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IMPACT OF HEALTHCARE UTILITIES AND LAW & ORDER CONDITIONS ON TOURISM: A STUDY ON COMMUNITY-BASED TOURISM IN NORTH EAST INDIA

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Abstract

Tourists and tour operators would seldom compromise on the safety conditions, cleanliness, hygiene practices (Kant, 2008) and basic healthcare infrastructure of a tourism destination. The economic benefits and cosmopolitan thought process arising from practices of community-based tourism process may discourage simmering tensions arising out of ideological differences and conflicting ethnicity in a destination. Instead of an exclusive remark that tour operators would seldom compromise on safety and hygiene aspects of a destination in North East India, this paper shall provide empirical findings at granular level. The author(s) debate on issues of safety, law & order conditions and disaster management preparedness of a typical village practicing community based tourism. There is an attempt on relating positive impacts of development indexes with community based initiatives of North East India.

Keywords: *Community Based Tourism, Healthcare Facilities, Utilities Measures, Disaster Management Preparedness*

INTRODUCTION

Travel, tourism and leisure segment is becoming a major thrust area for Assam and the North Eastern States. North East India is said to be the paradise for tourist, yet to be explored, but tourist and the host communities of Assam and North East India have mixed opinion about the leisure services and the socio-cultural impacts of tourism. There are many reasons to this theory, but having said that, couple of villages in some destinations of Assam, Arunachal Pradesh, Nagaland, and Meghalaya is emerging as major attractions. The leisure business model of these villages is based on responsible tourism and a memorable experience of staying with the host community. Community Based Tourism is responsible tourism which holds long term sustainable benefits for the host community, the business, the residents, and provides satisfying experience to the tourist. In Community Based Tourism (CBT), the host community invites the tourist to the destination with the provision of overnight accommodation in their villages. CBT model ensures that a part of the tourism receipts is provisioned for sustainable development of the village and the destination (Dutta & Das, 2011). They earn money and recognition through homestay operations, guiding & leisure activities, food, cuisines, beverages, souvenir, craft sales, and as an alternate livelihood opportunities. CBT tries to bring in exhaustive participation of the host community in the tourism value chain.

The components of community based tourism are tourist, host community, home-stay facility provider, infrastructure and distribution & value integration partner (Dutta, 2014). The community may choose to partner with a public/private sector entity to provide capital, clients, marketing, and other expertise. The partners may or may not own any part of the tourism enterprise subject to the ideals of supporting community's development, conservation, tourism planning and handholding. CBT stresses on the quality of cultural development, environmental considerations, divergent needs, potential of the primary stakeholder and its inhabitants (Brohman, 1996). These activities would support and encourage wide range of social development and conservation objectives (The Mountain Institute, 2000).

CBT includes ecotourism attractions where the host community has substantial management control over destination leisure business and a major proportion of the benefits remain within the community (WWF Guidelines

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for Community-based ecotourism development, 2001). The distribution of tourism revenue enhances welfare means, increase in livelihood opportunities, better conservation of resources, and, diversification of the regional tourism product as a brand (Sproule, 1996). The activities of CBT are lodging, food & cuisines, guiding, craft sales, entertainment and volunteerism at times.

HEALTH, HYGIENE, SAFETY, SECURITY AND LAW &ORDER ISSUES IN CBT

Among the stakeholders, the process of developing the tourism initiatives (Cooper, 2004) includes multi-pronged approach of participatory approaches, managerial control, research, capital investment & a good working knowledge of the leisure industry. The dependency of economies of North Eastern States such as Nagaland on tourism is limited due to its isolation from the Indian mainland and due to its turbulent political history (Deka & Baishya, 2009). Inspite of the troubled past, indigenous communities of Kohima have contributed to the Naga Heritage Village at Kisama, the Annual Hornbill Festival, Tourist Heritage Village at Touphema and Khonoma Green Village. The rural lifestyle and undisturbed natural setting in the protected areas serves as leisure content to the tourists, especially those coming from Indian Metros cities and European countries. But the question of economic benefits reaching the indigenous communities of the destination is still debatable (Gyamtsho, 1996).

Satisfaction level of inbound tourist is affected due to alarming service quality such as unjustified room prices, mismatch customer satisfaction issues, lack of good tour guides (Dhan, Gurung & Seeland, 2008). Their survey indicated that some tourist will prefer homestay facilities, provided it matches their ambience, sanitation and privacy. In contrast to the popular opinion, their research found that the most of litter and trash in the destination is actually created by local people only. Lack of investment strategy for establishing ecolodges or homestay facilities deters grassroot entrepreneurs in capital investment strategy (Buultjens, Tiyce & Gale, 2003). The extent of government and development partner's assistance necessary to train the rural entrepreneurs in hospitality services, communication, education, sanitation, hygiene, book keeping and outdoor leisure operations is also as important as source of capital investment.

Profit sharing from CBT operations in decentralized infrastructure development such as provided financial aid to the families to renovate their homes, build kitchen and washrooms for quality homestay is already proven in Endogenous Tourism Projects and Mountain Shepherds Initiative of Nanda Devi Campaign (Equations, 2008). This practice promotes better health & hygiene practices among the villagers. There are challenges faced by host on language skills, aspect of hygiene, cross culture food & beverage habits, water safety, trash collection and managerial skills. Improvement in capacity building and positive impact on social development indexes such as education, health-care, transparency in the exploitation of natural resources, and social safety program is also directly related to sustainable business model of CBT (Raffled, Berranger & Gouin, 2008). With opening up of emerging destinations for tourism, a simmering conflict emerges due to commercial exploitation (Bezbaruah, 1998).

Describing heritage preservation and tourism of Ladakh region, Bezbaruah mentions that the lucrative avenues might not be possible to be tapped by the local community. Attractions of economic benefits lure outsiders to exploit these avenues. This results into pressure not only from tourist alone, but also from the influx of thousands of tourism related seasonal workers coming to Ladakh from other regions of India and Nepal. Unplanned tourism development will put further pressure on the limited civic amenities such as solid trash management, congested single lane highways and electricity shortage. This eventually would lead hostility towards tourism intermediaries. Carrying capacity approach needs to be implemented from the beginning for a better sustainability of the CBT model. Segmentation strategy in profiling of tourists to CBT destination suggests a significantly higher proportion of leisure motivation as compared to business travelers (Foo, McGuiggan & Yiannakis, 2004). Therefore relevance of variables of leisure travelers and typology of tourist roles is important (Yiannakis, Gibson, 1992; 2002).

RESEARCH OBJECTIVES, METHODOLOGY AND LIMITATIONS

Given the above, this study shall endeavoured to draw insight into the operational aspects of community based tourism models of North East India. Specific objectives thus were: a). Analyze the hygiene, medical facilities and safety aspects of CBT villages and; b). Profile the buying behavior of tourist visiting CBT villages.

The population for the survey includes host community, tourism intermediaries, tourists and policy makers. The elements of this research are tourist staying overnight; village institution of the host community such as *gaonburah*, village council, *khel*[1], and society; households of the CBT village including indigenous population; policy makers promoting

[1] *Khel* is an institution in village governance in any Angami Naga village. This institution brings together several clans within the village community. Membership of a *khel* is either decided by birth or heredity. No village decision can be taken without the consensus of the *khels* of the village.

responsible tourism; and tourism intermediaries. First universe of the study comprises of the villages of the tourism destinations of NEI represented by six CBT villages of three states of NEI. These six villages are selected on the basis of the following judgment parameters: (a) The leisure business must have active community participation; (b) The village has to be newly discovered destination with visible frequency of tourists; (c) The leisure business model has to be sponsored a private equity or through a public private partnership or is a result of government aided programme within tourism policy.

The researchers have selected multi-staged judgment sampling method. In the first stage, on the basis of the judgment sampling, six CBT villages were selected based on their importance in the destination/circuit. In the second stage, two villages/localities from each destination were purposively selected. Finally, from these six selected villages/localities, opinion of 25 respondents or 2.5% of the total households of these three villages are collected using enumerated house number. The second universe of the study comprises of tourists, guides and the travel writers visiting the destination villages. Due to the unavailability of sampling frame for the population of tourists, intuitive sampling procedure is used and 25 samples are drawn from each village. The third universe of the study comprises of the traders (food & lodging), entrepreneurs, host community members serving leisure & tourism operations of destination. Judgment and snowball sampling method is used to collected opinion of 05 respondents from each selected village.

The study shall be conducted in three tourism circuits/ destinations of NEI only. Due to the heterogeneous nature of North East India, it is difficult to conduct random sampling or stratified random sampling. In spite of having household data of the villages, the cluster sampling procedure using the sample frame may have some limitations. The household enumeration is mostly based on identified kitchen for each household. Logically, there is not much difference in the opinion of enumerated household, because their opinion is mostly influence by clan heads. Moreover, many a times, to receive public distribution system scheme and government subsidised aid benefits, the household enumeration data suffers severe manipulation.

The census data of some districts of NEI states have limitation of estimation (Census of India, 2011) and the same is acknowledged by Registrar of Census. The periodicity for the survey for the tourists visiting the destinations is from February 2013 to January 2014. The prospective tourists to these locations were not included in the survey. The geographical area of this research is the North-East India excluding the state of Sikkim. The business scope of this study is limited to community based tourism only. Business travelers and visitors are excluded from this study. The service quality benchmark and the hygiene practices of a typical responsible tourism initiative may not be same with the mainstream leisure business.

Primary data was collected using a schedule for host community and a questionnaire for tourists. The questionnaire contained close-ended, multiple options, ranking options, 5-point Likert scales as well as open ended questions. The schedule was administered to the host community members, respective *gaonburah*[2] and village headperson, village entrepreneurs as well as the leading tour operators partnering the CBT destinations. Non-response was eliminated and the information was tabulated in SPSS table. The SPSS tool is used to conduct Chi Square analysis. Relationship between the dependencies and factors, if detected, the correlation was measured using Contingency Coefficient figure. If valid correlation is observed, the directional measure is conducted to find out the percentage of error in the judgment. The Lambda value is manually converted in percentage and subtracted from 100 to conclude a valid percentage.

For satisfaction ratings, 3 point and 5 point Likert scale were adopted, where 1 refer the lowest in satisfaction level and 3/5 was for the highest level of satisfaction. 'T' test were conducted with that rating as factor believed to be benchmark rating or when it is bare minimum service quality rating for the host community's operations. Same *modus-operandi* of 'T' test was done to find out the cut off/benchmark level of expectation beyond which a tourist will not compromise. The findings of T-test conducted for said factor/variable for host operator and the tourist will allow this research to conclude the level of difference in the perception of the service/ content. This process is used for gap analysis between the service provider i.e., homestay and destination conditions and the consumer i.e., tourist and tour operator.

Analysis of variance is done for measuring the satisfaction ratings for different set of the population based on age, income, relationship status, physical fitness and the city of origin. From the One way ANOVA operation, test of equal variance is sought. Only for those variable where equal variance is not observed, multiple comparison operation is conducted using Post-Hoc analysis. In Post Hoc analysis, the Games Howell correlation is identified to find out pairs having significant differences, i.e., opinion. The homogenous groups have been profiled as segments based on the socio-economic, demographic, business operation logic, geographic, interest related factors using Cross-tabulation, Chi-square tests and ANOVA.

The locations from which primary data is obtained are:

(a) Manas National Park, Assam: Five fringe villages of Manas National Park, Barpeta, Assam. It is a prominent wildlife attraction site and World Heritage Site by IUCN.

(b) Sualkuchi, Assam: Gandhmou Endogenous Tourist Project sponsored by UNDP and operated by the host

[2] *Gaonburah* or village headperson is the traditional hierarchical institutional head of villages of North Eastern India adopted by tribes of Assam, Nagaland and Arunachal Pradesh.

community. It is about 60 Km from Guwahati city, Assam.

(c) Khonoma, Nagaland: This village promoted Khonoma Nature Conservation & Tragopan Sanctuary without government support. It has a CBT model under village council.

(d) Touphema, Nagaland: Touphema Tourist Village is an Angami Naga Heritage village. It is located about 41 Km away from Kohima town.

(e) Thembang, Arunachal Pradesh: Thembang-Bapu Community Conserved Area Management Committee of Thembang is an initiative by Western Arunachal Landscape by WWF-India in West Kameng District of Arunachal Pradesh. It practices CBT as an alternate livelihood opportunity.

(f) Zemithang, Arunachal Pradesh: Pangchen Lumpo-Muchat Community Conservation Management Committee is another initiative by Western Arunachal Landscape by WWF-India in Tawang District of Arunachal Pradesh. It also practices CBT as an alternate livelihood opportunity along with conservation.

ANALYSIS AND FINDINGS

A. Demographic Profile of the Sampled Tourists

Table 1: Age in Years

Age category in years	Frequency
15 – 20	3
21 – 25	19
26 – 30	21
31 – 35	11
36 – 40	22
41 – 50	11
51 – 60	11
60+	5
Total	103

Source: Sample survey

Table 2: Occupation

Occupation Category	Frequency
Government service	16
Personal business/trader	16
Corporate employee	12
Professional	33
Retired	9
PSU	1
Student and dependent	16
Total	103

Source: Sample survey

Table 3: Marital Status

Marital Status category	Frequency
Invalid	1
Just married	4
Single	39
Married	47
Living together	4
Engaged	8
Total	103

Source: Sample survey

Table 4: Annual income

Annual income category	Frequency
Invalid	1
Rs. 1 lakh	3
Rs. 3 lakh	10
Rs. 5 lakh	15
Rs. 8 lakh	11
Rs. 12 lakh	6
Total	103

Source: Sample survey

Table 5: Religion

Religion followed	Frequency
Invalid	7
Christian	29
Islam	2
Hindu	55
Jew	3
Buddhist	2
Jain	5
Total	103

Source: Sample survey

Table 6: Nationality

Nationality	Frequency
Australian	5
British	7
Canadian	1
Chinese	2
Deutsch	2
French	7
German	1
Indian	66
Spain	8
Switzerland	2
USA	2
Total	103

Source: Sample survey

B. Disaster Management and its Preparedness by the Host Community

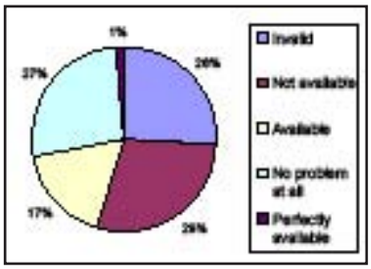


Figure 1: Disaster Management Preparedness of the CBT Village

Testing the possibility of 29% "Not available" response as sample error, the cross tabulation is:-

The hypotheses to test the relationship between these variables are:-

H_0: *There is a relationship between preparedness of Disaster Management and inflow of destination's tourist arrival to the destination.*

H_1: *There is no relationship between preparedness of Disaster Management and inflow of destination's tourist arrival to the destination.*

Disaster Management Preparedness and Destinations

Kohima Manas & Sualkuchi			Destinations: Western Arunachal Pradesh	Total		
Disaster Mgmt	Not available	Count	32	2	6	40
		Expected Count	15.8	14.4	9.8	40.0
	Available	Count	8	10	6	24
		Expected Count	9.5	8.6	5.9	24.0
	No problem at all	Count	5	26	6	37
		Expected Count	14.6	13.3	9.1	37.0
	Perfectly available	Count	2	0	0	2
		Expected Count	.8	.7	.5	2.0
	Null	Count	8	12	16	36
		Expected Count	14.2	12.9	8.8	36.0
Total		Count	55	50	34	139
Expected Count			55.0	50.0	34.0	139.0	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	60.327(a)	8	.000
Likelihood Ratio	62.657	8	.000
N of Valid Cases	139		

a 3 cells (20.0%) have expected count less than 5. The minimum expected count is .49.

The Chi-square value is 60.32 and is significant at the 0.000 level. Since the *p* value is less than level of significance ($\alpha = 0.01$), the null hypothesis is rejected. There is no relationship between Disaster Management preparedness of host community and inflow of tourists to the destination.

C. Mob Protest and Political Issues Such as Bandhs, Boycotts, etc.

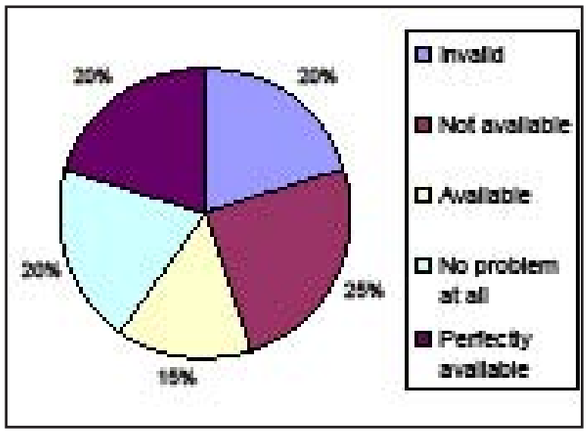


Figure 2: Host Community Control Over Leisure Services in Case of Political Protest

To test whether this 25% response "not available" is due to sample being drawn from a particular destination, the hypotheses for the negative correlation between "mob protest" and 'destination preference' shall be:-

H_0: *There is a relationship between mob unrest, Bandhs, boycott and it impacts the leisure operations of the host community.*

H_1: *There is no relationship between mob protest, Bandhs, boycott and its least impact on leisure sector of the host community.*

Mob Protest and Destinations

Kohima Manas & Sualkuchi			Destinations			
			Western Arunachal Pradesh	Total		
Mob protest	Not available	Count	24	10	0	34
		Expected Count	13.5	12.2	8.3	34.0
	Available	Count	7	11	3	21
		Expected Count	8.3	7.6	5.1	21.0
	No problem at all	Count	9	4	15	28
		Expected Count	11.1	10.1	6.8	28.0
	Perfectly available	Count	7	15	6	28
		Expected Count	11.1	10.1	6.8	28.0
	Invalid	Count	8	10	10	28
		Expected Count	11.1	10.1	6.8	28.0
Total		Count	55	50	34	139
		Expected Count	55.0	50.0	34.0	139.0

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.734(a)	8	.000
Likelihood Ratio	44.938	8	.000
N of Valid Cases	139		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.14.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.471	.000
N of Valid Cases		139	

a Not assuming the null hypothesis. b Using the asymptotic standard error assuming the null hypothesis.

Since the *p* value is less than level of significance (α = 0.01), the null hypothesis is rejected to conclude that there no relationship between these variables. The Contingency coefficient (0.471) indicates a weak relationship.

DIRECTIONAL MEASURES

Lambda value of the independent variable is 0.238. Proportional Reduction of Error (Lambda) = 100- (0.238 x 100) % = 76.2%. Therefore statistically it is concluded that 76% the CBT villages of the Destinations are capable of managing mob protest, Bandhs, boycott without having any visible impact on leisure sector. However, this correlation is weak.

			Value	Asymp. Std. Error(a)	Approx. T(b)	Approx. Sig.
Nominal by Nominal	Lambda	Symmetric	.212	.064	3.063	.002
		Location (Independent)	.238	.094	2.248	.025
		Mob protest (Dependent)	.190	.054	3.283	.001

a Not assuming the null hypothesis. b Using the asymptotic standard error assuming the null hypothesis.

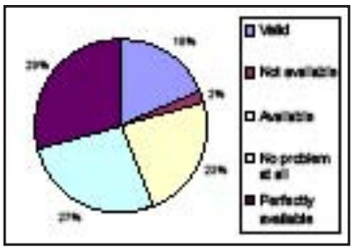
D. Law & Order Situations

Descriptive statistics indicates 29% opined "Perfectly available", 27% respondents said "Not a problem" and 23% said "Available". Thus, the sample indicates the entire population of CBT villages under this study has maintained a good Law & Order condition.

E. Consumer Buying Behaviour in terms of Annual income

Cross tabulation between *Star hospitality& Privacy* and *Annual Income*

Figure 3: General law&order situation of the CBT Village.



		Annual income in Rs. Lakh						Total
		Null	One	Three	Five	Eight	Twelve	
Star hospitality & privacy	Cannot Compromise	0	2	1	0	2	0	5
	I need	0	0	5	2	0	0	7
	I wish	1	1	2	9	7	2	22
Total		1	3	8	11	9	2	34

By conducting the One Way ANOVA with '*Annual Income of the tourist'* as the factor and comparing the means '*Star hospitality & privacy feature'* of the accommodation by the married tourist, the hypotheses are:-

H_0: *Perception of accommodation feature 'star hospitality & privacy feature' is same for all category of tourist irrespective of their income status, i.e.,*

$\mu_{1\ lakh} = \mu_{3\ lakh} = \mu_{5\ lakh} = \mu_{8\ lakh} = \mu_{12\ lakh}$

H_1: *Perception of accommodation feature 'star hospitality & privacy feature' is different for each category of tourist irrespective of their income status, i.e.,*

$\mu_{1\ lakh} \neq \mu_{3\ lakh} \neq \mu_{5\ lakh} \neq = \mu_{8\ lakh} \neq \mu_{12\ lakh}$

Where$\mu_{1\ lakh}$ = the mean of tourists with annual income of Rupees one lakh

$\mu_{3\ lakh}$ = the mean of tourists with annual income of Rupees three lakh

$\mu_{5\ lakh}$ = the mean of tourists with annual income of Rupees five lakh

$\mu_{8\ lakh}$ = the mean of tourists with annual income of Rupees eight lakh

$\mu_{12\ lakh}$ = the mean of tourists with annual income of Rupees twelve lakh

One way ANOVA: *Star hospitality & privacy*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.100	5	1.020	2.131	.091
Within Groups	13.400	28	.479		
Total	18.500	33			

Since, the P value in the One-Way ANOVA table is more than 0.05, the null hypothesis is not rejected and equal variance to be assumed among the group's mean. Therefore this ends up rejecting the alternate hypothesis and committing Type II error, i.e., accepting a wrong null hypothesis. The assumption remains inconclusive.

F. Assurance of tour operator references

About 41% of the tourists have responded as "I need" and 28% said "I Wish" for Assurance of Travel Agency References as accommodation feature.

Cross tabulation between*Assurance of the Travel Agency References* and *Arrival to destination*

Western Arunachal Pradesh		Location			Total
		Assam	Nagaland		
Assurance of travel agency references	Cannot compromise	10	7	5	22
	I need	16	6	20	42
	I wish	7	12	10	29
Total		33	25	35	93

Tourists visiting Western Arunachal Pradesh have expressed 'cannot compromise' while evaluating the assurance of the overall accommodation features by the Travel Agency. To test this assumption statistically about the population, the hypotheses are:

H_0: *The tourist is not influenced by the assurance of the travel agency about the accommodation facilities as available in the destination.*

H_1: *The tourist is influenced by the assurance of the travel agency about the accommodation facilities of the destination.*

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.183(a)	4	.057
Likelihood Ratio	9.577	4	.048
N of Valid Cases	93		

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.91.

The null hypothesis is not rejected and statistically it is accepted that tourists, irrespective of the destination, are not influenced by the assurance of the tour operators while deciding the accommodation facilities of the CBT villages.

G. Tourist's preference in having food & beverages from the host community.

Freshness, aroma and taste of food & cuisine.

The descriptive statistics infers that Food &Beverages offered by the host community are liked by most of the tourist. Comparing the opinion of the tourists about Food &Beverages based on place of origin of the tourist, the hypotheses are:-

H_0: *Perception of Food & Beverages by the tourists of North East India, Rest of India, Common Wealth Countries, European Countries, Asian Countries and USA is same, i.e.,* $\mu_{NER} = \mu_{CW} = \mu_{Europe} = \mu_{ROI} = \mu_{USA} = \mu_{Asia}$

H_1: *Perception of Food & Beverages is different for of the tourist segments based on city of origin or region, i.e.,* $\mu_{NER} \neq \mu_{CW} \neq \mu_{Europe} \neq \mu_{ROI} \neq \mu_{USA} \neq \mu_{Asia}$

Where μ_{ROI} *= mean of tourists originating from Rest of India (other than North Eastern India),* μ_{CW}, μ_{Europe}, μ_{NER}, μ_{USA}, μ_{Asia} *= mean of tourists originating from Common Wealth, Europe, USA and Asian countries other than India.*

Comparison of means of 'Place of Origin's, the variance indicates:-

Freshness, aroma and taste and *Food & Beverages*

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3.408	5	.682	2.466	.038
Within Groups	25.982	94	.276		
Total	29.390	99			

The F Probability value in the ANOVA table is less than 0.05. The null hypothesis is rejected to statistically conclude that equal variance cannot be assumed. It is concluded that the each segment's mean on the perception about Food & Beverages is different for each other. By conducting Post Hoc analysis, Games Howell figure indicates the pairs with opposite opinion.

Multiple Comparisons (Dependent Variable: Freshness, aroma and taste)

* The mean difference is significant at the .05 level.

Games-Howell

(I) D_City	(J) D_City	Mean Difference (I-J)	Std. Error	Sig.	95% confidence level	
					Lower Bound	Upper Bound
NER	RoI	-.029	.128	1.000	-.41	.35
	CW	-.525	.218	.209	-1.23	.17
	Europe	-.006	.130	1.000	-.39	.38
	Asian	.244	.084	.061	-.01	.50
	USA	.244	.084	.061	-.01	.50
RoI	NER	.029	.128	1.000	-.35	.41
	CW	-.497	.223	.276	-1.21	.21
	Europe	.023	.139	1.000	-.39	.44
	Asian	.273	.097	.096	-.03	.58
	USA	.273	.097	.096	-.03	.58
CW	NER	.525	.218	.209	-.17	1.23
	RoI	.497	.223	.276	-.21	1.21
	Europe	.519	.224	.239	-.19	1.23
	Asian	.769(*)	.201	.023	.09	1.44
	USA	.769(*)	.201	.023	.09	1.44
Europe	NER	.006	.130	1.000	-.38	.39
	RoI	-.023	.139	1.000	-.44	.39
	CW	-.519	.224	.239	-1.23	.19
	Asian	.250	.099	.168	-.06	.56
	USA	.250	.099	.168	-.06	.56
Asian	NER	-.244	.084	.061	-.50	.01
	RoI	-.273	.097	.096	-.58	.03
	CW	-.769(*)	.201	.023	-1.44	-.09
	Europe	-.250	.099	.168	-.56	.06
	USA	.000	.000	.	.00	.00
USA	NER	-.244	.084	.061	-.50	.01
	RoI	-.273	.097	.096	-.58	.03
	CW	-.769(*)	.201	.023	-1.44	-.09
	Europe	-.250	.099	.168	-.56	.06
	Asian	.000	.000	.	.00	.00

The above Games-Howell test for mean difference, the pairs "USA and Common Wealth Countries" and "Asian and Common Wealth Countries" have significant differences in their opinion on the freshness, aroma and taste of food & beverages of CBT Village. Therefore tourist from USA, Asia and Common Wealth countries need to be understood exclusively about their perception and behaviour of freshness, aroma and cuisine interest.

H. Cleanliness and Hygiene expectations for the toilets in Homestays

From review of literature and observations, for creating a good quality cleanliness and hygiene conditions of homestay accommodation, the minimum expectation of the tourist is "okay toilets". In view of limited qualitative references, most important quantitative factor measured about the toilet facilities should be the overall perception by the tourist. Therefore the null and alternate hypothesis shall be:-

- Null Hypothesis: If the toilet conditions are not satisfactory, the cleanliness & hygiene condition of the toilets has to be below 'okay' by the tourists.
- Alternate Hypothesis: If the toilet conditions are satisfactory, the cleanliness & hygiene condition of the toilets has to be equal or above 'okay' by the tourists.

One-sample T test is conducted with test value 4 as 'Okay condition of the toilets' among 5 test values in ordinal scale about the cleanliness and hygiene condition. Test value 1 as 'Not usable', value 2 representing 'Somewhat usable', 3 representing 'can't say about quality' and 5 as 'clean toilets with required facilities' in an ordinal scale.

One-Sample Test

	Test Value = 4					
	t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Please rate the cleanliness of the toilets of the mentioned accommodation.	-3.281	98	.001	-.354	-.57	-.14

Since p value (0.001) is less than the level of significance ($\alpha = 0.05$), the null hypothesis is rejected. Therefore it is concluded that the cleanliness & hygiene condition of the toilets can be satisfactory if it is perceived to be equal to 'okay' by the tourists. To identify the specific tourist based on city of origin having a positive preference about cleanliness & hygiene condition of the toilets of the CBT accommodations, opinion of the tourist based on place of origin (segments) are to be compared. Comparisons of the opinion of the tourists about preference for cleanliness& hygiene condition of the toilets by the Tourist, the null and alternate hypothesis will be:-

H_0: *Cleanliness & hygiene condition of the toilets in the accommodation facilities of CBT Village is equally liked by all tourists..*

$\mu_{NER} = \mu_{CW} = \mu_{Europe} = \mu_{ROI} = \mu_{USA} = \mu_{Asia}$

H_1: *Cleanliness & hygiene condition of the toilets in the accommodation facilities of CBT Village is liked differently by the tourists.*

$\mu_{NER} \neq \mu_{CW} \neq \mu_{Europe} \neq \mu_{ROI} \neq \mu_{USA} \neq \mu_{Asia}$

ANOVA

Cleanliness of the toilets of the mentioned accommodation.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	38.205	5	7.641	9.549	.000
Within Groups	74.421	93	.800		
Total	112.626	98			

The F Probability value in the ANOVA table is less than0.05, the null hypothesis is rejected to conclude that equal variance cannot be assumed. In Post Hoc analysis, the Games Howell figure provides the set of tourist who have significant difference of opinion.

MULTIPLE COMPARISONS

Games-Howell

(I) D_City	(J) D_City	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
NER	RoI	1.070(*)	.288	.008	.21	1.93
	CW	-.571	.230	.161	-1.27	.13

(I) D_City	(J) D_City	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
	Europe	-.213	.188	.865	-.77	.34
	Asian	-1.263(*)	.149	.000	-1.71	-.81
	USA	-1.263(*)	.149	.000	-1.71	-.81
RoI	NER	-1.070(*)	.288	.008	-1.93	-.21
	CW	-1.641(*)	.302	.000	-2.55	-.73
	Europe	-1.283(*)	.271	.001	-2.10	-.46
	Asian	-2.333(*)	.246	.000	-3.10	-1.57
	USA	-2.333(*)	.246	.000	-3.10	-1.57
CW	NER	.571	.230	.161	-.13	1.27
	RoI	1.641(*)	.302	.000	.73	2.55
	Europe	.358	.209	.538	-.29	1.01
	Asian	-.692(*)	.175	.018	-1.28	-.11
	USA	-.692(*)	.175	.018	-1.28	-.11
Europe	NER	.213	.188	.865	-.34	.77
	RoI	1.283(*)	.271	.001	.46	2.10
	CW	-.358	.209	.538	-1.01	.29
	Asian	-1.050(*)	.114	.000	-1.41	-.69
	USA	-1.050(*)	.114	.000	-1.41	-.69
Asian	NER	1.263(*)	.149	.000	.81	1.71
	RoI	2.333(*)	.246	.000	1.57	3.10
	CW	.692(*)	.175	.018	.11	1.28
	Europe	1.050(*)	.114	.000	.69	1.41
	USA	.000	.000	.	.00	.00
USA	NER	1.263(*)	.149	.000	.81	1.71
	RoI	2.333(*)	.246	.000	1.57	3.10
	CW	.692(*)	.175	.018	.11	1.28
	Europe	1.050(*)	.114	.000	.69	1.41
	Asian	.000	.000	.	.00	.00

* The mean difference is significant at the .05 level.

Statistically all segments of tourists based on place of origin had different perception about hygiene and cleanliness of the toilets of the accommodation facilities.

I. Cleanliness and Hygiene expectations of tourist about accommodation facility.

For creating a good quality accommodation with respect to cleanliness and hygiene conditions, the minimum expectation of the tourist must be either "okay and reasonable clean" or "hygienic accommodation with basic facilities". Therefore the hypothesis for shall be:-

- Null Hypothesis: If the accommodation is not satisfactory, then the cleanliness & hygiene condition of the accommodation has to be below 'okay and reasonable' by the tourists.
- Alternate Hypothesis: If the accommodation is satisfactory, then the cleanliness & hygiene condition has to be equal or above 'okay and reasonable clean'.

One-sample T test is conducted with value 4 as 'okay and reasonable clean' among 5 test values in ordinal scale about the cleanliness and hygiene condition. Test value 1 as 'Not clean', value 2 representing 'Needs improvement', test value 3 representing 'can't say about quality' and test value 5 as 'hygienic accommodation with required facilities' in the ordinal scale.

One-Sample Test

	Test Value = 4					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Please rate the cleanliness of the above mentioned accommodation.	-.282	98	.779	-.020	-.16	.12

For P value (0.779), the null hypothesis is not rejected. Therefore the accommodation will not be satisfactory in terms of cleanliness & hygiene condition if it is rated as 'okay and reasonably clean' by the tourists. Other test values are also needed to be validated.

Further, to qualify what qualifies for 'satisfactory' accommodation by the tourist, One-sample T test with test value 5 as 'hygienic accommodation with required facilities' in the same scale is to be conducted. The null and alternate hypothesis shall be:-

H_0: *If the accommodation is not satisfactory, then cleanliness & hygiene condition of the accommodation has to be below 'hygienic accommodation with required facilities' by the tourists.*

H_1: *If the accommodation is satisfactory, then cleanliness & hygiene condition of the accommodation has to be equal or above 'hygienic accommodation with required facilities' by the tourists.*

One-Sample Test

	Test Value = 5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Please rate the cleanliness of the above mentioned accommodation.	-14.217	98	.000	-1.020	-1.16	-.88

For the test value 5, the *P* value (0.000) is less than the level of significance ($\alpha = 0.05$). The null hypothesis is rejected. Therefore it is concluded that the accommodation will be satisfactory in terms of cleanliness & hygiene condition only when it is rated as 'hygienic accommodation with required facilities' by the tourists.

J. Tourists experience on safety measures as protection from wild animals.

Since all the CBT destinations are located far away from district headquarters and very close to National Parks and Sanctuaries, the tourists & the travel agents may have an apprehension about the safety measures in the CBT villages. To find out the satisfaction level in the village, 1-sampled T test is conducted. The assumption for T test is: Availability of safety measure from wild animals in the CBT villages is "Not an issue' with the village. The tourists were asked to give value in an ordinal scale in the questionnaire as 1 'Not acceptable', 2 as 'Acceptable with caution', 3 as 'Not an issue' and, 4 as 'Near perfect'. Since 'Near perfect' is a relative term, it was used to keep the ordinal scale value in a realistic manner so that the tourist will avoid picking this value. One-sample T test with value 3 as 'Not an Issue' for *Safety measure from wild animals* is conducted. Therefore, null and alternate hypothesis shall be:

$$H_0: \quad \mu < 3$$

$$H_1: \quad \mu \geq 3$$

Where μ is the mean of the tourist's opinion about safety measures from wild animals

One-Sample Test

	Test Value = 3					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Threat from wild animals	-1.274	90	.206	-.110	-.28	.06

With test value 3 as 'Not an issue', the *P* value (0.206) is more than the level of significance (α = 0.05) and therefore it is concluded that the mean opinion of the population about this facility is not equivalent to "Not an issue" for the tourist, but could be more than that. One-sample T test is conducted with value 4 as 'Near perfect' for Safety measure from wild animals. Therefore, our null and alternate hypothesis shall be:

H_0: $\mu < 4$

H_1: $\mu \geq 4$

Where μ is the mean of the tourist's opinion about safety measures from wild animals.

One-Sample Test

	Test Value = 4					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Threat from wild animals	-12.871	90	.000	-1.110	-1.28	-.94

With test value 4 as 'Near perfect', the *P* value (0.000) is less than the level of significance (α = 0.05) concludes that the mean opinion of the tourist population is "Near perfect".

INFERENCES AND CONCLUSIONS

There is no evidence of preference by tourist to pick a destination village with its Disaster Management preparedness by the host community. This research concludes that three forth of CBT villages of destinations in NER are capable of managing mob protest, Bandhs, boycott without having any visible impact on the leisure sector. However, this correlation is weak. Surveyed villages indicate a good Law & Order condition. Tourists, irrespective of the destination, are not influenced by the assurance of the tour operators while deciding the accommodation facilities of the CBT villages. Tourists originating from USA, Asia and Common Wealth countries are exclusive to each other with reference to their perception about freshness of food, aroma and cuisine interest. While understanding the hygiene behaviour of the tourist, a minimum 'Okay condition of the toilets' remark is required as satisfied opinion for toilets. 'Somewhat usable' should not be used as benchmark for satisfaction. Moreover, all segments of tourists based on place of origin have different perception about hygiene and cleanliness of the toilets of the accommodation facilities. Regarding cleanliness & hygiene condition of homestay accommodation, it may not be satisfactory even if tourists rate them as 'okay and reasonably clean'. The accommodation will be satisfactory in terms of cleanliness & hygiene condition only when it is rated as 'hygienic accommodation with required facilities' by the tourists. The mean opinion of the tourist population is "Near perfect"on safety measures on protection from wild animals for all the CBT destinations.

The perception of 'star hospitality & privacy feature' in homestay accommodation remained inconclusive with reference to income category of tourist. The study highlights the need to have a strategic approach to boost the community based tourism as practiced in some destinations of North East India. A single pro-poor tourism strategy will not serve the purpose as it is seen that 'one size fits all' has numerous limitations destinations with diverse cultural background and heterogeneous environment. There is a scope for further research to understand the social-cultural factors of the host community friendliness toward tourist. There is need to understand the underlying reasons through further research on some other destinations of NEI. A study on the capital requirement and community practices on health & hygiene with special reference to CBT villages needs to be carried out. This research will provide references to future studies on community based leisure models.

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