AN INSIGHTFUL STUDY ON HOMESTAY TOURIST SATISFACTION BASED ON DESTINATION ATTRIBUTE'S PERFORMANCE WITH REFERENCE TO DARJEELING HILLS (INDIA)

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Abstract
Blessed with a plethora of scenic bountiful natural attractions with the grandeur of mighty Himalayan peaks, waterfalls, flora and faunas, the 'Queen of Hills'-Darjeeling being one of highly googled hill-destinations has been witnessing a burgeoning growth of homestay based tourism in offbeat rural parts in and around Darjeeling-hills resulting equitable & inclusive socio-economic growth, prosperity and a holistic development in remote hilly locations. The present study attempts to ventilate an insightful understanding of homestay tourist satisfaction & dissatisfaction with a three-phased analysis, initially with Kano's-model to evaluate tourist-satisfaction based on identified destination parameters under 5 broad themes of attraction, accommodation, amenities, activities and accessibility. Penalty-Reward-Contrast-Analysis was applied to assess the texture of relationship between tourist-satisfaction and homestay-host's service-quality and finally Asymmetric-Impact-Performance-Analysis was used to validate findings of Kano's-model and also to identify homestay parameters' priority in generating homestay guest's satisfaction considering nonlinearity and impact of attribute's performance on tourist's mindset.

Key words: *Asymmetric-Impact-Performance Analysis, Darjeeling, Homestay, Kano's Model, Penalty-Reward-Contrast Analysis*.

JEL Classification: *L26, L83, P48, Q26, Z32*

I. INTRODUCTION

In India, homestays are quickly becoming a popular alternative-accommodation to hotels and resorts with traveller's shifting outlook. Homestays enable tourists to get mingled with local ethnic/tribal groups, cultural heritage, natural surroundings and social consistency. Darjeeling hills have been blessed with a plethora of scenic bountiful natural attractions with the beauty of Himalayan natural beauty which is consistently explored by the tourists across the globe. Having the age-old legacy of summer capital of British India, Darjeeling has always been one of the highly patronised hill destinations and well acclaimed as 'Jewel in the Crown' of the eastern Himalayas. Homestay-oriented rural tourism has emerged as a promising niche segment of tourism in and around the rural Darjeeling hills.

Homestays as an alternative livelihood option for local tribal communities of Darjeeling, plays a pivotal role in ensuring equitable socio-economic growth, prosperity and preservation of nature, local-skills, development of micro-level entrepreneurship and thereby ensuring inclusive growth & sustainable environment management (West Bengal Homestay Tourism Policy, 2017). Homestay generates income and employment opportunities to local people of Darjeeling hills utilising the breathtaking views of the majestic Himalayas coupled with sprawling green and picturesque tea-estates in a sustainable manner (H. Wilson & J. Venes, 2001).

The tourist satisfaction is shaped not only by a destination's tourist-pulling factor but also with positive and negative outcomes based on the destination's performance (Chahal & Devi, 2015; Kotler, Bowen, Makens & Baloglu, 2017) on multiple satisfaction driving parameters. Tourist satisfaction and delightment determines a destination's success rate in terms of tourist-footfall, loyalty and revisiting willingness of the tourists which propels economic growth of the locality concerned. Tourist satisfaction is a function of the gap between expectation and reality experienced and when expectations outperform experience, dissatisfaction results but if remains ahead

of expectations, tourists feel pleased & delighted (Hau & Khatijah, 2014). Interestingly, a tourist's satisfaction or dissatisfaction may have a non-linear effect whenever a high performing tourist site's parameter is not significantly contributing satisfaction while in spite of being a low performer, a parameter may not always create enough dissatisfaction.

For an insightful analysis on tourist satisfaction & dissatisfaction, this present study, makes a three phase analysis - firstly, Kano's Model (Kano et al. 1984) was used to assess tourist satisfaction based on homestay-based destination parameters. Next, Penalty-Reward Contrast Analysis (PRCA) was applied to illustrate the relationship between tourist satisfaction and homestay service-quality to enhance satisfaction and reduce dissatisfactions by analysing the homestay-destination performance-parameters classified under 5 themes, called '5As' attraction, accommodation, amenities, activities & accessibility (Truong and Gebbie, 2007). Finally in order to validate Kano's findings and identify homestay parameters' priority on homestay guest's satisfaction based on resource allocation and impact of attribute's performance on satisfaction considering nonlinearity, Asymmetric Impact Performance Analysis (AIPA) was used.

HOMESTAYS IN DARJEELING

Homestays are 'bread & breakfast' type alternatives to traditional hotels and resorts where the tourists as guests can stay with the host family along with socio-cultural interactions between them. Homestays provide a source of alternative income to the rural households and also gives a budget-friendly platform to the tourists at picturesque serene offbeat locations. Homestays across the Darjeeling hills currently offer tourists a clean, hygienic and affordable stay in a homely ambience with host-family, experiencing local tradition, customs and relishing authentic native cuisines. The unique promoting propositions for homestay-tourism in Darjeeling hills are ethno-cultural diversity, cuisines ('thukpa', 'momo', 'rai-sak', 'selroti', 'yomori', 'gundruk', 'aloo-achar' etc), pleasant hospitality by hosts, beauty of lush green tea gardens at the base of Mt. Kanchenjunga.

Homestays play an imperative role in promoting three gamuts of tourism - rural, cultural and eco-tourism through a portfolio of diverse offerings to bring the tourists closer to the cultural heritage and traditions of Darjeeling hills and thereby contributing to local employment generation and boosting regional economic growth. Additionally, homestay ventures promote conservation of the surrounding nature along with offering new markets for indigenous and handicraft items to uplift the socio-economically marginalised sections of this region having no other incomes except tourism & tea-plantation. Homestay-tourism and sustainability go hand in hand and complementing each other in realising the tourism-goals and decorating various future possibilities. The galloping count of homestays in Darjeeling hills acts as impetus to the tribal rural communities for uplifting their socio-economic condition in post-pandemic time since tourists now avoid crowded spots and here homestays are a safe and viable option to the health-conscious tourists.

TOURIST SATISFACTION

Tourist satisfaction has always been the top priority for the tourism providers and particularly pertinent for emerging practices like Homestays. Satisfaction is the emotional response exhibited after comparing the expectations with reality via physical encounter. Hence it essentially reflects a functional relationship between tourists' pre-tour expectations about the destination and their post-tour assessment of their experience. In Indian perspective, the theme of 'Atithi Devo Bhava' is built around the '7-S Mantra' described as Swagat (welcome), Soochana (information), Suvidhaa (facilitation), Surakshaa (security) Sahyog (cooperation), Sanrachna (infrastructure) and Safaai (cleanliness) which in turn shapes the texture of satisfaction in a tourist's mind. For homestay-based tourist destinations, the '7S-Mantra' of satisfaction is embedded in '5As' - attraction, amenities, accommodation, activities and accessibility. Tourist satisfaction stemming from various destinations has been specifically defined as the aggregate feelings that one derives as a result of visiting a tourist attraction (Cole & Scott, 2004). Apart from intrinsic motivators, destination-attributes being extrinsic motivators cast a pulling action among the tourists and act as 'pull factors' for satisfaction of tourist's aspirations and generate revisit willingness (Dann, 1977).

KANO'S MODEL

This model, developed by Dr. Kano & his associate researchers of Tokyo University of Science in 1984, is an analytical instrument to unearth customer's emotional responses to a particular product/service or its features and their subsequent measurement. It is an insightful way of understanding, classifying, and prioritising chief five types of customer requirements for new or better products and services. The model portrays the extent of influence of these five categories upon satisfaction and dissatisfaction and thereby reveals how some of the categories add, some detract and some creates value. According to Kano, functionality of any product/service is not the key factor that makes it 'good' to customers but emotions attached also matters. Generally, services like tourism can work well but may not be enough to win the hearts of the tourists as the product/service can be boring or fails to occupy a distinct place in a tourist's mind. Therefore, a few great new features rather than lots of basic ones, may quickly increase customers' satisfaction and make them think 'wow'.

II. Literature Review

DARJEELING BASED HOMESTAY TOURISM

Bhattacharya (1986) in his study pointed out that, nowadays Darjeeling bound traveloholic people are keen to stay in a local homestay because of their inclination to lead leisure time out of the crowded places under the laps of pristine calm nature amidst local culture and lifestyle. Later in the same context Bhuiyan et al. (2013) showed that host families are increasing employment opportunities and impacting the standard of living and public and private investment of locals. The very recent study by Pasanchay & Schott (2021), depicted that homestay has emerged as a growing trend in accommodation perspective in Darjeeling hills rather than traditional marketed hotels and resorts.

TOURIST SATISFACTION AND DESTINATION FEATURES

The study of Laws (1995) revealed that the key motivational driver for any tourist is spending an enjoyable vacation using climate, ecology, culture & tradition as primary while fooding, lodging, transport & onsite relaxing activities acts as reinforcer of attractiveness of the spot in tourist's mind as secondary motivators. Alegre & Garau (2010) demonstrated tourist satisfaction is functionally related to attribute-wise destination performance. They also recognised the detrimental effect of dissatisfaction and displeasing experiences associated with destinations on overall touring experience and revisiting intention. Siskos et al. (2013) through their study identified major five determinants of tourist satisfaction with respect to tourist places - transportation facilities, food and catering, room and boarding and tourist infrastructure. The three different research works by Canny (2013), Al-Ababneh (2013) and Hau & Khatijah (2014) together validated the influence of multifaceted destination features like accessibility, attraction, clean & hygienic ambience, image and anicilliary & support services in shaping the tourist satisfaction particularly when these features outperform perceived expectations.

KANO'S MODEL

As per the study by Leliga, Angelina & Wijaya (2019), Kano's model guides the tourism providers to enhance their service performance by considering the non-linearity between tourist satisfaction and destination attributes. The work of Thuy & Thao's (2019) on Kano's model advocated Basic' category of destination-features being part of non-linear relationship ensuring no dissatisfaction due to high performance of attributes along with meeting tourist expected demand but poor performance without meeting tourist's expectation results huge dissatisfaction. The study finally asserted that because of this nonlinearity, a mere rise or fall in attributes' performance does not always indicate tourist dissatisfaction as excitement is nonlinearly related to tourist's value. In the same line research by Bi, Liu, Fan & Zang, (2020) highlighted the existence of direct functional relation of tourist satisfaction with destination attribute's capability to meet tourist demand & expectations.

PENALTY-REWARD CONTRAST ANALYSIS (PRCA)

The works of Matzler & Sauerwein (2002) & Deng et al. (2008) both pointed out that this analytical tool classifies all tourist satisfaction driving factors into three categories - basic, performance and excitement related. Schofield & Reeves (2015) in their work defined the basic category as prime contributors of dissatisfaction if absent though presence does not add value, while the performance category creates satisfaction or dissatisfaction if present or absent respectively. Albayrak & Caber (2013a, 2013b) in their two studies recognised this three categorises of various tourist destination-attributes according to their extent of influence on overall tourist satisfaction and also pointed that excitement factors have no connection with dissatisfaction rather they act as 'add-on' for enhancing satisfaction.

ASYMMETRIC IMPACT PERFORMANCE ANALYSIS (AIPA)

Mittal, Ross & Baldasare (1998) through their research advocated that asymmetry function is a mixture of both positive and negative asymmetry where former indicates degree of sensitivity of destination-attribute more towards satisfaction than dissatisfaction whereas the latter indicates the opposite of what positive asymmetry embodies. These findings were supported later by Anderson & Mittal (2000) and Streukens & Ruyter (2004). The joint research done by Caber, Albayrak & Loiacono, (2013) used this Asymmetric Impact Performance Analysis (AIPA) as a simple visual technique by graphical representation of attributes so as to identify the prioritised list of attributes that escalate overall customer satisfaction. Kuo et al. (2018) in their research applied regression analysis to investigate the negative and positive asymmetric effects of the quality of tour guidance service on overall tourist satisfaction in an indirect way. Hu et al. (2020) in their study on hotel service devised a new version of asymmetric impact-sentiment-performance analysis to assess the impact-asymmetry of pertinent attributes on customer satisfaction.

RESEARCH GAP

(a) Dearth of study exploring deep insight & root-cause analysis on homestay tourist-satisfaction and dissatisfaction in context of rural Darjeeling hills.
(b) Inadequate research in the perspective of Darjeeling hills available on assessment of the nonlinear relationship between destination-attribute based tourist-satisfaction and homestay-owners' service-quality.

(c) Insufficient literature available on prioritisation of homestay performance-attributes related to Darjeeling in generating tourist satisfaction according to their relative impact on tourist.

RESEARCH OBJECTIVE

(a) To gain in-depth understanding on the contribution of various homestay tourist destination parameters to result satisfaction and dissatisfaction with relative performance assessment.
(b) To identify the nonlinear relationship between tourists and host's service quality which accounts for satisfaction or dissatisfaction.
(c) To identify and segregate performance-wise different satisfaction generating parameters to augment service to the homestay-tourists and increase their footfall.

III. METHODS AND DATA

RESEARCH DESIGN & APPROACH

This research design used is 'descriptive' to ventilate the main attributes behind tourist satisfaction/dissatisfaction in the context of homestay-tourism in Darjeeling hills and also 'exploratory' for exploring hidden nonlinearity aspects of visitors' satisfaction/dissatisfaction at the homestay destination. This study considers a combined quantitative approach using Kano's models (Wang, 2009) in association with two other analytical tools Penalty-Reward Contrast Analysis (PRCA) & Asymmetric Impact Performance Analysis (AIPA).

SURVEY INSTRUMENT'S DESIGN

Questionnaires were consisting of the sections namely demographic background, travel behaviour, statements relating to tourist expectation versus experience in reality on 15 tourist-attraction arresting attributes (Cooper et al. 1998) of the homestay destinations (Table 1) across Darjeeling hills, categorised under '5As' format as - Attraction (2 attributes), Amenities (5 attributes), Accommodation (5 attributes), Activities (2 attributes) and Accessibility (1 attribute) for using in Kano's Model. The negative (dysfunctional i.e. absence of the attribute) and positive (functional i.e. presence of the attribute) statements on each attribute in the questionnaire were arranged randomly in the Questionnaire.

Table 1: Homestay Attributes classified as per 5As

Sl No	Category of 5As	Code	Homestay Destination Attributes (Questioning source)
1	Attraction	A1	Scenic Beauty & Relaxing and Pleasant Climate around the Homestay
2		A2	Extent of Sight-seeing Opportunities (Water Falls, Mountains Peaks, Ethnic/Heritage Architecture etc)
3	Amenities	A3	Availability of Car Rental, Customised Tour Planning & local Guide service
4		A4	Provision for Car Parking & Driver's stay
5		A5	Hygienic Food Preparation & Variety Dishes, Local Cuisines
6		A6	Extent of Infrastructure of Internet Facility & Mobile Connectivity
7		A7	Availability of Nearby Health Clinic/Hospital/Doctor & ATM for cash withdrawal
8	Accommodation	A8	Physical Homestay Infrastructure, Room arrangement with eye-catching Decoration
9		A9	Comfortable Basic Lodging Amenities & Add-on Services with Promptness
10		A10	'Feel at Home' staying ambience & with Friendly Behaviour of the Host Family
11		A11	Maintenance of Overall Cleanliness, Proper Sanitation & COVID protocol
12		A12	Cost of Fooding, Lodging & customised on-site touring
13	Activities	A13	Scope of Hilly adventures (Nature-trailing, Trekking, Paragliding, River-Rafting etc)
14		A14	Availability of Nearby Shopping, Sporting & Recreational/Cultural activities
15	Accessibility	A15	Road Condition, Elevation & Easy Navigability using Google Map

Source: Literature Survey (Cooper et al. 1998)

SAMPLING & DATA COLLECTION

The population for this study was the tourists/guests staying in homestays spread across five different study-zones (Table 2) of the rural offbeat areas of Darjeeling district. Convenience sampling was used for gathering primary data. The requisite primary-data were collected from 300 homestay-guests during May to mid of June (before Monsoon) 2023 using surveys through questionnaires & personal interviews. The ratings given by homestay-tourists were used as a proxy of their evaluation of overall satisfaction for each of these 15 attributes using 5-points Likert-scale ranging from 1 being terribly unhappy/unsatisfactory, to 5 = highly satisfactory/excellent. IBM SPSS v.20 & Realstat tool packs of MS Excel were used for data analysis.

Table 2: Study Zones in Darjeeling District

Zone No	Hilly hamlets or areas covered under Darjeeling District
1	Takdah & adjoining - Tinchuley, Lamahatta, Bara Mangwa, Dawaipani
2	Kurseong & adjoining - Bagora, Chimney, Mahaldiram, Chatakpur
3	Sitong & adjoining - Latpanchar, Shelpu, Ahaldara, Rangli Rangliot
4	Mirik & adjoining - Tabakoshi, Rangbang, Bunkulung Thurbo & Gopaldhara TE
5	Sukiapokhri & adjoining - Manebhanjan, Dhotrey, Bijonbari, Takvar-Jamuni, Mazua

Source: Author's own work

KANO'S MODEL

To use Kano's Model in this study, a total 15 pertinent homestay destination attributes categorised under '5As' were identified (Table 1). Considering that emotional response to any product/service features acts as a decider of customer satisfaction/delightment and loyalty, Dr Kano hypothesised six emotional responses (Table 3) to the product/service-features which help the service provider to understand customer satisfaction depending on the extent of sophistication of an available attribute/function.

Table 3: Kano's Six Emotional Responses

Sl No	Kano's emotional responses	Description
1	Must-be (Expected Quality)	Absence will result in customer's discontentment, but presence does not add satisfaction.
2	Attractive features (Desired Quality)	Presence results satisfaction although absence does not all time creates dissatisfaction
3	Single-dimensional	Direct linkage with customers' satisfaction & its increased presence escalates satisfaction.
4	Questionable	Presence and absence have contradicting outcome on satisfaction/dissatisfaction
5	Indifferent	Presence or absence does not have any bearing on customer satisfaction/dissatisfaction
6	Reverse	Presence contributes to dissatisfaction and vice-versa.

Source: Kano et al. (1984)

Unlike other similar customer-satisfaction analyser models (SERVPERF or SERVQUAL) Kano's model considers various nonlinear relationships between the destination-attributes with satisfaction and innovatively depicts the effects of both satisfaction and dissatisfaction on the general satisfaction with a product or service (Alegre & Garau, 2010).

PENALTY-REWARD CONTRAST ANALYSIS (PRCA)

In tourism research, this approach is applied to explore the non-linear effects of destination attributes' performance upon tourist satisfaction (Bi, Liu, Fan & Zang, 2020) in order to segregate high (rewarding tourist-satisfaction) and low (penalty for tourist-satisfaction) performing attributes. Here dummy variable (indicating 'reward' or 'penalty' in binary term) based multiple-regression analysis is carried out to determine values of 'reward', 'penalty' & overall satisfaction as per tourist ratings since multiple regression tool can be best fitted in such nonlinear-effect measurement (Albayrak & Caber, 2016; Guo, Barnes & Jia. 2017). From the output of such multiple-regression the standardised coefficients can be used to assess the reward and penalty coefficients (Caber, Albayrak, Loiacono, 2013). If the calculated destination attribute's average performance exceeds overall tourist satisfaction [using Equation (1)] then that attribute will be high-performer else low-performer (Bi, Liu, Fan & Zang, 2020).

Overall Tourist Satisfaction (OTS)
$= \beta o + \sum(\beta^{i}_{penalty}.Dummy^{i}_{penalty} + \beta^{i}_{reward}.Dummy^{i}_{reward})$
+ Error term……(1)

Where i is no. of destination attributes
$Dummy^{i}_{penalty}$ = 1, if 5-point Likert's rating is 1 (Lowest) and 0 for other ratings
$Dummy^{i}_{reward}$ = 1, if 5-point Likert's rating is 5 (Highest) and 0 for other ratings

ASYMMETRIC IMPACT PERFORMANCE ANALYSIS (AIPA)

To categorise various classified destination attributes found from Kano's Model in 'basic' ones as desired by tourists, satisfaction rendering 'performers' and tourist 'delightment' givers, Asymmetric Impact Performance Analysis (AIPA) is used to measure attributes' capability to generate tourist satisfaction with non-linear effects using Impact Asymmetric Index (IAI) ranging from -1 to +1 (Bi, Liu, Fan & Zang, 2020 and Albayrak & Caber, 2016). This IAI [using Equation (2)] for any i^{th} destination-attributes is the ratio of difference in absolute β-values of both reward and penalty to the summated absolute β-values of Reward & Penalty.

$$IAI_i = \frac{(|\beta^{i}_{reward}| - |\beta^{i}_{penalty}|)}{(|\beta^{i}_{reward}| + \beta^{i}_{penalty}|)} \quad \ldots\ldots (2)$$

Bi, Liu, Fan & Zang, (2020) and Albayrak & Caber (2016) also provided the three ranges of IAI values (Table 4) for 3-fold classification of Destination attributes analysed using Kano's Model.

Table 4: Ranges of IAI values for 3-fold classification of Destination attributes

Sl No	Impact Asymmetric Index (IAI) Ranges	3-fold classification
1	$1 \leq IA_i \leq -0.1$	Basic/minimum desired
2	$-0.1 \leq IA_i \leq 0,1$	Satisfactory Performer
3	$0.1 \leq IA_i \leq 1$	Delighter/Excitement generator

Source: Bi, Liu, Fan & Zang, (2020) and Albayrak & Caber (2016)

IV. RESULTS AND DISCUSSIONS

The summarised findings (Table 5) after investigating homestay tourists' satisfaction compared to their expectation in the context of entire Darjeeling hills indicate that considering the positive (functional) aspects of 15 homestay-destination's performance-attributes, all performed well in contributing homestay tourist's overall take-home satisfaction except four (Table 1: A4, A7, A12 & A14) and on the negative (dysfunctional) sides, six attributes (Table 1: A5, A6, A8, A9, A12, A14, A15) showed very encouraging improvements indicated by very high negative differences though the rest of the attributes need more focus for lowering the negative-satisfaction on the part of tourists.

Table 5: Mean Expectation, Reality & Difference for Positive & Negative Aspects

Sl	Attribute Code	Mean Positive/Functional Aspects			Mean Negative/Dysfunctional Aspects		
		Expectation	Reality Experienced	Difference	Expectation	Reality Experienced	Difference
1	A1	4.19	4.81	0.62	1.67	1.21	-0.46
2	A2	4.40	4.63	0.23	2.11	1.15	-0.97
3	A3	2.69	2.89	0.20	3.14	2.53	-0.61
4	A4	2.59	2.04	-0.55	4.08	3.38	-0.70
5	A5	4.14	4.27	0.12	3.47	2.30	-1.17
6	A6	2.59	3.80	1.21	3.07	1.94	-1.14
7	A7	2.88	2.05	-0.82	4.13	3.62	-0.51
8	A8	3.93	4.52	0.59	3.09	1.73	-1.36
9	A9	4.03	4.62	0.59	3.03	1.75	-1.28
10	A10	4.48	4.60	0.12	2.92	2.03	-0.89
11	A11	4.26	4.45	0.18	3.47	2.53	-0.94
12	A12	3.95	3.88	-0.07	3.68	2.24	-1.44
13	A13	3.12	3.95	0.82	2.97	2.38	-0.60
14	A14	4.34	4.21	-0.13	3.78	2.49	-1.29
15	A15	2.97	4.06	1.09	3.84	2.51	-1.33

Source: Author's Compilation

Homestay Tourist Satisfaction using Kano's Model

As the questions in questionnaire relating to each of the 15 homestay destination attributes were asked from respondents in two aspects - positive (functional) & negative (dysfunctional) (Kano et al. 1984, Berger et al. 1993), evaluation of responses were done using most frequency logic (Sauerwein, 1999) to segregate these attributes into 6 categories (Table 3) based on Kano's 2-dimensional (Negative & Positive) quality evaluation strategy (Kano et al, 1984). This study used strategic-guidelines (Table 6) for 6 fold categorisation of homestay destination attributes based on 5 point Likert scale data on both the dimensions attribute-wise.

Table 6: Six-fold Categorisation of homestay site-attributes as per 5-point Likert scale

Attribute Category based on Kano's 2 dimensions of Attribute Quality	Ordered Likert Scale Rating Pairs (Positive/functional, Negative/dysfunctional)
Must-be (M)	(5, 1); (5, 2)
Attractive (A)	(4, 1); (4, 2)
Questionable (Q)	(1,1); (2,2); (4,4); (5,5); (4,5); (5,4); (2,1); (1,2)
Indifferent (I)	(3, 3)
Reverse (R)	(1,5); (2,5); (1,4); (2,4)
Single-dimensional (SD)	(1,3); (2,3); (4,3); (5,3); (3,5); (3,4); (3,1); (3,2)

Source: Author's Compilation

Following the strategy devised (Table 6), the results of 6-fold divisions of 15 attributes homestay-attributes (Table 7 and Table 8) by Kano's Model depicts, more than 70 percent attributes (except A3, A4, A6, A7)) belong to 'Must-be' category and no 'Questionable' and 'Indifferent' categories results indicating very rational and reliable responses given by tourists. Only 1 attribute (A3) belongs to 'Single-dimensional' and 2 fall under the 'Reverse' category. The overall indication by Kano's Model reveals the importance of the majority of homestay-attributes to pull the traffic and build commitment for revisiting the homestay destinations across Darjeeling hills.

Table 7: Most Frequency Rule based Classification of Homestay Attributes

5A Categories	Code	M	A	Q	I	R	SD	Most Frequent
Attraction	A1	242	57	0	0	0	1	M
	A2	196	101	0	0	2	1	M
Amenities	A3	11	34	74	18	34	129	SD
	A4	10	6	71	3	172	38	R
	A5	124	112	15	2	0	47	M
	A6	27	131	60	10	1	71	A
	A7	8	1	85	1	187	18	R
Accommodation	A8	157	108	12	0	8	15	M
	A9	148	71	24	1	14	42	M
	A10	137	62	52	1	27	21	M
	A11	134	123	10	1	8	24	M
	A12	89	65	49	5	56	36	M
Activities	A13	141	36	24	2	53	44	M
	A14	106	46	18	1	93	36	M
Accessibility	A15	101	67	43	4	34	51	M

Source: Author's Compilation

Table 8: 6-fold Kano's Category of Homestay Destination Attributes

6 fold Kano's Category	Codes of Homestay Destination Attributes
M (Must be)	A1, A2, A5, A8, A9, A10, A11, A12, A13, A14, A15
A (Attractive)	A6
Q (Questionable)	Nil
I (Indifferent)	Nil
R (Reverse)	A4, A7
SD (Single-dimensional)	A3

Source: Author's Compilation

Non-linearity check of homestay performance upon tourist satisfaction by Penalty-Reward Contrast Analysis (PRCA)

For assessing the non-linear effects of performances by 15 homestay- attributes' on tourist-satisfaction using PRCA, two binary dummy-variables were considered (Table 9) to segregate high and low performing attributes. Next dummy-variable (D_Ri & D_Pi) based multiple-regression was used to explore presence of non-linear effects in relationships among the homestay attributes on homestay tourist-satisfaction.

Table 9: Description of Dummy Variables for PRCA

Sl No	Dummy Variable	Description	Value
1	D_Ri	i^{th} attribute as rewarding for exhibiting high performance	1 for highest Likert's rating (5) and 0 for rest of the ratings
2	D_Pi	i^{th} attribute as penalty for being the poor performer	1 for lowest Likert's rating (1) and 0 for rest of the ratings

Source: Author's own work

As per the mean performance rating of 5A-based attributes (Table 10), 'Attraction', 'Accommodation' and 'Accessibility' related attributes scored high while 'Amenities' & 'Activity' related ones scored moderate. These attribute wise mean performance was compared with the Overall Tourist Satisfaction (OTS) score with a view to identify Homestay destination's contribution level towards attribute-wise tourist-satisfaction. The overall tourist satisfaction (OTS) score was calculated using the dummy-variable regression equation (1).

Table 10: Mean Values of Performance Ratings and Dummy Variables for all attributes

5A Categories	Code	Mean Performance Rating	Mean of D_{Ri}	Mean of D_{Pi}
Attraction	A1	4.803	0.807	0.003
	A2	4.630	0.653	0.010
Amenities	A3	2.930	0.040	0.070
	A4	2.073	0.037	0.240
	A5	4.320	0.443	0.020
	A6	3.823	0.150	0.077
	A7	2.060	0.027	0.333
Accommodation	A8	4.480	0.567	0.033
	A9	4.477	0.627	0.073
	A10	4.340	0.593	0.130
	A11	4.373	0.487	0.047
	A12	3.820	0.377	0.170
Activities	A13	4.057	0.570	0.180
	A14	3.483	0.387	0.377
Accessibility	A15	4.080	0.460	0.160

Source: Author's Compilation

The results of multiple regression (Table 11) states that, overall model fit was significant (F = 56.2607, df = 14, p = 0.000) with R^2 is 0.904 indicating 90.4 percent influence exhibited by homestay-destination attributes upon tourist satisfaction. The β-values for all 15 homestay-attributes as satisfaction-rewarder were statistically significant ($p<0.05$) and as dissatisfaction-giver only 7 attributes chiefly under 'Accommodation' & 'Accessibility' dimensions were significantly instrumental and really matter of concern for the sustainable survival of Homestays in Darjeeling hills.

Table 11: Results of Dummy Variable Regression among homestay tourist-satisfaction with attributes

5A Categories	Attribute Code	β value Reward	Sig (p-Value, 2 tailed)	β value Penalty	Sig (p-Value, 2 tailed)
Attraction	A1	0.058	0.010	-0.028	0.879
	A2	0.078	0.000	-0.194	0.069
Amenities	A3	0.203	0.000	0.006	0.883
	A4	0.239	0.000	-0.091	0.000
	A5	0.079	0.000	0.020	0.803
	A6	0.080	0.001	-0.038	0.366
	A7	0.142	0.008	0.006	0.793
Accommodation	A8	0.066	0.000	-0.234	0.000
	A9	0.075	0.000	-0.175	0.000
	A10	0.115	0.000	-0.157	0.000
	A11	0.099	0.000	-0.088	0.084
	A12	0.116	0.000	-0.120	0.000
Activities	A13	0.128	0.000	-0.267	0.000
	A14	0.043	0.019	0.033	0.135
Accessibility	A15	0.149	0.000	-0.122	0.000
$R^2 = 0.904$; F (14) = 56.2607, p = 0.000					

Source: Author's Compilation

The value of overall tourist satisfaction (OTS) using the results of Table No 10 & 11, and dummy-variable regression equation (1) for the homestays of Darjeeling hills comes to 4.088. Comparing this OTS with mean performance score of each of the 15 attributes (Table 12), all attributes under 'Attraction' found as high-performers and same found for 'Accommodation' related attributes except the cost-related (A12). Poor performance was found in the attributes under 'Accessibility', 'Activity' and 'Amenities' dimensions. Hence as per '5As framework' less than 50 percent dimensions were lagging in satisfying homestay tourists across the Darjeeling hills.

Table 12: Overview of Darjeeling based Homestay-attribute Performance with OTS in PRCA

5A Categories	Attribute Code	Mean Performance Rating	Overall Tourist Satisfaction (OTS)	Attribute's Performance Status in Tourist Satisfaction
Attraction	A1	4.803	4.088	High
	A2	4.630	4.088	High
Amenities	A3	2.930	4.088	Low
	A4	2.073	4.088	Low
	A5	4.320	4.088	High
	A6	3.823	4.088	Low
	A7	2.060	4.088	Low
Accommodation	A8	4.480	4.088	High
	A9	4.477	4.088	High
	A10	4.340	4.088	High
	A11	4.373	4.088	High
	A12	3.820	4.088	Low
Activities	A13	4.057	4.088	Low
	A14	3.483	4.088	Low
Accessibility	A15	4.080	4.088	Low

Source: Author's Compilation

Prioritisation of homestay-parameters' for guest's satisfaction using Asymmetric Impact Performance Analysis (AIPA)

To measure the extent of destination attributes' capability to generate tourist satisfaction with non-linear effects as per using Asymmetric Impact Performance Analysis (AIPA), an Index called Impact Asymmetric Index (IAI) was calculated for each of the 15 Homestay destination attributes across rural Darjeeling hills as per Equation (2). The results of Asymmetric Impact Performance Analysis on 15 homestay site attributes (Table 13) indicate that 5 attributes were found as 'Basic' whose majority belong to 'Accommodation' oriented while 8 were 'Excitement' creators which are mostly under 'Amenities' category depicting high potential for satisfaction-provider (car rental, customised tour planning and local guide service attained highest IAI value 0.943) and rest 2 attributes came to be 'Performer' type which are 'Accessibility' and 'Accommodation' centric depicting equally responsible to the satisfaction and dissatisfaction. Therefore the two attributes - cost of fooding, lodging & on-site touring and accessible road condition, elevation & navigability are two prime areas to work upon as they appeared as poor performers in creating tourist satisfaction i.e. sources of dissatisfaction.

Table 13: Impact Asymmetric Index (IAI) values with 3 fold classifications

5A Categories	Attribute Code	IA Index	AIPA Classifications
Attraction	A1	0.349	Excitement
	A2	-0.426	Basic
Amenities	A3	0.943	Excitement
	A4	0.448	Excitement
	A5	0.596	Excitement
	A6	0.356	Excitement
	A7	0.919	Excitement
Accommodation	A8	-0.560	Basic
	A9	-0.400	Basic
	A10	-0.154	Basic
	A11	0.059	Excitement
	A12	-0.017	Performance
Activities	A13	-0.352	Basic
	A14	0.132	Excitement
Accessibility	A15	0.100	Performance

Source: Author's Compilation

V. DISCUSSIONS

In line with past literatures, this study confirms the functional relationship between tourist satisfactions with attribute-wise destination performance and homestay site's attributes drive tourists in spending an enjoyable vacation where natural attraction, climate, culture & tradition are primary motivators while fooding, lodging, transport and onsite activities acts as reinforcer of attractiveness. Use of Kano's model in this study supports existence of direct functional relation of tourist satisfaction with destination attribute's capability to meet tourist demand & expectations considering the non-linearity between tourist satisfaction and destination attributes. PRCA tool in association with AIPA here successfully categorized all tourist-satisfaction driving attributes into three categories – 5 basic, 2 performance and 8 excitement related attributes and helped in their prioritization. On a comparative assessment note on the three analytical models used in exploring the

performance-texture of homestay destination attributes on tourist satisfaction, Kano's results are validated by both the two tools PRCA & AIPA in majority of cases except two 'Amenity' related attributes, viz. provision for car parking and driver's stay and availability of nearby health clinic & ATM. The AIPA & PRCA also confirms nonlinear relationship between homestay-attributes & tourist-satisfaction through the 'excitement-low performance' categories which are not causing dissatisfaction in spite of being low-performer as they generate excitement.

VI. CONCLUSION

As far as Homestay tourist's satisfaction is concerned across the Darjeeling hills with respect to the identified fifteen study-attributes in both of their functional & dysfunctional form, the six-fold categorisation as suggested by Kano's Model, reveals majority (eleven attributes) belong to 'Must be' category indicating importance to pull the traffic and build commitment for revisiting the homestay-destinations across Darjeeling hills. Absence of any 'Questionable' or 'Indifferent' categories signifies rational & reliable responses from homestay guests-tourists during the study. Only the two attributes under the 'Reverse' category claim more attention to work upon by the homestay hosts and other stakeholders. The PRCA technique affirms statistically significant roles of all 15 homestay attributes under study as satisfaction-rewarder and also identifies 7 attributes mainly under 'Accommodation' and 'Accessibility' dimensions as dissatisfaction-giver for which homestay business may encounter a penalty for the sustainable survival of Homestays in Darjeeling hills if not improved. Dummy variable based multiple regression associated with PRCA and Overall Tourist Satisfaction (OTS) Score-wise, all 'Attraction' related & majority of 'Accommodation' related attributes are high-performers except the cost. 'Accessibility', 'Activity' & 'Amenities' dimensions have not found good as per analysis. The Asymmetric Impact Performance Analysis indicates two attributes - cost of fooding, lodging with on-site touring and road-condition with navigability are two prime areas being poor-performers to put more effort into upgrading while the ratio of Basic to Excitement giver is 5:8, thereby revealing overall good condition of Homestay business in terms of tourist pulling ability.

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