

A study on the role of social media in promoting sustainable tourism in the states of Assam and Odisha

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Abstract

Purpose – The purpose of this paper is to determine the role played by social media platforms in promoting sustainable tourism in the states of Assam and Odisha. The study provides insights on sustainable tourism and related products of the above-mentioned destinations that need to be promoted on social media. It also recommends strategies to augment the sustainable tourism in the two states.

Keywords Sustainable tourism, Eco-tourism, Social media marketing, Responsible tourism

Paper type Research paper

1. Introduction

The emergence of social media has brought a paradigm shift worldwide as a medium of communication, facilitating users to observe, interact and exchange information. The evolution of social media as new technology has changed the working of the tourism sector which in turn has significantly influenced the sustainable tourism business. Several international organizations like World Wide Fund for Nature, The International Eco-Tourism Society, Eco-Tourism Society of India, Rainforest Alliance, Sustainable Travel International and Global Sustainable Tourism Council are continuously working for marketing and dissemination of awareness of sustainable tourism through social media platforms in addition to conducting seminars and publishing annual reports. Uses of social media sites like Facebook, Instagram, Twitter, Google+ and Pinterest enable tourism providers to remain connected with other stakeholders (Stanciu and Costea, 2012).

Tourism is a cultural, social and economic experience that involves the movement of people from their place of residence to other places and countries for enjoying leisure, local cuisines and delicacies, entertainment, shopping, recreation, education, business, spiritual, health and even visiting relatives and friends. It includes transportation to the chosen destination and accommodation. Tourism is classified into many branches such as sports tourism, religious tourism, medical tourism, culture tourism, rural tourism, spiritual



tourism, tea-tourism, wine tourism, etc. that can be sustainable. Moreover, with the rapid advent of globalization sustainable tourism has gained prominence.

Sustainable tourism can be defined as the process of people maintaining change in a balanced environment, wherein resources, investments, technological development and institutional change are all in accordance and augment the current and future human needs and aspirations. The United Nations declared 2017 as the International Year of Sustainable Tourism for Development. This declaration at the UN 70th General Assembly intended to spread awareness on the contribution of the tourism sector through the three pillars of sustainability economic, social and environmental. Sustainable tourism advocates maintaining long-term ecological balance, promoting indigenous cultures and creating employment opportunities for the local population in villages and towns through tourism. For example, visiting tourists get an exemplar space to relax and enjoy the beautiful landscapes and food, which is produced organically in the local farms. Tourists get to know about sustainability and see how it can be achieved.

It is pertinent to note that the Travel and Tourism industry in India is the 7th largest in the world contributing nearly 9.6% to India's gross domestic product. It is estimated to grow by 6.9% per annum over the next 10 years, ranking the 4th largest globally. This is expected to create a multiplier effect on India's socio-economic growth through infrastructure development, job creation and skill development. The practice of sustainable tourism in India is to responsibly engage tourists in village homestays, silk tourism, tribal tourism and wildlife eco-tourism (Heather Carrerio, 2018). The first Tourism Policy was announced by the Government of India in 1982. The objective of this policy was to encourage sustainable tourism for economic sustenance and integration of the socio-cultural fabric to enhance India's brand image. Kerala popularly known the world over as "God's own country" was perhaps the first state in India to create innovative initiatives for sustainable tourism. In 2014, Kerala Tourism was conferred with the prestigious UNWTO Ulysses Award for its Global Leadership in creating innovative initiatives for sustainable tourism.

This study is an attempt to determine the role played by social media platforms in promoting sustainable tourism in the states of Assam and Odisha. The study also provides insights on sustainable tourism and related products of the above-mentioned destinations that need to be promoted on social media. The study will benefit the government, local population and sustainable tourist providers with the much-needed information required for their media planning and devising appropriate marketing strategies.

2. Review of literature

According to Blackshaw (2006), "Social Media" can be defined as internet-based applications that carry consumer-generated content, which encompass media impressions created by consumers, typically informed by relevant experience, and archived or shared online for easy access by other impressionable consumers. Social media includes a variety of applications in the technical sense which allow consumers to "Post," "Tag," "Digg" or "Blog" on the internet. The contents generated by these applications include a variety of new and emerging sources of online information that are created, initiated, circulated and used by consumers with the intent of educating each other about products, brands, services and issues (Blackshaw and Nazzaro, 2006). The importance of social media was investigated in a study conducted by Xiang and Gretzel (2010). The authors analyzed the extent to which social media appear in search engine results in the context of travel-related searches. Their analysis showed that social media constitutes a substantial part of the search results, indicating that search engines linked travelers directly to social media sites.

Social media has become an integral platform for businesses as it supports marketers to remain connected with their customers in an effective way. The users put in writing their own reviews on blogs, visual communities and social networks, thus providing a platform to share any audio, video, picture or any other media files on YouTube, Flickr, internet ([Xiang and Gretzel, 2010](#); [Pan *et al.*, 2007](#)). [Királová \(2014\)](#) and [Pergolino *et al.* \(2012\)](#) contend that a destination will be successfully visible through a well-developed communications strategy focusing on social media. An increase in brand awareness, brand engagement, online word of mouth (WOM), friends like trust and social validation are the benefits of adopting this communication strategy.

[Buhalis \(1998\)](#) states that tourism products are purchased in advance before their use and away from the point of consumption. Therefore, timely and accurate information, relevant to visitor needs are crucial elements of customer satisfaction and the destination's competitiveness. Furthermore, it is pertinent to note that the tourism industry is at the forefront of internet usage and online transactions. [Inversini \(2019\)](#) in a recent literature review indicated the importance of reputation and the shift toward online reputation. The literature survey found that the aggregation of social media coupled with the growing computational power has made it possible for real-time reputation assessment. Moreover, it has enabled grasping and understanding of reputation breakdowns instantaneously.

According to [Yadav and Arora \(2012\)](#), social media is an important tool of tourism marketing that can enhance the destination's reputation. Given the above, tourism providers need to view social networking sites as a vital part of their marketing strategies. [Schmallegger and Carson \(2008\)](#) contend that sustainable tourist destinations have used social media as a promotional tool for interactive marketing purposes. [Kaplan and Haenlein \(2010\)](#) found that through social media platforms tourist destinations contact prospective visitors at a relatively lower cost and at higher levels of efficiency when compared to traditional media tools. It is evident from the literature that social media acts as the medium of interaction with substantial cost benefits to all the stakeholders.

More importantly, tourism has created a multiplier effect on India's socio-economic growth through infrastructure development, job creation and skill development, amongst others. [Rajasekharan Pillai \(2006\)](#) research study found a close relationship between tourism and employment opportunities. Tourism is an employment generating industry that provides employment opportunities to a large cross-section of unskilled, semi-skilled and highly skilled professionals. [Chalip and Costa \(2012\)](#) observed that urban communities were economically better off when compared to their rural counterparts. The widespread disparities between the two communities were represented by differences in wealth, human capital and employment levels, and consequently reduced economic development in the rural communities. The authors have advocated sustainable tourism as a means for promoting rural development. [Nunkoo and Gursoy \(2012\)](#) have cited the economic impact of tourism as the most significant enabling factor for the host community to become self-sustainable.

[Irandu and Shah \(2014\)](#) examined the role of eco-tourism in empowering women participants in the rural areas of Kenya by offering them alternative and sustainable livelihoods. The authors argue that the creation of income-generating activities for women through eco-tourism helps alleviate poverty, improves the status of women and promotes the sustainable development of local communities. Therefore, sustainable tourism contributes to the local economy by attracting new businesses through investment opportunities. It not only increases income levels and standards of living of the local communities but also empowers women.

Despite its volume, a recent state-of-the-art literature review (Pourfakhimi *et al.*, 2020) found that academic research on the impact of electronic WOM on tourism and hospitality consumer behavior was fragmented and largely limited to investigating a small scope of its impact. It is evident from the literature that the role of social media in promoting awareness in sustainable tourism is quite a new concept. Furthermore, there is a paucity of the literature in the Indian context. Few studies to date have been conducted on the role of promoting awareness in sustainable development through social media. Therefore, the present study is aimed at reducing this research gap by throwing light on the role of promoting awareness in sustainable tourism through social media in the tourist states of Assam and Odisha. More importantly, the study identifies significant socio-economic and cultural factors that play an important role in promoting sustainable tourism and enhancing the destination's reputation.

3. Research objectives

- To identify significant socio-economic factors that play an important role in promoting sustainable tourism in the states of Assam and Odisha.
- To identify cultural factors that play an important role in sustainable development.
- To comprehend the role of social media in spreading awareness and promoting sustainable tourist destinations.
- To identify sustainable tourism products in Assam and Odisha.

4. Area of study

The study area comprises of the two Indian states of Assam and Odisha. The major tourist destinations in the two states were easily accessible to the researchers, and therefore were identified for conducting the present study. Primary data was collected from the major tourist destinations of Guwahati and Nagaon in Assam and Bhubaneswar, Puri, Pipli and Cuttack in the state of Odisha, respectively.

4.1 Assam

The state of Assam is known for its rich history and cultural vibrancy. Guwahati, the capital city of Assam is the hub of the state, which also serves as the gateway to North-East India. The local markets in Assam sell beautiful handicrafts and paintings. The ethnicity of the state is reflected through its diverse handicrafts, visual arts and the traditional Bihu dance. The traditional ladies drape, Assam Muga Silk Mekhela Chadar is a popular handloom product. In rural Assam, every household owns a loom and family members are engaged in weaving silk and cotton "Mekhla Chadars" and embroidered "White Gamochas." Apart from the traditional Bihu dance, another popular art form is the "Sattriya" dance introduced by the great saint and reformer of Assam, Mahapurusha Sankaradeva in the 15th century AD. The attire for this dance comprises of a locally woven milky white "Pat Silk" saree which represents the locality through its colorful motifs and designs.

The famous arts and craft gallery Shrimanta Sankaradeva Kalakshetra situated in Guwahati was reviewed on Trip Advisor portal as a one-stop destination for visitors to view the rich cultural treasures of Assam (TripAdvisor May 2019). It is spread across 17.5 hectares of land surrounded by hill-locks exhibiting several replicas of Assam's heritage monuments. The other places of significant tourist interest from Assam include Kaziranga National Park, Manas National Park, Pobitora Wildlife Sanctuary, Majuli Island, Hajo, Sivasagar, Umananda Island, Silk and the Craft Village-Sualkuchi. The Kamakhya Temple

is one of the India's most revered temples situated on Nilachal Hill in the western part of Guwahati city it holds religious, historic and archaeological significance. The temple attracts thousands of devotees every day and large congregations of pilgrims and tourists gather every year during July for the Ambubachi Mela.

4.2 Odisha

The state of Odisha is renowned for its superior art and craftworks. For instance, some of the notable arts and craftwork in Odisha are Appliqué Work, Brass and Bell Metal Work, Horn Work, Paper Mache, Stonework, Silver Filigree, Terracotta, Wood Craft. It is also well known for textile products like "Tie and Dye" and "Ikkat" textile in cotton, tassar and silk. Bhubaneswar the capital city of Odisha is well connected with East Coast Railway and boasts of a full-fledged International Airport which operates direct flights to Bangkok and Kuala Lumpur. The state attracts large number of domestic and international tourists. Odisha is synonymous with the famous temple of Lord Jagannath located in Puri, which is an important pilgrimage destination of the Hindus. Thousands of pilgrims wait in long queues every day for "Darshan." The pilgrims receive "Mahaprasad" that is prepared in the temple's kitchen with much dedication and sanctification. It is pertinent to note that the temple has the largest kitchen in the world (Jajati, 2009; Kanungo, 2013). A small village named Pipli near the temple town of Puri is renowned for its intricate appliqué works. Another popular art form known as "Pattachitra Art" (*Vastra - Cloth and Chitra - paintings*) has given a unique identity to a crafts village named Raghurajpur. This ancient art form decorates Lord Jagannath and his siblings with vibrant colors and traditional artistry.

5. Research methodology

The research methodology for the study was based on identifying domestic tourist respondents from other Indian states who were visiting the major tourist destinations of Assam and Odisha. To gather responses for the study, the research was carried out in two phases. In the first phase, a pilot survey was conducted. A convenient sampling method was used for data collection as the researchers had easy access to these destinations. For this purpose, a sample of 23 respondents was selected conveniently. The initial sample included those respondents who were willing to participate and devote quality time with the researchers to undergo the interview process. In the second phase, the final data was collected from 220 domestic tourist respondents who were visiting Assam and Odisha from other states. Therefore, a structured questionnaire was prepared and distributed through google forms. It is pertinent to note that before circulation the questionnaire was pretested and modified to ensure validity.

The questionnaire utilized a five-point Likert scale, one point for "Strongly disagree," two points for "Disagree," three points for "Undecided," four points for "Agree" and five points for "Strongly agree." Out of the 220 questionnaires that were distributed a total of 197 usable responses could be retrieved. Therefore, the valid sample size for the study was considered as 197. The sample distribution of the respondents visiting Assam from other states was Maharashtra (27), Odisha (24), Delhi (19), West Bengal (14) and Karnataka (7). With regards to Odisha, the sample break up was Delhi (32), Assam (28), Maharashtra (24) and West Bengal (22).

Post hoc analysis of "observed power" was conducted after the completion of the current study. Power analysis can either be done before (*a priori*) or after (post hoc) data collection. It utilizes the obtained sample size and effect size to determine what the power is in the study. It assumes that the effect size in the sample is equal to the effect size in the population. The observed post hoc statistical power was 0.967 for (one-tailed hypothesis) and 0.935 for (two-

tailed hypothesis) at a 5% probability level for the given study sample size of 197. Therefore, based on the aforesaid post hoc power statistic the sample size of 197 respondents was deemed to be sufficient for the study.

6. Analysis and findings

Table 1 highlights the demographic details of the respondents identified in the study. The respondents were from different age groups ranging from 18 to 58 years and above. A majority of the respondents were between the age group of 49–58 years, followed by 29–38 years and 39–48 years. Among the respondents, approximately 58% were male, whereas the remaining 42% were females. Regarding the marital status, 53% were married, 36% were single and others comprised of 11%. A majority of the identified respondents were graduates, i.e. 38%; 25% were postgraduates and around 20% of respondents possessed intermediate education. With regards to occupation, 33% of the respondents were entrepreneurs which included tourism providers, followed closely by 24% with government jobs and 23% from private sectors, whereas the remaining were students and agriculturists.

It is pertinent to note that over 40% of the respondents were aged above 49 years. The higher concentration of aged respondents implies high social media and internet usage among the elderly. These findings seem to be very contradictory when verified from TRAI, IAMA reports. According to internet usage statistics in India, the age demographic and their social media and internet use is highly correlated. Social media and internet usage among the elderly are sketchy, and the young use it significantly higher. Contrary to the aforesaid findings, the respondents reported that they were comfortable with social media like Twitter, Facebook and state government travel websites. The present study found that

Variable	Particulars	(%)
Age	18–28	10.05
	29–38	23.65
	39–48	22.50
	49–58	25.85
	Above 58	17.95
Gender	Male	57.57
	Female	42.43
Marital status	Married	53.15
	Single	36.09
	Other	10.94
Qualification	Primary	2.11
	Secondary	14.21
	Intermediate	20.37
	Graduate	38.42
	Higher Education	24.89
Occupation	Agriculture	10.58
	Govt. job	24.32
	Business/Self-employed	32.74
	Private job	23.58
	Student	8.78
Monthly income	INR 25000	13.95
	INR 26000–50000	24.79
	INR 51000–75000	31
	INR 76000–1,00,000	18.11
	Above INR 1,00,000	12.15

Table 1.
Demographic profile
of the respondents

the younger members of the family were involved in booking travel tickets. A significant study undertaken in China noted the growing popularity of social media among the aged especially in the urban areas (Ke, 2015). One more study on the acceptance of information communication technology for online banking by older adults in India showed that the aged were wary of using online banking services for transactions due to safety issues (Amma and Panicker, 2013). Unfortunately, academic research in this particular area of new media and aging population is quite limited in India. Moreover, very little is known about the nature or particular use and purpose of social media for the aging population.

The monthly income of the respondents ranged from INR 25,000 (US\$338) to more than INR 100,000 (UD\$1,351). Approximately 25% of the respondents disclosed a median monthly income of INR 36000 (US\$486) followed by 18% belonging to the income category of INR 1,26,000 (US\$1,702) and 14% from the income category of INR 25,000 (US\$338). The demographic profile of the respondents largely comprised of the middle class and upper-middle class. The practical implication is that taking a sustainable tourist trip requires time and money to spare. Sustainable tourism may not necessarily be the first choice for people who have not had a trip before. The initial findings though inconclusive corroborates with a recent research study on the moderating effect of social media use on sustainable rural tourism in South Korea (Joo *et al.*, 2020). Therefore, if sustainable tourism is marketed, targeting the upper and middle classes would be effective.

The source of information regarding tourist destinations was found to be highly relevant. Among the selected respondents, 11% pointed out Google search, 5% blogs, 8% newspapers, 17% travel magazines, 22% on social media, 9% online WoM, 12% websites of tour promoter, 6% OOH and 10% on others which included tourism literature, brochures and many more. This is illustrated in Table 2.

The study also identified and listed sustainable tourism products from the states of Assam and Odisha (Table 3). The aforesaid products were the main growth drivers of economic development in the two states. These products also empowered local women to be self-dependent, generated employment and opened new opportunities for entrepreneurship in the form of homestays, Airbnb, resorts, local food joints. Therefore, sustainable tourism products have not only alleviated poverty but also created a sustainable host community. The findings are consistent with the literature discussed earlier regarding the linkage between social media usage and socially sustainable tourism in economically backward areas. In Odisha, marketing of these products was done through online WOM, print and audio-visual platforms, out of home media (OOH) and through active participation on social media platforms. It is pertinent to note that Odisha Tourism has a user-friendly website that provides tourists with the required information about the exotic destination. It also allows the travel agents and hoteliers to register themselves and remain visible for the visitors

Table 2.
Source of information
about tourist
destinations

Preferred source of information	% of respondents
Google search	11
Blogs	5
Newspaper	8
Travel magazine	17
Social media (Facebook, Twitter, Instagram, YouTube)	22
Online word of mouth (WOM)	9
Website of tour provider	12
Out of home	6
Others	10

Assam	Odisha	Study on the role of social media
Assamese Silk	Adventure Tourism	81
Adventure Tourism	Archaeological Tourism	
Bamboo Crafts	Beach Tourism	
Bihu Festivals	Buddhist Tourism	
Brahmaputra River Festival/ Ropeway	Bird Sanctuary; Bird Watching	
Cruise Tourism	Culture Tourism	
Culture Tourism	Eco-Tourism	
Films Fests/Film Awards	Handloom and Handicraft	
Food Fest	Heritage	
Golf Tourism	Medical Tourism	
Hill Trekking, Hornbill Festival	Religious Tourism	
Island Tourism- Majuli, the largest freshwater Island in the world and found its place in Guinness Book of World Records. Declared as a district w. e. f 2016. Originally 880 sq. km. Ideal place for birdwatching.	Sand Art Tourism	
Music Fests	Sea Food Fests	
Temple Tourism	Temple Tourism	
Wildlife Tourism: Kaziranga National Park- UNESCO World Heritage Site and home to the one-horned Rhino; Manas National Park-UNESCO World Heritage Site also known for Project Tiger Reserve, Elephant Reserve and Biosphere Reserve; Orang National Park	Tribal Tourism and Craft	
Sports Tourism	Sports Tourism	
		Table 3. Sustainable tourism products

through the portal. However, in the state of Assam marketing of sustainable tourism products are very limited.

The respondents were asked whether they had visited any sustainable tourism destination. Table 4 revealed that out of the total of 197 respondents merely 23% visited sustainable tourist destinations, whereas the majority of about 77% respondents reported that they had not visited such destinations. The study also tried to understand from the respondents their preferred mode of booking their holidays. Social media active visitors seek freedom for their choices. It was evident from Table 5 that 81% of the respondents preferred

Aware	No.	(%)	Table 4. Awareness of sustainable tourism
Yes	45	23	
No	152	77	
Total	197	100	

Preferred mode	No.	(%)	Table 5. Preferred mode of planning holidays
Plan their own holidays	160	81	
Plan own holidays through tour operator	24	12	
Dependent on tour operator	14	7	
Total	197	100	

to plan their own holidays whereas 12% preferred to plan their holidays through a tour operator, the remaining 7% were dependent on travel operators.

Respondents were also asked to point out their preferred mode of booking tickets. Table 6 highlighted that 44% of the respondents preferred online travel mode (OTM), 48% preferred to book directly via travel company websites, and 8% through travel agents. For booking hotels, 46% of the respondents preferred to book by OTM (Make my Trip and Trip Advisor) 52% preferred to book directly through hotel websites, and a merely 2% booked through their local travel agents. Therefore, it could be inferred from the analysis in Table 7 that booking hotels via travel agents is no more the trend nowadays. Furthermore, it was observed that the respondents used online booking platforms such as Make my Trip, Trip Advisor for convenience. Therefore, the findings suggest that online booking platforms are primarily convenience oriented.

The researchers inquired from the respondents whether status updates, pictures, or videos of their friend's vacations exercise any influence on their own travel decisions or to choose any destination. The respondents gave a positive answer to afore mentioned query. The respondents rated 1 as the lowest and 5 as the highest influencer. It is pertinent to note that the analysis revealed that 41% of respondents surveyed rated Twitter as the most important influencer, followed by 33% Instagram, 17% Facebook, 7% Pinterest and the remaining 2% others. The aforesaid analysis is illustrated in Table 8. The results suggest that online conversations were taking place predominantly on social networking sites like Instagram, Facebook and Pinterest, whereas the "Others" category included travel sites such as Make my Trip, Trip Advisor and the State Tourism Websites of Assam and Odisha.

The respondents were probed further to determine the awareness level of sustainable tourism and growth potential of the identified destinations. It was intended to comprehend the respondent's sensitivities towards sustainable tourism, media platforms used to connect with the visitors, and methodology adopted to promote the destination. Cronbach's α reliability method was applied to check the reliability of all items in the questionnaire. A reliability test was conducted using SPSS 25.0 statistical software. The initial reliability coefficient value was found as 0.784. The insignificant items were deleted based on item-total statistics to improve the measurement model. The remaining items were again tested for item reliability. The reliability coefficient value was found as 0.834.

Table 6.
Preferred mode of
booking travel
tickets

Preferred mode	No.	(%)
Online Travel Mode	87	44
Travel Company Websites	95	48
Local Travel Agents	16	8
Total	197	100

Table 7.
Preferred mode of
hotel reservation

Preferred mode	No.	(%)
Online Travel Mode	91	46
Travel Company Websites	102	52
Local Travel Agents	4	2
Total	197	100

The highest mean value (4.65) reported in Table 9 indicated that the respondents strongly agreed that tourism helps in poverty alleviation. It is pertinent to note that religious places significantly influenced respondent visits. The findings assume significance as religious tourism holds great potential in the study areas. The preliminary analysis based on the mean values in Table 9 suggests that tourism generates employment opportunities (4.57), boosts traditional arts and crafts products (4.53), promotes local entrepreneurship and self-sustainability (4.52). Furthermore, tourism also increases government revenue (4.5). Therefore, it is imperative that the government provide updated tourist information through its portals as well as allocate sufficient funds for its promotion. It must be noted that the first six items in Table 9 reported Kurtosis greater than 3. This type of distribution with Kurtosis greater than 3 is called leptokurtic. Its tails are longer and fatter when compared to a normal distribution, and often its central peak is higher and sharper.

It must be noted that some of the questions in the questionnaire seem too normative. For instance, it is rather difficult for respondents to state that tourism would not reduce poverty. This could result in a bias as the respondents tend to agree with such normative questions or constructs. For that purpose, the authors have reported the Kurtosis results for individual items. The first item poverty alleviation reports high mean values. This is an important finding regarding attitudes on social aims. The results seem to suggest the existence of responder bias which warrants the use of Kurtosis. Notice that the Kurtosis reported for poverty alleviation is 4.14 suggesting a reduction in bias.

Much like cluster analysis involves grouping similar cases, factor analysis involves grouping similar variables into dimensions. This process is used to identify latent variables or constructs. The purpose of using factor analysis in the study was to reduce individual items into a fewer number of important dimensions. It can be observed from Table 10 that the variable with the strongest association to the underlying latent variable Factor 1 is Tourism Promotion, with a factor loading of 0.824. As factor loadings can be interpreted like standardized regression coefficients, it could be said that the variable Tourism Promotion has a correlation of 0.824 with Factor 1. This would be considered a robust association for factor analysis in most research fields. Field (2005) suggests that a factor is considered reliable if it has four or more loadings of at least 0.6 regardless of sample size.

When the items have different frequency distributions Tabachnick and Fidell (2007) suggest using more stringent cut-offs going from 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good) and 0.71 (excellent). Following Tabachnick and Fidell's (2007) suggestion a factor loading cut-off of 0.71 was used in the present study. The other variables such as Film Festivals, Trade Fairs, Tourist Arrivals, Sports Events, Awards and Social Media Information are also strongly associated with Factor 1. It is pertinent to note that these variables have factor loadings of more than 0.712. Based on the variables loading highly onto Factor 1, the authors have named the factor "Tourist Promoted Events." It could be inferred that different events such as film festivals, trade fairs, sports and awards events are

Social media platform	Respondents ratings*	% of respondents
Twitter	5	41
Instagram	4	33
Facebook	3	17
Pinterest	2	7
Others	1	2

Notes: 5 – highest influencer; 1 – lowest influencer

Table 8.
Social media
influencer in order of
preference

Table 9.
Insights on the
sensitives of the
respondents towards
sustainable tourism

Insights on sensitivities of respondents	Degree of agreeableness percent						STD. DEV	KURT
	SA	A	N	D	SD	MEAN		
Tourism helps in alleviating poverty	71.57	23.4	3.55	1.5	0	4.65	0.63	4.14
Religious places influence your visit	70.05	24.9	3.05	1.5	0.51	4.63	0.65	6.38
Tourism generates employment opportunities	69.04	22.8	5.58	1.0	1.52	4.57	0.78	6.33
The Traditional Art and Craft and Silk are important sustainable tourist products	65.48	27.4	2.54	4.1	0.51	4.53	0.78	4.42
Tourism promotes the local entrepreneurship and self-sustainability	66.5	23.9	6.6	1.5	1.52	4.52	0.81	5
Tourism promotion increases revenue of the Government	63.45	28.4	4.57	1.5	2.03	4.5	0.82	5.74
Adequate information regarding to tourist destinations and available facilities should be provided by the Government	53.81	37.1	6.09	2.5	0.51	4.41	0.76	2.69
Upsurge in tourism brings in more sale of local cuisines	47.16	39	5.2	6.1	2.5	4.22	0.97	2.14
Tourism promotion activities on social media increases footfall in the tourism destination	45.2	36	9.6	6.6	2.5	4.15	1.01	1.2
Arrival of tourists are indicators of revenue and income generation	51.78	24.9	10.7	9.1	3.6	4.12	1.14	0.44
Art and culture festivals build up tourism	49.2	28.4	10.2	8.1	4.06	4.11	1.13	0.66
Growth in tourist arrivals boosts economic development of the region	46.7	31	11.17	7.6	3.55	4.1	1.1	0.7
Upsurge in tourism leads to growth of sales local ethnic art and craft products	44.16	37.1	6.6	8.1	4.1	4.09	1.09	1.05
Social media provide needful information to the tourist	32.99	40.1	13.7	8.6	4.6	3.88	1.1	0.35
Events such as trade fairs influence tourists to visit the different regions	37.6	23.9	19.3	11.7	7.61	3.72	1.29	-0.67
Sports – National and International enhances the visibility and also encourages tourism	40.5	19.8	16.77	13.8	9.1	3.71	1.35	-0.87
Tourism promotion goes together with the socio-economic development	37.1	23.9	18.3	13	7.61	3.7	1.3	-0.77
Film festivals leads to heavy footfall in the destination, hotels and homestays.	34.01	26	20.8	12.2	6.6	3.69	1.24	-0.65
Tourists arrival gives a positive impact on the economic development of the region.	39.09	20.8	17.8	13.7	8.6	3.68	1.34	-0.88
Awards, both national and international, increase footfall in the destination	26.9	34	23.4	10.2	5.58	3.66	1.14	-0.31

Source: Data from Survey Respondents

Insights on sensitivities of respondents	Factor1	Factor2	Factor3
Tourism promotion goes together with the socio-economic development	0.824	0.448	0.328
Film festivals leads to heavy footfall in the destination, hotels and homestays.	0.822	0.444	0.327
Events such as trade fairs influence tourists to visit the different regions.	0.815	0.449	0.344
Tourists arrival gives a positive impact on the economic development of the region.	0.812	0.435	0.359
Sports – National and International enhances the visibility and also encourages tourism.	0.803	0.446	0.364
Awards, both national and international, increase footfall in the destination.	0.784	0.472	0.320
Social media provide needful information to the tourist	0.718	0.522	0.387
Growth in tourist arrivals boosts economic development of the region	0.629	0.497	0.576
Arrival of tourists are indicators of revenue and income generation	0.628	0.531	0.527
Art and culture festivals build up tourism	0.627	0.509	0.562
Upsurge in tourism leads to growth of sales local ethnic art and craft products	0.626	0.465	0.596
Tourism promotion activities on social media increases footfall in the tourism destination	0.615	0.484	0.598
Upsurge in tourism brings in more sale of local cuisines	0.542	0.503	0.649
Adequate information regarding to tourist destinations and available facilities should be provided by the Government	0.530	0.576	0.536
The Traditional Art and Craft and Silk are important sustainable tourist products	0.472	0.789	0.317
Tourism promotion increases revenue of the Government	0.456	0.772	0.370
Tourism helps in alleviating poverty	0.442	0.820	0.278
Tourism promotes the local entrepreneurship and self-sustainability	0.433	0.789	0.389
Religious places influence your visit	0.425	0.845	0.261
Tourism generates employment opportunities	0.401	0.827	0.355

Notes: S.A – Strongly Agree; A – Agree; N – Neither Agree nor Disagree; b – Disagree; S.D – Strongly Disagree

Source: Data from Survey Respondents

Table 10.
Factor loadings of
main dimensions

the major drivers of tourism in the regions. It is noteworthy to mention that before deciding upon the destination prospective visitors search for relevant and trustworthy information from government portals. Therefore, to increase tourist destination footfalls messages regarding different adventures, events, religious rituals, festivals and sports need to be promoted creatively on the social medium preferably by the government.

It can also be observed from Table 10 that the variables Religious Place Visits, Employment Generation, Poverty Alleviation, Local Entrepreneurship, Traditional Products, Increase in Government Revenue have high factor loadings on Factor 2. The reported factor loadings of the six variables on Factor 2 were more than 0.772. The results seem to indicate Socio-Economic Development within the two regions. The authors have named Factor 2 as "Regional Socio-Economic Development." It is evident from the findings that tourism is responsible for the Socio-Economic economic development of the two regions. A steady rise in the development of facilities with increase in the number of visitors could be observed in the two regions. The improved infrastructure, hotels and budget homestay on the lines of Airbnb, food joints, theme-based resorts have increased government revenue. In addition, it has also empowered the host population to be economically self-sustainable.

7. Recommendations

Assam is blessed with natural fauna that remains largely unexplored, and therefore it holds good tourism potential. As discussed, both skilled men and women artisans are engaged in the making of sustainable products like handicrafts and handlooms. Self-sustainable resorts are being developed wherein tourists visiting the resorts engage in activities like fishing in the man-made ponds, tea tourism, etc. Also, homestays are being encouraged in various tourist destinations in Assam.

Assam is also blessed with rich resources like silk and tea. However, much more work needs to be done in promoting "Silk Tourism" and "Tea Tourism." One way of promotion could be by organizing and promoting specific events on social media. The "Awesome Assam" campaign launched by the Government of Assam with noted actor Priyanka Chopra as the Brand Ambassador needs to be extensively promoted. The world-famous Kaziranga wild-life sanctuary in Assam attracts tourists from all over the world. Therefore, an international awareness campaign on sustainable tourism in Assam could increase international tourist footfalls and contribute to its socio-economic development. It is pertinent to note that in many Tiers 1, 2 and 3 Indian cities civil groups promote initiatives like Heritage Tours, City Walks, etc. both in the online and offline mode. Therefore, such wonderful initiatives could also be effectively tapped.

Popular annual tourism events such as Ambabuchi Mela, Brahmaputra Festival, Handloom Expo, Majuli Music Festival, Tea Tourism, Silk Tourism and Wildlife Tourism need to be promoted actively on social media platforms. Furthermore, equal importance and exposure needs to be given to different festivals that are organized in the neighboring North East states. For instance, the Hornbill Festival in Nagaland, Ziro Music Festival Arunachal Pradesh and the Wangala Festival of Garo Tribes in Meghalaya are some of the notable festivals. The authors recommend that the regions enter award schemes and engage with accreditation agencies given the importance respondents have given to such schemes in the study. Moreover, tourists planning to visit Assam may be encouraged to stopover at the neighboring North East states commonly referred to as the seven sister states. Moreover, such initiatives need to be actively promoted on the new media.

On the other hand, Odisha has been for a long time on the tourist map. Besides religious tourism there exist the potential for products like crafts, silverware, weaving,

etc. New tourism products like education tourism (tourists comprising of doctoral students of art, drama, archaeology, history) and rural tourism offer opportunities that need to be explored further. The Odisha state tourism department is making considerable efforts to promote its tourism products on social media. The case in point is the out of home (OOH) promotion on social media. However, much more efforts need to be taken to promote and empower local artisans on social media. For example, Padmashree Sudarshan Patnaik an eminent Sand Artist from Odisha would gain wider visibility if he is actively promoted on social media platforms. More specifically, concerted efforts need to be taken at the central and the state government level to promote sustainable tourist destinations in the Southern states of India.

Prospective tourists seek more information through social media platforms such as Instagram, Facebook, YouTube when compared to conventional media platforms. The study findings reported that tourists also seek information from government portals like odishatourism.gov.in, visitodisha.org, assamtourisonline.com, awesomeassam.org, tourism.assam.gov.in. The social media button is placed at the bottom of the page on the official website of Odisha Tourism. Therefore, it may not be marked or more often noticed by website visitors. Registered tour operators and hotel industries must be encouraged to promote the official social media page rather than creating new pages.

8. Conclusion

The evolution of the internet over the years has brought about a paradigm shift in global consumption trends. Tourism is an important revenue-generating industry that empowers and enhances sustainability among the local population. Therefore, it requires a strategic media platform for the promotion that is easily accessible. It could be concluded from the study that the active promotion of sustainable tourism destinations on social media platforms would enhance the destination's visibility and accessibility to the visitors.

This study has provided significant insights into sustainable tourism in the selected regions. The most significant insight was the linkage between social media usage and socially sustainable tourism concerning the economically backward regions. Poverty alleviation and women empowerment were the two significant findings regarding attitudes on social aims. Another important finding is that sustainable tourism maybe not necessarily be the first choice for people who have not had a trip before. Therefore, if sustainable tourism is marketed, targeting the upper and middle classes would be more effective. Contrary to past evidence, the study implies high social media and internet usage among the elderly. However, this linkage needs further probe and research.

The study identified different sustainable tourism products for promotion and maximum visibility on social media platforms. Among the regions chosen for this study, Odisha tourism had a significant presence on social media and websites promoting its different tourism products. As discussed, in Odisha sustainable tourism products like temple tourism, handicrafts, sand art and silver filigree are promoted on both conventional and new media platforms. The aforesaid tourism products hold immense potential in contributing to sustainable tourism in Odisha. However, with regards to Assam, there are local issues that need to be resolved. Despite being endowed with rich biodiversity, the region has remained unexplored largely due to insurgency issues, poor marketing and the casual attitude of strategy makers.

Due to paucity of time and resources the responses were not uniformly distributed across tourist destinations within the state boundaries of Assam and Odisha. It may be noted that the geographic scope of the study was limited only to the major tourist destinations in the

two states. Thus the findings may not be generalized to other tourist destinations within the two-state boundaries. However, it could be extended to other sustainable tourism destinations in the two states to study the local issues, challenges and complexities. Future research should examine the role played by social media in promoting sustainable tourism at the national level and then make state-wise comparisons. It is pertinent to note that survey respondents tend to provide altruistic responses. Therefore, the questionnaires may not have accurately captured and assessed reactions to specific benefits the visitors may have gained. To critique, the questionnaires utilized in the current study could have been worded better. Perhaps, the authors will take note of the same while developing questionnaires for future research.

References

- Amma, K.P. and Panicker, S.M. (2013), "Senior citizen's' acceptance of information communication technology: a study of E-Banking in India", *Journal of Information Technology and Economic Development*, Vol. 4 No. 1, pp. 1-8.
- Blackshaw, P. (2006), "The consumer-generated surveillance culture", available at: www.clickz.com/showPage.html?page=3576076
- Blackshaw, P. and Nazzaro, M. (2006), *Consumer-Generated Media (CGM) 101: Word-of-Mouth in the Age of the Web-Fortified Consumer*, Nielsen BuzzMetrics, New York, NY.
- Buhalis, D. (1998), "Strategic use of information technologies in the tourism industry", *Tourism Management*, Vol. 19 No. 5, pp. 409-421.
- Chalip, L. and Costa, C.A. (2012), "Clashing worldviews: sources of disappointment in rural hospitality and tourism development", *Hospitality and Society*, Vol. 2 No. 1, pp. 25-47-23.
- Field, A. (2005), "Reliability analysis", in Field, A. (Ed.), *Discovering Statistics Using SPSS*, 2nd ed., Chapter 15, Sage, London,.
- Fogel, S. (2010), "Issues in measurement of word of mouth in social media marketing", *International Journal of Integrated Marketing Communications*, Vol. 2 No. 2, pp. 54-60.
- Heather Carrerio (2018), available at: <https://kaziranganationalparkassam.in/guest-reviews/>
- Inversini, A. (2019), "Reputation in travel and tourism: a perspective article", *Tourism Review*, Vol. 75 No. 1, pp. 310-313.
- Irandu, E.M. and Shah, P. (2014), "The role of ecotourism in promoting women empowerment and community development: some reflections from Kenya", *Journal of Tourism and Hospitality Management*, Vol. 2 No. 6, pp. 245-259.
- Jajati, K. (2009), "God's own kitchen vies for no record", *India News*, available at: www.ibnlive.in (accessed 2 July 2019).
- Joo, Y., Hwayoon, S. and Nam, Y. (2020), "The moderating effect of social media use on sustainable rural tourism: a theory of planned behavior model", *Sustainability*, Vol. 12 No. 10, pp. 2-14.
- Kanungo, A. (2013), "Unity in diversity: the uniqueness of jagannath culture of Odisha", *Odisha Review*.
- Kaplan, A.M. and Haenlein, M. (2010), "Users of the world, unite! The challenges and opportunities of social media", *Business Horizons*, Vol. 53 No. 1, pp. 59-68.
- Ke, Y. (2015), "Ageing on WeChat: the impact of social media on elders in urban China", *Journal of Visual and Media Anthropology*, Vol. 1 No. 1, pp. 8-21.
- Kiráľová, A. (2014), "Social media as a tool of tourism destinations' marketing campaign", In Doucek, P., Chroust, G. and Oškrdla, V. (Eds).
- Nunkoo, R. and Gursoy, D. (2012), "Residents' support for tourism: an identity perspective", *Annals of Tourism Research*, Vol. 39 No. 1, pp. 243-268.

- Pan, B., MacLaurin, T. and Crotts, J.C. (2007), "Travel blogs and the implications for destination marketing", *Journal of Travel Research*, Vol. 46 No. 1, pp. 35-45.
- Pergolino, M. Rothman, D. Miller, J. and Miller, J. (2012), "The definitive guide to social marketing", A Marketo Workbook.
- Pourfakhimi, S., Duncan, T. and Coetzee, W.J.L. (2020), "Electronic word of mouth in tourism and hospitality consumer behavior: state of the art", *Tourism Review*, Vol. 75 No. 4, pp. 637-661.
- Rajasekharan Pillai, K. (2006), "Structure of the Labour Market in the Tourism Sector of Kerala", Unpublished Thesis, Department of Economics, University of Kerala.
- Schmallegger, D. and Carson, D. (2008), "Blogs in tourism: changing approaches to information exchange", *Journal of Vacation Marketing*, Vol. 14 No. 2, pp. 99-110.
- Stanciu, P. and Costea, M. (2012), "Online visibility of the touristic supply In Suceava county", *Journal of Tourism Studies and Research in Tourism*, Vol. 14 No. 14, pp. 46-52.
- Tabachnick, B.G. and Fidell, L.S. (2007), *Using Multivariate Statistics*, 5th ed., Allyn and Bacon/Pearson Education.
- Xiang, Z. and Gretzel, U. (2010), "Role of social media in online travel information search", *Tourism Management*, Vol. 31 No. 2, pp. 179-188.
- Yadav, V. and Arora, M. (2012), "The product purchase intentions in facebook using analytical hierarchical process", *A Journal of Radix International Educational and Research Consortium*, Vol. 1 No. 4, pp. 26-54.

Further reading

- Arnaboldi, M. and Spiller, N. (2011), "Actor-network theory and stakeholder collaboration: the case of cultural districts", *Tourism Management*, Vol. 32 No. 3, pp. 641-654.
- Bindu, I. (2018), "Role of social media in ecotourism development", *International Journal of Research and Social Sciences*, Vol. 8 No. 5, pp. 134-141.
- Bortha, E. and Mills, A.J. (2012), "Managing new media", in Close, A.G. (Ed.), *Online Consumer Behavior*, Routledge, New York, NY, pp. 83-99.
- Brochado, A. (2019), "Nature-based experiences in tree houses: guests' online reviews", *Tourism Review*, Vol. 74 No. 3, pp. 310-326.
- Budeanu, A. (2013), "Sustainability and tourism social media", *Tourism Social Media: Transformations in Identity, Community and Culture, Community and Culture (Tourism Social Science Series)*, Emerald Group Publishing Limited, Vol. 18, pp. 87-103.
- Chan, I.C.C., Ma, J., Law, R., Buhalis, D. and Hatter, R. (2020), "Dynamics of hotel website browsing activity: the power of informatics and data analytics", *Industrial Management and Data Systems*, doi: [10.1108/IMDS-12-2019-0709](https://doi.org/10.1108/IMDS-12-2019-0709).
- Chow, S., Shao, J. and Wang, H. (2008), *Sample Size Calculations in Clinical Research*, 2nd Ed, Chapman and Hall/CRC Biostatistics Series.
- Ferguson, R. (2008), "Word of mouth and viral marketing: taking the temperature of the hottest trends in marketing", *Journal of Consumer Marketing*, Vol. 25 No. 3, pp. 179-182.
- Grevet, C. and Mankoff, J. (2009), "Motivating sustainable behaviour through social comparison on online social visualization", *HCI Conference*.
- Kapoor, R. (2018), "Ecosystems broadening the locus of value creation", *Journal of Organisational Design*, Vol. 7 No. 12, pp. 1-16.
- Kumar, A., Bezawada, R., Rishika, R., Janakiraman, R. and Kannan, P.K. (2016), "From social to sale: the effects of firm-generated content in social media on customer behaviour", *Journal of Marketing*, Vol. 80 No. 1, pp. 7-25.
- Leung, X.Y., Sun, J. and Bai, B. (2019), "Thematic framework of social media research: state of the art", *Tourism Review*, Vol. 74 No. 3, pp. 517-531.

- Lim, C., Baba, K. and Iijima, J. (2018), "Exploring capability governance model for sustainable-smart tourism development", in *PACIS*, p. 162.
- Liu, H., Wu, L. and Li, X. (2019), "Social media envy: how experience sharing on social networking sites drives millennials' aspirational tourism consumption", *Journal of Travel Research*, Vol. 58 No. 3, pp. 355-369.
- Magno, F. and Cassia, F. (2018), "The impact of social media influencers in tourism", *Anatolia*, Vol. 29 No. 2, pp. 288-329.
- Okumus, F., Köseoglu, M.A., Morvillo, A. and Altin, M. (2019), "Strategic management research in hospitality and tourism: a perspective article", *Tourism Review*, Vol. 75 No. 1, pp. 243-246.
- Riasi, A. and Pourmiri, S. (2015), "Effects of online marketing on Iranian ecotourism industry: economic, sociological, and cultural aspects", *Management Science Letters*, Vol. 5 No. 10, pp. 915-926.
- Séraphin, H., Yallop, A., Capatana, A. and Gowreesunkar, V. (2018), "Heritage in branding of strategy of tourism destinations", *International Journal of Culture, Tourism and Hospitality Research*, Vol. 12 No. 1, pp. 89-105.
- Sinclair-Maragh, G. (2018), "Destination Brand potency: a proposition framework", in Gursoy, D. and Chi, C.G. (Eds), *The Routledge Handbook of Destination Marketing*, Routledge, Abingdon.
- Soper, D.S. (2020), "Post-hoc statistical power calculator for a student t-test (software), available at: www.danielsoper.com/statcalc
- Werthner, H. and Ricci, F. (2004), "E-Commerce and tourism", *Communications of the ACM*, Vol. 47 No. 12, pp. 101-105.
- Williams, N.L., Ferdinand, N. and Bustard, J. (2019), "From WOM to aWOM – the evolution of unpaid influence: a perspective article", *Tourism Review*, Vol. 75 No. 1, pp. 314-318.
- Xiang, Z., Wöber, K. and Fesenmaier, D.R. (2008), "Representation of the online tourism domain in search engines", *Journal of Travel Research*, Vol. 47 No. 2, pp. 137-150.
- Zhang, T. (2019), "Co-creating tourism experiences through a traveler's journey: a perspective article", *Tourism Review*, Vol. 75 No. 1, pp. 56-60.

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