancy Rate | January-April 2019 | May-August 2019 | Sep-December 2019 |
|----------------|--------------------|-----------------|-------------------|
| | Percentages | | |
| less than 20% | 38.7 | - | 4 |
| 20% to 40% | 32.0 | - | 44 |
| 40% to 60% | 20.0 | 6.7 | 24 |
| 60% to 80% | 8.0 | 42.6 | 21.3 |
| 80% to 100% | 1.3 | 50.7 | 6.7 |
| Total | 100.0 | 100.0 | 100.0 |

4.2 Focal Group Discussion and Gap Analysis

No doubt tourism has brought extensive opportunities of development to the local people. It carries billions of rupees through tourists' expenditures. Enabling the female and youth in the tourism has led to the development of their families as the dividends have been invested in educating their children which is one aspect of the tourism development whereas there are challenges too which have been identified during this study. A focal group discussion was also arranged with the experts from various segments of tourism sector both at Hunza and Negar (Hopper). This study and group discussions revealed that the trickledown effect of tourism is not too wide to eradicate poverty and only small proportion of population has got its dividends. There is crucial gap of production in the local markets, therefore, severe import leakage exists which means that portion of tourists' spending majorly flows outside the local economy. A complete broken tourism supply chain has been identified, local producers are even not in a position to supply the basic raw material to the tourism industry. It was indicated in the results that billions of rupees have been invested in building hotels and guesthouses all over Hunza specially on concentrated concrete structures/ constructions in Aliabad, Karimabad in central Hunza and Sost in Upper Hunza. Additionally, majority are willing to expand their hotels and guest houses infrastructure assuming that tourism to flourish in coming years and demand for the accommodation will increase proportionately. Unfortunately, no one knows about the actual seasonality of the tourism business in Hunza/Nager and very importantly no one is aware of forecasted trends of tourists' flow. If tourism industry collapses no alternate plans are in their mind that how to refund the billions of loans borrowed from commercial banks and other financial institutions on heavy interest rate. The influx of tourists especially domestic tourism created pressure on the land as the locals are converting the agricultural land to hotels and guest houses which caused decreasing per capita holding of land as well as production yield. Many of the households even build the heavy concrete guest houses in the places even where there is no any accessible road connectivity is available. These unplanned constructions create another mess in the rural settings of Hunza. According to the data available at Foreign Tourist Registration Office Gilgit, there are still few

number of foreign tourists visiting to these mountain areas. For the overall tourism development and foreign exchange earnings, it is very crucial to attract inbound tourists from across the globe especially from the countries where adventure tourism is being recognized. Although total tourists' expenditures are not so high if we look at TSA table 4 total internal expenditures; since sample collected data also represents big hotels e.g. Serena Hotels, Darbar Hotel, Embassy Hotel, Eagle Nest Hotel etc. and an average expenses incurred on accommodation during the visit shows Rs.3659 per night, food and beverages Rs. 1695 per day, Shopping and Souvenirs Rs. 5547, entertainment Rs. 928, transportation Rs. 14511, sightseeing Rs.964, handicraft purchasing Rs. 2696, Dry fruits Rs. 2895, Gemstone Rs. 1998, spending on equipment (mountaineering gears etc.), purchase Rs. 280, walnut cake Rs. 1323, spending on local guides Rs. 932 and expenditures on miscellaneous Rs. 3160. Consumption of local products; apple juice, cherry juice and sea-buckthorn juice shows insignificant contribution in the local economy amounting Rs. 125, Rs. 152 and Rs. 29 respectively. This depicts that local entrepreneurs are still not in a position to combat the tourists' need and taste. This is very critical to consider so that local productivity can be integrated into tourists' market. Lack of legislation on urban planning is another dilemma in Hunza. There are no building codes available nor customary rules and principals are totally in place. Therefore, giants of tourism business can build hotels/guesthouses anywhere any time without considering the local dynamics and traditional norms.

5 CONCLUSION

Government must offer soft loans to local youth for developing entrepreneurship. The bank loans must be linked with the concept of sustainable and green buildings. Rich potentials for tourism exist but the involvement of females in the tourism also required for their mainstreaming and to increase family incomes which will contribute in reducing import leakage of tourism expenditures from the local economy. The local values and culture must be connected to businesses and construction in the region. To this end the capacity building of the locals will be required. Therefore, a comprehensive awareness program must be launched in the entire region to educate people about the smart businesses and constructions. There is a need to develop ecotourism and sustainable natural resource management. For ecotourism, specialized trained human resource is also required. Therefore, various trainings and courses offered by NAVVTC -Hunarmand Jawan program and other institutions should be developed in line with the needs of ecotourism. Since various tourism spots are visited by the thousands of tourists every day, so there is a need to conserve the natural resources and implement some taxes for conservation. Culture and local traditions must be blended into the tourism. Therefore, effective and close coordination and campaign with community is required to ensure sustainable tourism development. There is dire need to emphasize over market driven skills in the tourism sector. No any specialized institution is working massively on skill development required for the tourism sector. Therefore, NAVVTC, Government of Gilgit-Baltistan and NGOs should focus on soft skill trainings and courses. Tourism bodies e.g. Gilgit-Baltistan Tourism Department should introduce an aggressive marketing campaign to attract more foreign tourism so that good foreign

exchange can be attracted to the country in general and the region in particular. Presently only local tour operators are involved for attracting domestic/foreign tourists, but their capacity building and protection with proper legislation and policy making is required. Moreover, to promote tourism in the region, national tourism companies must be attracted in partnership with the local tour operators. Tourism will have negative impacts on the natural resources like water availability and its quality, land use, solid waste, sewerage etc. A proactive approach is required for that. Develop trekking access and mule tracks to all glaciers for the sustainable tourism developing without putting pressure on glaciers in Hoper glaciers, Biofo Hisper, Passu glacier and Batura glaciers etc. To promote and increase tourism on across the river on Nager side, access road from Pissan to Nagar may be constructed, which will also act as CPEC alternate route. Tourism readiness assessment of the region is required. External investors are taking benefits of tourism, in a greater extent. A policy for engaging the local people in these businesses must be developed. The local committees must be formed to discourage the sale of lands to external people for constructions of hotels and guest houses rather partnership/lease models may be introduced. Provincial level legislation is required for external investment in the commercial and tourism activities. Community involvement in the legislation and policy making must be encouraged, so that ownership of the community can be ensured. Town Planning and Urban Planning must be done in all parts of the region. Local tradition and cultures must be conserved and made be part of the Tourism policy. Moreover, legislation for effective urban and town planning it is very crucial to strengthening local bodies/institutions for their empowerment. The provincial Government needs to work with academia and society to develop Strategic Plan for Ecotourism to save the ecological value of the region and sustain its biodiversity

ACKNOWLEDGMENT

The authors wish to thank ICIMOD and WWF, Pakistan for the support in conducting the study.

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