A Study of Natural Disaster 2013 and Tourism Business of Uttarakhand

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Abstract – Uttarakhand is called as land of god and acts of god destroy tourism business in the area. Uttarakhand faced disaster continuously throughout history, but 2013 disaster affected a lot to tourism, community and environment. Researcher studied here relationship between natural disaster and tourism business. Results indicate that natural disaster influence tourism business negatively.

Keywords: Natural Disaster, Tourism Business, Uttarakhand

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INTRODUCTION

Tourism industry is one of the fastest growing sectors which is helpful in job creation, foreign exchange earnings and contribute to the GDP of the country. Uttarakhand's economy is based on tourism and agriculture (mainly fruits) and natural disasters affects both the sector. The state Uttarakhand is situated in the lap of Himalaya; there are more chances of natural disasters due to the geophysical location. The number of tourists visiting Uttarakhand has consistently increased from around 11 Million in 2000 to 28 Million in 2012. But in the year 2013, the State was washed away by devastating floods and landslides that resulted in significant 30% decline in tourist visits. In 2014, the State regained its momentum and witnessed 10% growth in total tourist visits.

A natural disaster is a geophysical, atmospheric or hydrological event (e.g., earthquake, landslide, tsunami, windstorm, flood or drought) that has the potential to cause harm or loss, while a natural disaster is the occurrence of an extreme hazardous event that impacts on communities causing damage, disruption and casualties, and leaving the affected communities unable to function normally without outside assistance (Twigg, 2007).

The natural disaster in Uttarakhand has caused millions of losses in economy, livelihood and natural resorces. The Rudraprayag district where Kedarnath is located has already faced the problem of natural disasters 8 times for last 34 years. During 1953-1980, 764.48 million peoples have suffered mainly due to flood and natural disaster (Sharma, Mishra, & Tyagi, 2013).

Massive floods and landslides in June 2013 led to what most believe to be Uttarakhand's worst disaster in living memory. The devastation was state wide, with estimates of anticipated revenue losses in the tourism sector alone being over Rs. 120 billion for 2013–14 rising to Rs. 200 billion in 2014–15 and an estimated Rs. 250 billion in 2015–16 (Sharma etal. 2013.

REVIEW OF LITERATURE

Tourist destinations in every corner of the world face a disaster of one form at some point in their history (Faulkner, 2001). The exposure of tourism to natural calamity is related with the attractiveness of many high-risk exotic locations, where events such as hurricanes, landslide, avalanches and volcanic activity are common (Murphy & Bayley 1989).

Tourism is highly prone to disaster. The increased volume of international tourist movement has combined with the attractiveness of high-risk exotic destinations to expose tourists to greater level of risk (Drabek, 1995)3, (Murphy, 1989)4. Tourists are more vulnerable than locals in disaster situation because they are less familiar with local hazard situation and the available resources that can be relied on to avoid risk, and they are dependent on the service provider (Burby & Wagner, 1996)5; (Drabek, 1994).

Tourism business operator hope to construct accommodation and other facilities close to scenic areas, which provide them special geography, are often nearby to the mountains or the ocean. Unfortunately these are also the sites that most repeatedly experience natural disasters. During the

peak season visitors gather in large numbers that can place people in danger (Tsai & Chen, 2011).

Tourism industry is immune to natural disaster that is reflected in annual data. Further high development of the tourism sector therefore offers some opportunity to reduce the economy's vulnerability to disasters. However, any upper limits imposed by natural disasters on the potential degree of expansion of the industry, from the perspective of both potential investors and visitors, should be investigated. Tourist should be protected from the event of disaster and damaging publicity must be avoided (Benson, 1997).

Nott (2006) studied that Floods are the most costly and wide reaching of all natural hazards. They are responsible for up to 50,000 deaths and adversely affect some 75 million people on average worldwide every year. Disease outbreak is common especially in less developed countries. Disease like Malaria and Typhoid are also common in tropical countries after floods. It has been estimated that in India and Bangladesh 300 million people live in areas that are affected by floods.

The floods destroyed tourism infrastructure like hotels, lodges and restaurants and abruptly ended the main annual tourist season. Scores of hotel buildings and residential houses collapsed into the swirling flood waters in Uttarakashi, Rudraprayag and Chamoli districts. GMVN, the state-owned corporation, lost popular tourist rest houses at Syalsaur, Chandrapuri, Birahi and Kaudiyala among other sites. The devastation was state wide, with estimates of anticipated revenue losses in the tourism sector alone being over Rs. 120 billion for 2013–14 rising to Rs. 200 billion in 2014–15 and an estimated Rs. 250 billion in 2015–16 (PHD Research Bureau, 2013).

Patra (2013) found that this being the time of the year when tens of thousands of pilgrims and tourists flock to Uttarakhand for the Char Dham Yatra (the most revered Hindu pilgrimage of Journey of Four Holy Shrines of Gangotri, Yamunotri, Kedarnath and Badrinath), the losses are far too higher. There number has dramatically increased in recent years; from 362,757 in 1990 to 925,998 in 2012. And, going by the trend, it has been projected to cross more than one million in 2013. Tourism accounts for between 25-30% of the state's gross state domestic product. A recent report on tourism in India said that in spite of hosting 4% of India's tourists, Uttarakhand spends only 1.5% of its budget on tourism (Live-mint, 2013).

RESEARCH METHODOLOGY

Objectives

To study natural disaster and its relation with tourism business

To assess the impact of natural disaster 2013 on tourism businesses in Uttarakhand

HYPOTHESIS

H_1: there is no relation between natural disaster and tourism business

H_2: In context of tourism businesses/tourism professionals, there is a significant difference in terms of impacts, before and after natural disaster.

For this research four natural disaster affected sites (Gangotri, Yamunotri, Kedarnath and Badrinath) have been selected. Both secondary and primary source were used for data collection. Secondary data collected from research journals, thesis, reports, newspapers etc. Primary data collected through structured questionnaire. Tourism professionals were selected for the primary data and filled 120 questionnaires. For analysis and interpretation paired sample 't' test was used by researcher.

ANALYSIS OF DATA

Table 1

Demographic Profile of Respondents (Tourism Professionals) N=120

	Frequency	Percentage
Male	109	90.8
Female	11	09.2
Age Group (in years)		
18-25	8	06.7
26-40	42	35.0
41-60	57	47.5
61 and above	13	108
Marital Status		
Single	19	15.8
Married	87	72.5
Any Other	14	11.7
Education Level		
Upto 10	40	33.4
10+2	28	23.3
Graduation	16	13.3
Above Graduation	12	10.0
Professional Qualification	8	06.7
Any Other	16	13.3
Income		
Less than 1 lakh	19	15.8
1 lakh to 2 lakh	54	45.0
2 to 2 lakh	32	26.7
3 lakh and above	15	12.5
Belongings		
By Birth	76	63.3
Migrated from lower Districts	32	26.7
Migrated from other states	12	10.0

Tourism professionals can provide proper information regarding impacts of natural disaster on tourism. Below given table depicts demographic profile of respondents who were working in tourism

Naveen Kumar*

field. Above 90% respondents were male and female were just 9%. In terms of age group 6.7% respondents belong to 18 to 25, 35% were belongs to 26 to 40. In the age group of 41 to 60 respondents were 47.5% and 10.8% were from 61 and above. Most of the respondents were married (72.5%), 15.8% were single whereas 11.7% belongs to other category. 33.4% respondents were educated up to 10th class, 10+2 were 23.3%. Graduate respondents were 13.3% and 10% were with post graduation. Professional qualification respondents were just 6.7% and 13.3% were with other which are not mentioned in categorisation. In terms of income 15.8% respondents were belongs to less than 1 lakh rupees and 45% from between 1 to 2 lakh rupees. 26% respondents have income of rupees 2 to 3 lakh rupees and only 12.5% were belongs to 3 lakh and above rupees. Most of respondents 63.3% were born in study area while 26.7% were migrated from lower districts. Just 10% respondents were migrated from other states.

PAIRED SAMPLE 'T' TEST OF TOURISM PROFESSIONALS

Table 4.11

Paired Sample 't'-Test of Tourism Professionals

Sr. No	Variables	Mean	Std. Deviation	't'	Skewness	Kurtosis
1	Tourism had grown in the Area / Tourism has growth in the Area	2.1	1.3	17.62	.089	-1.207
2	Tourism Created Employment / Tourism is still creating Job	1.3	1.19	11.49	.894	.199
3	Tourism was the Main Source of Income / Tourism is the Main Source of Income	.60	.491	13.36	-.413	.221
4	Cancelation of Booking was negligible / Cancelation of Booking is negligible	1.30	1.49	9.53	.581	-1.27
5	Tourism improved standard of living / Tourism improves standard of living	.800	.751	11.66	-1.10	1.24
6	Family occupation was supported by tourism / Family occupation is supported by tourism	.100	.834	1.31	-1.25	1.61
7	Family occupation shifted due to tourism / Family occupation shift due to tourism	.001	1.18	.001	-1.10	2.13
8	Government provided financial support for tourism business / Government provide financial support for tourism business	.001	.44909	.001	.001	2.138
9	Attitude of Government while Issuing Permits was Relaxed / Attitude of Government while Issuing Permits is Relaxed	.100	.30126	3.63	2.70	5.38

To test the hypothesis that the pre disaster impacts (M, S.D) and post disaster impacts means (M, S.D) were equal, a dependent/paired sample t-test was performed. Prior to conducting the analysis, the assumption of normality distribution difference scores was examined. The assumption was considered satisfied, as the skew and kurtosis level were estimated, which is less than the maximum allowable values for a t-test (i.e., Skew<|2.0| and kurtosis< |9.0|); postern 1984). It will also be noted that the dependent sample t-test is appropriate in this case. The null hypothesis is appropriate in this case. The null hypothesis of equal impact was rejected, t (n-1) =, p<.001.

Table 1

Analysis of Tourism Professionals' Agreement Level on Impact of Natural

Disaster on Tourism (N=120)

S. NO	Attribute	Sign 2 tail	Hypothesis
1	Tourism had grown in the Area / Tourism has growth in the Area	.001	H$_2$Accepted
2	Tourism Created Employment / Tourism is still creating Job	.001	H$_2$Accepted
3	Tourism was the Main Source of Income / Tourism is the Main Source of Income	.001	H$_2$Accepted
4	Cancelation of Booking was negligible / Cancelation of Booking is negligible	.001	H$_2$Accepted
5	Tourism improved standard of living / Tourism improves standard of living	.001	H$_2$Accepted
6	Family occupation was supported by tourism / Family occupation is supported by tourism	.192	H$_2$Rejected
7	Family occupation shifted due to tourism / Family occupation shift due to tourism	.100	H$_2$Rejected
8	Government provided financial support for tourism business / Government provide financial support for tourism business	1.00	H$_2$Rejected
9	Attitude of Government while Issuing Permits was Relaxed / Attitude of Government while Issuing Permits is Relaxed	.001	H$_2$Accepted

The above table indicate acceptance and rejection of hypothesis "*In context of tourism businesses/tourism professionals, there is a significant difference in terms of impacts, before and after natural disaster*". The data depicts that variable serial number 1, 2, 3, 4, 5, 9 were accepted and another 6, 7, 8 variables were rejected, that mean natural disaster affects tourism business in Uttarakhand.

CONCLUSION

Uttarakhand faced a number of disasters throughout history but natural disaster 2013 was worst of them. Tourism is the main source of income for locals and professionals. Researcher found that natural disaster affects tourism business and tourist flow decreased after the disaster. Sustainable approach is required for the development of tourism in the area.

REFRENCES

Benson, C. (1997). *The Economic impact of natural disasters.* London: Overseas Development Institute Portland House Stag Place.

Burby, R. J., & Wagner, F. (1996). Protecting tourists from death and injury in coastal storm. *Disasters, 20* (1), pp. 49-60.

Naveen Kumar*

Drabek, T. E. (1994). Risk perceptions of tourist business managers. *The Environment Professional, 16*, pp. 327-341.

Drabek, T. E. (1995). Disaster responses within the tourism industry. *International Journal of Mass Emergencies and Disasters, 13(1)*, pp. 7-23.

Live-mint. (2013, June 30). *Uttarakhand: a state caught unprepared.* Retrieved from Live Mint: http://www.livemint.com /Opinion/bqf8R3mRLr50kJyUspc0IJ /Uttarakhand-a-state-caught-unprepared.html

Murphy, P. E. (1989). Tourism and disaster planning. *Geographical Review, 79(1)*, pp. 36-46.

Murphy, P. E., & Bayley, R. (1989). Tourism and disaster planning. *Geographical Review, 79* (1), pp. 36-46.

Nott, J. (2006). *Extreme Events: A Physical Reconstruction and Risk Assessment.* New York: Cambridge University Press.

PHD Research Bureau. (2013). *Life ahead in Uttarakhand: Rebuilding infrastructure and reviving economy.* New Delhi: PHD Chambers of Commerce.

Sharma, M., Mishra, S. K., & Tyagi, S. (2013). The impact of torrential rainfall in kedarnath, uttarakhand, india during june. *International Research Journal of Environment Sciences, Vol. 2(9)*, pp. 34-37.

Sharma, V. K., & Kaushik, A. D. (2012, March). Natural Disaster Management in India, Disaster Management. *YOJANA* , pp. 30-36.

Tsai, C. H., & Chen, C. W. (2011). The establishment of a rapid natural disaster risk assessment model for the tourism industry. *Tourism Management, 32*, pp. 158-171.

Twigg, J. (2007). *Tools for Mainstreaming Disaster Risk Reduction, Social Impact Assessment.* Retrieved 2014, from International Federation of Red Cross and Red Crescent Societies prevention Consortium.: Http://www.proventionconsortium.org /mainstreaming _tools

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