

SUSTAINABLE COASTAL TOURISM IN GOA: DESTINATION PROBLEMS AND MANAGEMENT
OPTIONS

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Abstract

Goa is a world famous tourist destination of India with a beautiful coast line of over 105 kms on its western coast stretching over the picturesque golden beaches of Sinquerim, Candolim, Calangute, Baga, Vagator and Anjuna. Coastal tourism is the mainstay of Goa's economy. The economic importance of Goa's coastal tourism is unquestionable. But the main challenge of Goa's coastal tourism is the conflict between the economic benefits tourism generates and its negative impact on the coastal environment. There are research studies on Goa's tourism, coastal sustainability, its carrying capacity etc., but so far there has been no study focusing on coastal tourism in Goa from its stakeholders' perception. The present article analyses the economic, environment and socio-cultural impact of tourism on coastal sustainability of North Goa's famous beaches on stakeholders. The study suggests steps to reduce the negative impact of tourism activities and develop sustainable coastal tourism thereby addressing the research gap on coastal tourism sustainability studies at a local level. Using a convenience sample of 150 coastal stakeholders and applying a 5-point Likert scale, mean and standard deviation, standard error, the paper finds that locals who gained economic benefits perceive coastal tourism to be sustainable and those who haven't, perceive it to be unsustainable. But all the local stakeholders agreed that tourism has adversely affected the coastal environment as well as the socio-cultural sustainability. And, in the aftermath of the COVID 19 pandemic, the economic sustainability is also under threat. For sustainable coastal tourism, environmental laws need to be stringently implemented and all stakeholders need to be proactive and sensitive towards their coastal areas.

Key words: Sustainable Coastal Tourism, tourism impacts, Stakeholder Perception, COVID 19 pandemic.

JEL Classification: Z32

I. INTRODUCTION

Though Goa is a small state of India, and fares well on many indicators of sustaining development, the environmental sustainability of its coastal tourism has become a major concern among social action groups and policy planners. This is due to the rampant expansion of coastal tourism and real estate activity on this Northern Beach belt under the guise of economic growth. The Sustainable Development Goals Report (2019), ranks Goa far low among 30 Indian states i.e., 22nd in the clean water and sanitation criterion and 19th in the criterion of green climate. More industrialized states like Telangana and Karnataka outperform Goa in these areas. The growth of coastal tourism in the state of Goa had reached its peak, especially after the closure of Goa's mines in 2012, then a major sector of the state economy. The economic importance of coastal tourism is unquestionable. Until the onset of the COVID 19 pandemic, tourism services in Goa directly and indirectly contributed on an average nearly 18 percent to the Net State Domestic Product (NSDP), 25 percent to its total employment and US \$1451 million foreign exchange earnings to the exchequer (Government of Goa 2019). Despite these positives, coastal tourism in Goa has created a heavy negative impact on the coastal physical as well as socio-cultural environment.

The main challenge of coastal tourism which needs to be solved is the conflict between the benefits tourism provides for the economy and for the social environment it is operating in, and its heavy impact on the coastal environment in terms of urban sprawl, linear urbanization, pressure on sensitive areas, the production of waste, water pollution and the fragmentation of habitats, and the social environment, in terms of the loss of social and cultural identity and values (Ghosh T. 2012). The main objective of the present research is to analyze the impact of Coastal Tourism on the economic, environmental and socio-cultural sustainability of the region from various stakeholders' perspective and attempt to recommend regulatory frameworks and tools for sustainable coastal tourism management for North Goa's beaches.

II. OBJECTIVES OF THE STUDY

The specific objectives of the study are as follows:

- i) To define the concept of sustainable coastal tourism.
- ii) To analyse the impact of coastal tourism on the economic, environmental and socio-cultural sustainability of the region from the view point of various stakeholders.

- iii) To develop a practical methodological action plan for the sustainable coastal tourism of north Goa beaches.

water, healthy eco-system and well-maintained coastal environment.

III. REVIEW OF LITERATURE

The Concept of Sustainable Tourism :

The travel and tourism industry are placed among the largest industries in the world. However, the adverse and degrading effects of tourism have become a serious concern and need to be addressed quickly. With this in mind, the concept of sustainable tourism has emerged with the aim of reducing the negative effects of tourism activities, which has become almost universally accepted as a desirable and politically appropriate approach to tourism development (Sharpley, 2003). Sustainability covers all elements that constitute a complete tourism experience. According to majority of the social scientists (Briguglio, Archer, Jafari, & Wall, 1996; Butler, 1991; Sharpley, 2000; Vellas & Becherel, 1999; WCED, 1987) 'sustainable tourism development' concerns an economic, social and environmental tourism development that aims at the continuous improvement of tourists experiences. The tourism industry has the potential to contribute to sustainable development, particularly to job creating, including employment for women and marginalized groups (Cukier, 2002; Gorg, 2000). The purpose of sustainable tourism is to make a balance between protecting the environment, maintaining cultural integrity, establishing social justice and promoting economic benefits, meeting the needs of the host population in terms of improved living standards both in the short and long term (Liu et al., 2013) in both developed and emerging nations (Mitchell & Hall, 2005) while emphasising both intergenerational equity and intra-generational equity (Liu, 2003) and in a form that can maintain its viability in an area for an indefinite period of time' (Butler, 1993, 1999). In community tourism, sustainable development is applied to improve the residents' quality of life by optimising local economic benefits, protecting the natural and built environment and providing a high-quality experience for visitors (Bramwell & Lane, 1993; Park & Yoon, 2009; Park, Yoon, & Lee, 2008).

The World Tourism Organization (WTO, 2001) describes sustainable tourism as, tourism that comprehensively includes its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities. And in the context of coastal tourism, sustainability implies protecting the distinctive coastal resources and associated activities involving terrestrial and marine biodiversity, cultural and historical heritage, beaches, water and scenic beauty (UNEP 2009). The fundamental principle of sustainable coastal tourism lays on the crystal-clear

Theory of Stakeholders Perception

The stakeholder theory is likely to remain in use as the most used theoretical framework for assessing sustainability as long as the concerns of stakeholders of the actual economic and social system and environment that sustain them are present (Renata T. et al 2013). Experts from tourism planning highlight the need to study the stakeholders in order to identify possible problems early and devise strategies that will minimize eventual conflicting situations for destination development. Heng (2017) conducted a study based on the concept of sustainable coastal tourism. The study was implemented for improving the performance of coastal ecotourism in the area that has a very limited number of human resources, funding and time. This study was conducted with quantitative and qualitative mixed mode research. The questionnaires were distributed purposively and tabulated using content analysis. The results of the study showed that in addition to coastal tourism facilities and infrastructure, it was also necessary to socialize with all stakeholders on technology and coastal tourism development in a sustainable manner. Polnyotee and Thadaniti (2014) in their article review the tourism scenario at Patong beach and analyse the factors influencing sustainable tourism at the said beach. The research tools used are direct observation and questionnaire method. Mean and standard deviation were the statistical techniques used for data analysis. A random sample survey of 120 locals and tourists was conducted and the major findings of the survey were local people perceived tourism to be generating more negative than positive outcomes, while tourists revealed that the beach is potentially a very good tourist attraction, but were not satisfied by the supply of tourism services on the beach. The authors recommend all stakeholders to participate in the planning and conservation of the Patong beach. Ghosh and Dutta (2012) assessed the status of Kovalam beach tourism in Kerala and its impact on the sustainability of beaches through participatory community feedbacks. It was found that the coastal village of Kovalam needs social participation from all stakeholders to protect and sustain itself from the havocs created by the consumerist urban-industrial culture.

Amuquandoh and Dei (2007) in their paper examine the tolerance of residents to tourism development around the Lake Bosomtwe Basin in Ghana. A resident survey of 660 people undertaken during January 2006 in the basin reveals that residents are tempted towards large scale tourism. Using chi-square test statistic, the study found that high income, married and highly educated locals wanted large scale tourism for more economic benefits. Ramyashri (2021) in her article on promotion of Odussu lake in Puducherry as a hot spot for ecotourism describes the environmental threats the

lake is facing and how the local stakeholders as well as tourist visitors cooperation is vital in conservation of the ecology of the tourist lake and effective planning and management is needed for sustainable development of the destination. Kement *et al* (2021) in their article examine if the behaviours of tourists visiting sustainable tourism destinations is environmentally responsible. Using a structural equality model the study finds that tourists who have knowledge on environmental protection are more sensitive and responsible towards the surrounding environment of a tourist destination. Though there have been various research studies (Noronha, Lourenco, Lobo-Ferreira, Lieopart, Feoli E., Sawkar, Chachadi 2003, Alvares C.,2002) assessing Goa’s Coastal Sustainability and many official reports on Goa’s tourism, its carrying capacity etc., so far there has been no study focusing on the planning and management of coastal tourism in Goa from the holistic perception of the stakeholders, since they are the most vulnerable section facing the negative impacts of rampant expansion of tourism in Goa. The present study aims at identifying the factors influencing coastal tourism sustainability from this perspective in an attempt to fill this research gap.

IV. RESEARCH METHODOLOGY AND DATA ANALYSIS TOOLS

The study makes use of secondary data on Goa’s State Income, employment, tourism and environment data from official reports like, Employment Unemployment Reports (EURs), ‘Tourist Statistics’, Annual reports on environment. The primary data was collected from 150 stakeholders consisting of 50 local residents, 50 vendors, shack owners, taxi drivers, travel agents (service providers) and 50 tourists mostly domestic, from the 4 most famous beaches of North Goa (Bardez Taluka) viz. Calangute, Baga, Vagator and Anjuna using convenience sampling method. Direct observation, Google forms and interview method were mainly used. Three separate questionnaires were prepared and administered using google forms for various groups of stakeholders. Reliability of questionnaire was tested and was found to be suitable. Locals and tourists were physically interviewed in the months of January and February 2021. Due to COVID foreign tourists

were very few. Most of the domestic tourists were from Maharashtra, Gujarat and Karnataka. Other stakeholders were covered in the month of March and April 2021.

The study uses 5-point Likert scale (Strongly agree, Agree, Neutral, Disagree and Strongly disagree), mean, standard deviation as statistical tools to test and analyse the data collected. Dr. Geoff Norman using real and simulated data, proved that parametric tests not only can be used with ordinal data, such as data from Likert scales, but also that parametric tests are generally more robust than nonparametric tests. That is, parametric tests, even when statistical assumptions are violated, yield largely unbiased answers that are acceptably close to “the truth” when analysing Likert scale responses (Sullivan, G.2013). To analyse Likert scale or interval data, firstly one must create Likert scale items by calculating a mean from the given Likert items then parametric statistic such as mean for central tendency and standard deviation for variance can be applied (Subedi B.P. 2016). Though this is true, the data in the present study follows a classic normal distribution and hence mean and standard deviation has been used. The Likert scale has 22 scale type items for residents’ responses, 13 for tourists and 13 for local tourism service providers, in order to assess the 3 important aspects of coastal tourism sustainability viz. economic, environmental and socio-cultural. They have been designed and developed after reviewing studies on stakeholder perception on tourism growth and sustainability (Renata T. *et al* 2013, Szell 2012, Pappas and Tsartas 2009). The present study uses Google forms, EXCEL and GRETEL soft wares for data analysis.

V RESULTS AND DISCUSSION

From the table 1 it is observed that male respondents in all categories were higher than female respondents. Most of the respondents were young and upto 40 years, 82 percent of local service providers were in the age group of 21-40. 43 percent and 42 percent in this age limit were residents and tourists respectively. It is very striking that most locals and service providers are not even graduates and 10th or 12th pass. But tourists who visited Goa were better educated than locals. Coastal tourism is characterized by younger populations and locals having lower education levels.

Table 1 Demographic Profile of Stakeholders:

Variable	Classification	Category	Percentage Share*
Gender	Male	Residents	44
		Local Service Suppliers	80
		Tourists	58
	Female	Residents	56
		Local Service Suppliers	20
		Tourists	42
Age	Below 20	Residents	15
		Local Service Suppliers	06
		Tourists	33
	21-40	Residents	53
		Local Service Suppliers	82
		Tourists	42

	41-60	Residents	32
		Local Service Suppliers	12
		Tourists	25
Education	Below Graduate	Residents	64
		Local Service Suppliers	60
		Tourists	25
	Graduate	Residents	20
		Local Service Suppliers	23
		Tourists	41
	Post Graduate	Residents	16
		Local Service Suppliers	17
		Tourists	34

Source : Sample Survey, *authors calculation

Another finding from the table 2 is that 36 percent of local residents are not employed in tourism sector, while 26 percent are working in tourism. It implies tourism has absorbed more migrant labour than local labour. Shack owners and taxi owners were more in the study areas as compared to other service suppliers.

Table 2 Category of Stakeholders in %

Category of Residents *					Tourism Service Suppliers*					Tourists*	
Not related to tourism	Related to tourism	Housewife	Retired	Students	Shacks	Stalls	Taxi	Travel agents	Vendors	Domestic	Foreign
36	26	20	14	04	26	12	28	14	18	74	26

Source: Sample Survey, *authors calculation

Table 3 Residents Perception on Economic Sustainability of Coastal Tourism in Goa.

Items	Statements related to Economic Sustainability	Impact	Mean Score (\bar{x})	Standard Deviation	Standard Error
1	The locals' quality of life has significantly improved because of tourism.	positive	4.14**	0.40	0.016
2	Tourism has created more jobs for the migrant labour than goans in the lower category jobs.	negative	3.88**	1.02	0.04
3	Tourism is the main reason for the decline of agriculture in coastal areas.	negative	3.90**	0.61	0.02
4	Tourism has improved the Infrastructure services like roads, power, water supply etc.	positive	3.72	1.48	0.05
5	Tourism has increased the prices of products and services for the locals	negative	3.80**	0.80	0.032
6	Overall tourism destination areas generate higher incomes, employment and services than non - tourism areas in Goa.	positive	3.98**	0.86	0.034
7	Tourism has benefited only the higher class of the society.	negative	3.40	1.52	0.060
8	The road network in Coastal parts of Goa is considerably good due to tourism development.	positive	3.54	1.57	0.062

Source: Prepared by the author herself, same as table 1. ** significant at 5 % level.

Firstly, residents' perception towards economic sustainability is analyzed using Likert scale data and deriving the mean, standard deviation and standard error for all the items. The results in table 3 show that the mean scores are high for better quality of life of locals ($\bar{x} = 4.14$) and the fact that overall tourism areas generate higher incomes, employment and services than non-tourism areas in Goa. ($\bar{x} = 3.98$). But on the negative side locals perceive that tourism is the main reason for decline in agriculture ($\bar{x} = 3.90$), for creating more jobs for migrants than locals ($\bar{x} = 3.88$) and increased prices of products and services for the locals ($\bar{x} = 3.80$). Thus, the attitude of locals on the economic impact of tourism is mixed with some

respondents who have not benefitted from tourism expressing a negative perception and those stakeholders who have gained from tourism activity having a positive perception. This vividly brings out empirical support to the theoretical models of stakeholder theories. While tourism has brought prosperity to the coastal belt, the major problems created by tourism are loss of farm lands, higher number of migrants in tourism related jobs and a high cost of living for the locals.

There have been various theoretical studies (Briassoulis, 1992, Buckley, 1999, 2001, Hunter and Green, 1995) on the environmental impact of coastal tourism and all of them point out to the fact that tourism produces a variety of pollutants, which are irresponsibly disposed off, at times beyond the carrying capacities of the environment; resulting in negative environmental externalities. There have been quite a number of studies on coastal tourism sustainability some of the important ones include the study on the Caribbean islands and its coastal tourism environment, which are under severe stress due to poor sewage disposal; ships throwing waste into sea; sand erosion; commercial scale fishing; wildlife habitat facing slow extinction; carrying capacity limits reaching saturation levels and the like (Lockwood and Medlik, 2003). Another study by Chawla and Romela (2006) on The Gulf of Manner, lying on the Western Coast of Sri Lanka, containing 21 coral reef islands rich with biodiversity, points out to the effects of tourism and industrial pollution, rampant fishing and coral mining which have threatened the endemic species and flora and fauna of this

coastal region.

A study by Marafa, L. M (2008) observed that tourism in Hong Kong was taken as a ready and easy growth option and their government chalked out tourism plans based on mere economic logic. This resulted in adverse long-term environmental impacts, destroying the very resources that have attracted tourists. Although tourism is the major sector of Hong Kong economy, recent strategies have identified the environment as a core factor in strategic plans.

Previous studies on Goa's coastal tourism also point out to similar findings. One of the most famous long-term tourism protests has been in Goa's Calangute beach in India, where a luxury hotel consumed water equivalent to five local villages and one five-star tourist consumed 28 times power supply more than a Goan resident, justifying local discontent over resource-use (Narasimha 2007). A major work on the environmental impact of coastal tourism in Goa can be found in the scientific studies carried out by Tata Energy Research Institute (TERI) in their book (Noronha et al 2003) on coastal tourism, environment and local development. The authors have assessed the economic and more particularly the environmental impact of coastal tourism on human and marine life in Goa and found that the quality of environment in the coastal belt to be degraded and polluted. Another pioneering study by Alvares (2002) describes the slow decline of Goa's bio diversity, Khazan lands, eco systems, its natural assets due to rapid and haphazard tourism construction.

Table 4. Resident Perception on Environment Sustainability of Coastal Tourism in Goa.

items	Statements related to impact Environmental Sustainability	Mean Score (\bar{x})	Standard Deviation	Std Error
9.	Uncontrolled tourism and negative hospitality infrastructure has led to the destruction of natural environment in Coastal areas.	3.98**	1.17	0.047
10.	Due to overcrowding of tourists, negative garbage and litter amounts have increased.	3.80**	0.4	0.016
11.	There is heavy consumption of power and water by hotels, restaurants etc. during peak season.	3.62	1.79	0.07
12.	Tourism has contributed to the increase of congestion, noise and pollution	3.66**	0.86	0.034
13.	Coastal Zone Regulation Act is aimed at protecting the coastal environment in Goa.	3.50	1.85	0.07
14	Sand erosion, is visible on the beaches in Goa.	3.58	1.28	0.051
15	The present sewage and solid waste management systems in coastal areas are sufficient in tourist areas only.	3.82**	0.58	0.02
16.	Tourist developments have spoiled the scenic beauty of our coastline.	3.48	1.44	0.057

Source: Prepared by the author herself, same as table 1. ** significant at 5 % level.

Based on mean scores, (table 4.) the perception of locals towards environmental sustainability indicates that there is a negative impact of tourism activity on the environment, especially with regard to destruction of natural environment in coastal areas, due to rampant tourism infrastructure(\bar{x} =3.98), overcrowding, garbage and litter (\bar{x} = 3.80), congestion noise and pollution(\bar{x} =3.66) and sewage and waste management is sufficient only in tourist areas and not where locals reside (\bar{x} =3.82).

Finally, the social and cultural implications of tourism need to be carefully considered, as impacts can either become assets or liabilities to communities. Mass tourism can either built a positive rapport between locals and tourists (positive) or increase illicit drug use, crime etc. (negative)(Kreag,

G.,2001).Sustainability from the social viewpoint (table 5) reveals that residents perceive Goa is a special place(\bar{x} = 3.76), and also that cultural and entertainment opportunities for Goans have gone up due to tourism(\bar{x} = 3.76), generating a positive impact but there is strong agreement that, Goa is losing its Traditional Culture to Casinos and Electronic Music Festivals (\bar{x} =4.04) as also the drug abuse, crime rates in coastal tourist areas recently are higher than non-tourist areas(\bar{x} = 3.94). The mean scores for the negative impact of social & cultural aspects of tourism is higher than for its positive impacts, indicating that locals fear losing their local identity and intrusion of non-local culture into their peaceful lives. Residents also perceive a negative image of Goa being created among tourists.

Table 5. Resident Perception on Social Cultural Sustainability of Coastal Tourism in Goa

Items	Statements related to Social & Cultural Sustainability	impact	Mean Score (\bar{x})	Standard Deviation	Std error
17	My place is special and should be protected.	positive	3.76**	0.9424	0.037
18	Tourism has increased cultural and entertainment opportunities.	positive	3.76**	0.6624	0.026
19	We are losing Goa's Traditional Culture to Casinos and Electronic Music Festivals.	negative	4.04**	0.9584	0.038
20	Tourists only create crowds and ques.	negative	3.54	1.4084	0.056
21	Further coastal tourism development will affect our quality of life	negatively negative	3.64	1.0704	0.05
22	Social problems like drug abuse, excessive drinking etc is more in tourist visited areas than non-tourist areas.	negative	3.94**	0.8164	0.032

Source : Prepared by the author herself, same as table 1. ** significant at 5 % level

Analysing the other stakeholders viz. 50 tourists, and 50 tourism service providers comprising of shack owners, vendors, shopkeepers and taxi owners were asked to rate the service

quality and condition related to sustainability of beaches in the coastal belt on a 5-point Likert scale ranging from (5 to 1) with following range and response as given in

Table 6 below Table 6.Likert Scale Range of Tourists and Vendors Responses

Scale	Range*	Response
5	4.21-5.00	Very good
4	3.41-4.20	Good
3	2.61-3.40	Sufficient
2	1.81-2.60	Poor
1	1.00-1.80	Very poor

Source: *Authors calculation

Based on the results in table 7, the tourists found the quality of Cleanliness on beaches and roads(\bar{x} =3.2), waste and garbage management(\bar{x} =2.9) and behaviour of locals towards tourists (\bar{x} =3.4) sufficiently good. If the perceptions of the local stakeholders who are service suppliers like vendors, shack owners, guest houses, taxi drivers etc. is taken, one can observe that the roads, traffic and parking, sewage treatment facilities, cleanliness on beaches & roads, and water and power supply were rated poor by local suppliers of tourism services, as the mean scores were 2.18, 2.50, 2.58 and 2.60 respectively. This indicates a serious lapse of the basic infrastructure facilities in sufficient quantity for managing the huge influx of tourists every year. Thus, there is a poor carrying capacity of tourism in coastal

areas that have strained the natural and man-made resources by disregarding and overusing them.

Table 7. Tourists' & Vendors' Rating of the Quality of Coastal Tourism services

Item	Statements related to quality of services related to beach tourism	Mean Values for		Standard Deviation		Standard Error	
		Tourists (Demand side)	Vendors, shacks, taxi drivers, hotels (Supply side)	tourists	Vendor, shops, taxi drivers, hotels (supply side)	tourists	Vendor, shops, taxi drivers, hotels (supply side)
1	Cleanliness on beaches and roads	3.2**	2.58**	0.84	1.21	0.033	0.048
2	Waste and garbage management	2.9**	2.06	0.65	1.57	0.026	0.06
3.	Water and power supply service	2.78	2.6**	1.13	0.32	0.045	0.012
4	Sewage treatment	3.16	2.5**	1.37	0.85	0.05	0.03
5.	Roads, traffic and Parking of tourists vehicles	2.64	2.18**	1.31	0.94	0.052	0.037
6.	Behaviour of locals with tourists and vice versa in case of service suppliers	3.4**	2.26	0.76	1.63	0.03	0.065
7.	Greenery, Scenic beauty and quality of air, water, surroundings	3.32**	2.32**	0.93	1.25	0.03	0.05

Source : Prepared by the author herself, same as table 1. ** significant at 5 % level

With a high positivity rate until June 2021, the second wave of COVID 19 pandemic has devastated Goa's tourism economy and hotel industry in particular. Experts peg Goa's tourism losses at over ₹2000 crores with its heavy negative impact on employment and livelihoods in particular. The economic impact of COVID 19 on the tourism industry in terms of losses to hotels, shacks, tour and travel agencies can be observed from the fact that cancellations of room bookings were 80 percent, while reduction in tourist arrivals was higher at 90 percent. average monthly loss of income was ₹5 to ₹10 lakhs, job losses among informal and migrant labor was higher at 36 percent than among formal and local labor at 33 percent. Most of the hotels, travel agencies had to refund 85 percent of their customers payments received. The findings justify that why the tourism sector in the state is in dire need of a boost and pumping.

VI FINDINGS & DISCUSSION

The major results and findings of this study confirm to the existing findings on coastal tourism in Goa that is, our coastal tourism sustainability is jeopardised on the environmental and socio-cultural grounds and due to the recent COVID 19 pandemic the economic sustainability of coastal tourism is at greater stake. Thus, it is clear that the negative impact in any dimension is high, whereas the positive impact on the economy and local participation are of moderate level.

Based on the options suggested by local residents for sustainable coastal tourism development, it can be concluded that the residents want Improvement of Goa's tourism image as a clean and safe destination (80%), preservation of natural resources (77%) and government incentives for better water and waste management by hoteliers, tourist enterprises. On the other hand, 80 percent of the vendors, shacks, hotels etc. view garbage disposal and management, proper sewerage treatment plants, better traffic management, proper roads and fines on tourists cooking and drinking in the open as most important to achieve control in the coastal tourism areas. Besides this, due to the adverse impact of COVID on the local suppliers the latter want confidence boosting measures, fiscal relief in the form of Goods

& Services Tax (GST) rate cut on tourism services, subsidies and monetary measures like postponement of loan repayment, lower interest rates on loans by banks and direct income support from the state government. It was also found that 58 percent of the hotels, shacks and guest houses did not follow green practices like waste water recycling, wet waste management etc. The tourists perceive better sewerage treatment, uninterrupted essential services and better traffic management as important for their better stay.

Based on the perceptions of the residents and other stakeholders, it is clear that implementation of tourism planning and regulatory policies to manage coastal tourism in Goa is weak and missing. Tourism education and outreach among tourists, local residents and tourist service providers is also conspicuous by its absence. In many of the advanced tourism economies tourism education by NGOs to public sector, private sector brokers, tourists and locals has proven to be beneficial and effective in responsible tourism.

From the sample survey findings, it is clear that Coastal tourism in the Northern Goa is mismanaged and a long-term sewerage, garbage and traffic management action plan in North Goa's Coastal belt is urgently needed. All the resident stakeholders expect the State and local bodies to strictly enforce environment and beach protection rules for destination management and sustainability. The local panchayats should involve various stakeholders in planning and implementing at least waste management and resource conservation projects in their regions by giving tax incentives and subsidies to the participant agents. The local residents, tourist suppliers and civic groups the local bodies, state water and waste management authorities must be sensitised to environment protection and understand that the biocapacity and ecological limits have to be considered before giving any consent for new tourism projects. Local participation in the decision-making process of tourism development should be ensured. Private investors, developers must coordinate pro sustainable activities with government agencies and NGOs to make sustainable tourism a reality. More interactions between all the stakeholders is the need of the hour. Afterall sustainable

tourism for destination management is a collective responsibility and future reward for all the destination stakeholders.

Besides this, an environment centric approach to economic growth is especially appropriate for the coastal environment (the recognition of protected areas, marine parks, marine reserves along the wetland areas and wetland park in Hong Kong are good examples of this approach). Zonal Conservation for sustainability should be focus of coastal resources management. Multiple-use as well as multi-sector involvement is essential to sustainable use of coastal resources where civil societies, NGOs, academics and government could all work as partners. Although, the application of systematic planning in tourism is widely accepted regional or local governments is still slow and partial' (Yunis, 2003).

VII CONCLUSION

Besides short term monetary, fiscal and income measures which are pertinent, one of the biggest requirements for sustaining coastal tourism is to plan and implement strategies that integrate the needs of all coastal zone stakeholders in a sustainable manner

taking account of the environmental, socio-economic, and cultural dimensions (UNEP Division of Technology, Industry, and Economics, 2006). The latter includes tourism education and outreach programs, people centric and participatory coastal management programs and stakeholder involvement in zonal conservation policies. There is an urgent need to restore traveller confidence, support tourism businesses impacted negatively due to the COVID 19 pandemic and involve locals in future planning of sustainable coastal tourism development. To conclude, a coastal area is a very sensitive area in every respect and it requires clear planning while handling. This study shows that the present tourism development at coastal area is not in the right direction of sustainability in its economic, environmental and social aspects. All the north Goa beaches taken for the study have much potential but require effective and efficient planning. More involvement of local community at different levels of planning is one of the prerequisites, at the same time the developers should make sure that the local community is benefited and socio-cultural and environmental values are not deteriorated by tourism development in the coastal areas.

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