

## **SUSTAINABLE TOURISM DEVELOPMENT STRATEGIES USING SWOT-AHP ON NEWLY DEVELOPED COASTAL TOURISM DESTINATIONS**

JAYANTA SAHA<sup>1</sup>, SUMAN PAUL<sup>2</sup>

**ABSTRACT** – For the proper development of tourism destinations, the role of tourism policy is becoming more important. Holding this in mind, scientists have concentrated on environmental, economic, social and cultural sustainability. The SWOT-AHP study was used in this paper to formulate sustainable tourism growth strategies for newly formed tourism strategies in Mandarmani and Tajpur. The most dangerous factors for the destinations are the breach of the Coastal Regulation Zone (CRZ) standard and coastal degradation and depletion of biodiversity. Weaknesses are the second priority factor in the growth of sustainable tourism. The weakest factors for these destinations are the lack of public facilities and the lack of tourism goods. Besides these, the natural beauty of the sea beach is the most reinforcing aspect that, as weekend ecotourism resorts, gives the scope to these destinations. It also has opportunities for more employment choices, as well as local residents, and at the same time contributes to the growth of local infrastructure.

**Keywords:** sustainability, CRZ norm, biodiversity, ecotourism, SWOT- AHP

### **INTRODUCTION**

Tourism is one of the most dynamic and fastest growing global industries and important development contrivance as it generate revenue and employments for nation (Goeldner and Ritchie, 2003). The big consumption of tourism in particular towns or tourist regions has positive and negative consequences (Goranczewski and Puciato, 2010). Some time, the tourism industry has been adversely affected by external political, economic, social and technological factors (Dincer, 2004). It is also vulnerable to disasters that are either natural or man-made. The impacts of disasters on tourism destinations are inevitable and profound and there is no disaster immunity for destinations (Wickramasinghe and Takano, 2007; Sonmez et al., 1999; Beirman, 2003). Unplanned tourism management can harm a tourist destination's physical, social, cultural and economic climate (Dwyer and Edwards, 2010). Recent study has focused on the growth of tourism in terms of economic, social, cultural and environmental sustainability, bearing in mind the positive and negative impacts or effects of tourism (Kisi, 2019).

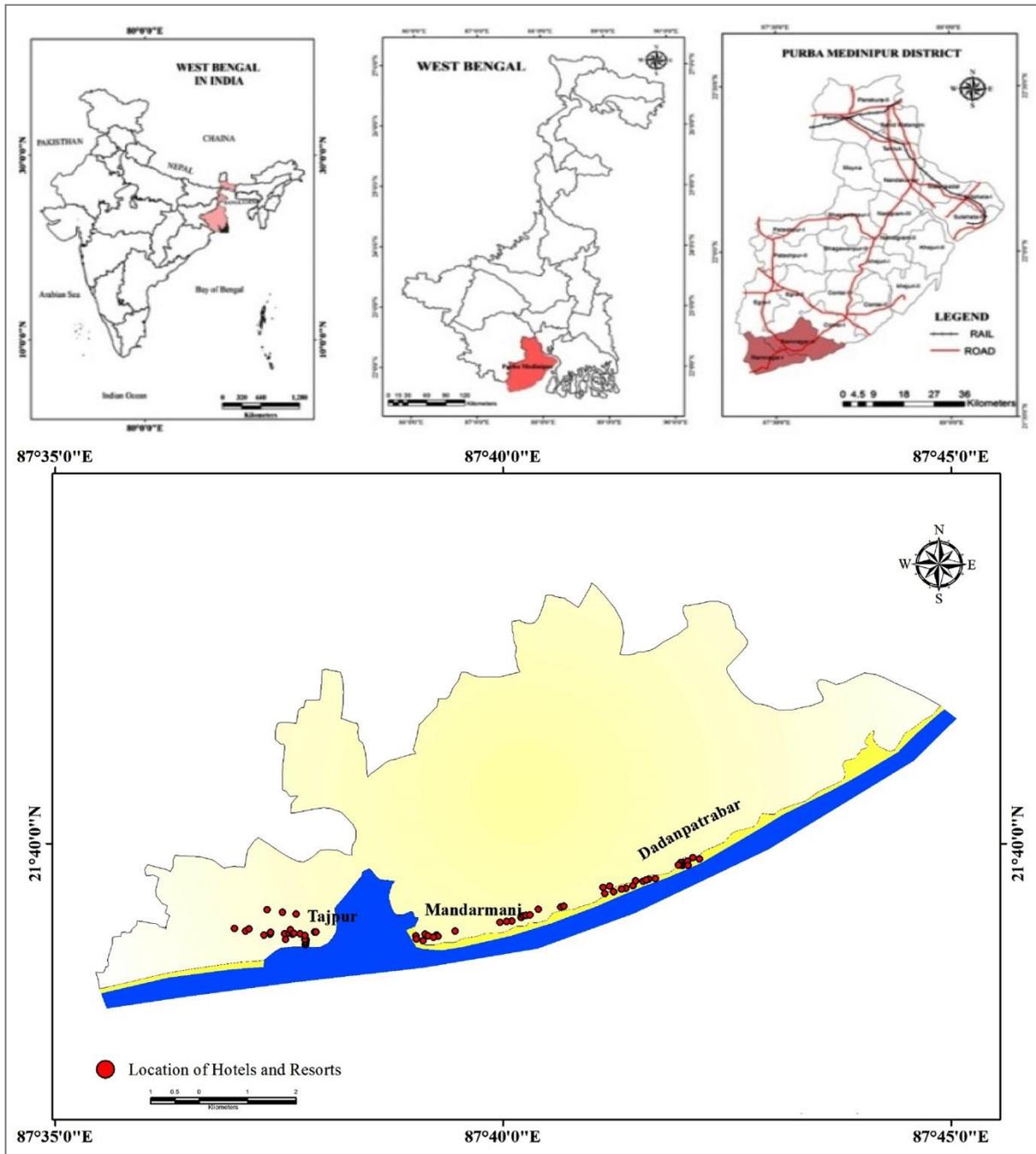
The sustainability of tourism is a systemic notion that takes into account all the industries and services on which tourism depends. It 'takes full account of its present and potential economic, social and environmental consequences, meeting the needs of tourists, the sector, the environment and host communities, for example (Dodds, 2007; UNEP/WTO, 2005; Kisi, 2019). According to Muller (1994), the goal of sustainable tourism is to impact economic sustainability, the subjective well-being of the unspoiled nature of the locals, resource security, balanced culture and maximum fulfilment of the requirements of the visitor. According to Niedziolka (2012), Sustainable tourism has retained ecological, economic and social dignity and has ensured that natural and cultural resources are

---

<sup>1</sup> Research Scholar, Sidho-Kanho-Birsha University, Department of Geography, Purulia, West Bengal, India.  
E-mail: jayantasaha.001@gmail.com

<sup>2</sup> Professor, Sidho-Kanho-Birsha University, Department of Geography, Purulia, West Bengal, India.  
E-mail: suman.krish.2007@gmail.com

protected. Therefore, it is clear that sustainable tourism growth is just an approach that preserves and maintains a country's natural, historical, social and cultural capital (Kisi, 2019).



**Figure 1.** Location of hotels and resorts at Mandarmani and Tajpur, Purba Medinipur, India

The two newly established tourist attractions of the Purba Medinipur District of West Bengal, India, are the Mandarmani and Tajpur. The Purba Medinipur district of West Bengal, India, has tremendous potential for the growth of coastal tourism. The newly established coastal tourism destinations in the chain of coastal resorts in the Purba Medinipur district are Mandarmani and Tajpur. These two destinations have put themselves well on the tourism map of West Bengal within ten years.

## SUSTAINABLE TOURISM DEVELOPMENT STRATEGIES USING SWOT-AHP ON NEWLY DEVELOPED COASTAL TOURISM DESTINATIONS

Mandarmani tourism belt (87°38'49"– 43'19"E; 21°39'30"- 40'15"N) stretches over the villages of Mandarmani, Silampur, Sonamuhi, Dadanpatra between Jaldha and Pichuaboni inlet and Tajpur tourism destination (87°37' 00" – 87°38' 48"E; 21°38'48"- 21°39'16"N) consisting of two villages of Tajpur and BaraKhan is situated in the western side of Jaldha inlet (Figure 1). Mandarmani and its nearby villages were the villages of the fishing community until the establishment of tourist resorts. The temporary settlement of fishermen in Dadanpatrabar and Mandarmani has been established; the practice has been a custom for the last 35-40 years. Orissa fishermen, Medinipur, both Purba and Pachim, and South 24 Parganas come here for trading activities. Before the growth of tourism, Tajpur village was renowned for its fishing activities and salt production. Temporary fishing culture communities started to establish in two villages of Tajpur and Barakhanas in dispersed form (Pahari, 2013; Saha and Paul, 2020). These two destinations have undergone a fast and unplanned growth in tourism that leads to harmful conditions in the natural environment, such as beach erosion, degradation, loss of biodiversity, etc. Yet, it has directly or indirectly affected the local economy in a constructive way. According to West Bengal's Coastal Zone Management Plan Report 2018, Tajpur, Jaldha, Chandapur, Berakhana of Ramnagar-I block and Mandarmani, Silampur, Sonamuhi, Dadanpatrabar, Purushottampur of Ramnagar- II block are under CRZ-I A. By the way, in these villages all the hotels and resorts were built. Figure 2 reveals how the hotels and resorts developed inside the NDZ (NO Construction Zone) were in violation of the CRZ regulations.

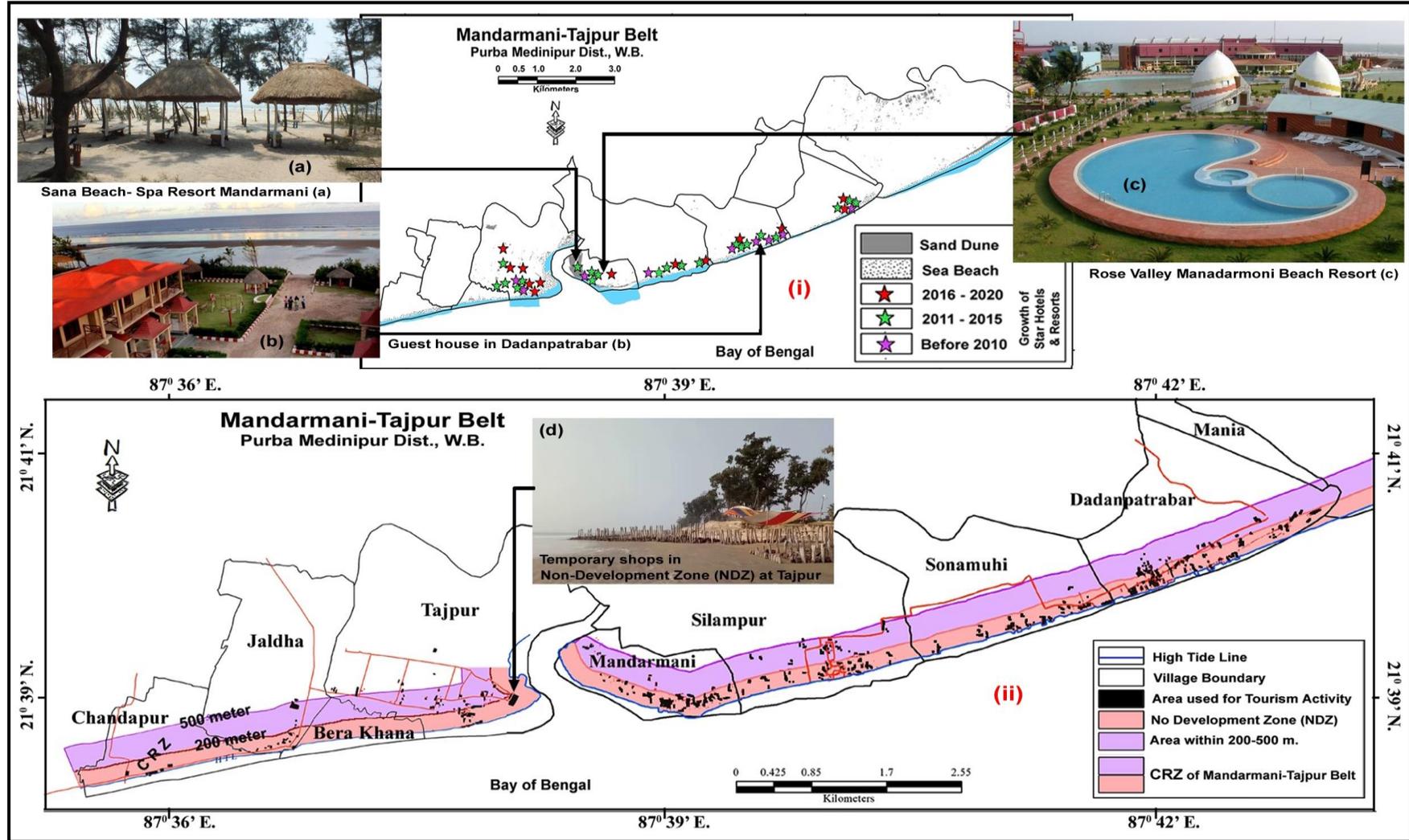
Proper strategic management, which is viewed as the compilation of business management decisions and actions, should be expected under these situations, in conjunction at all levels within the organisation, to assess long-term operational practices (Dincer, 2004; Heidari et al., 2014). Here, an approach to sustainable tourism growth will be essential for tourism development in the long term. The key goal of the study is to establish a systemic approach to the growth of sustainable tourism in this region. For the formulation of strategic claims, the A'WOT (AHP-SWOT) hybrid system has been used as a strategic strategy for Mandarmani and Tajpur sustainable tourism growth and TOWS matrix.

### BACKGROUND OF THE STUDY

In their research, scientists such as Mondal (2017), Feili et al. (2017), Rezapouraghdam and Esmaeili (2017), Sulistyadi et al. (2017), Tsaor and Wang (2007), Reihanian et al. (2012), Kisi (2019) have developed a sustainable tourism growth approach. In formulating sustainable tourism growth plans for Iran, Feili et al. (2017) used SWOT strategy and Fuzzy logic. An assessment procedure for Sustainable Tourism Growth was suggested by Tsaor and Wang (2007) and shows how it can be extended empirically to a Green Island destination in Taiwan. To assess the sustainable growth of tourism, they applied AHP and Fuzzy set theory. As a sustainable tourism growth plan, Vladi (2014) undertook a SWOT study to boost Albania's reputation as a tourism destination. Mondal (2017) proposed several sustainable tourism growth techniques in Bangladesh, such as tourist protection guarantee, economic benefit preparation, and environmental regulatory understanding of sustainable tourism development, using the SWOT analysis and TOWS matrix. SWOT analysis was also used by Rezapouraghdam and Esmaeili for sustainable desert tourism creation in the Khara Desert, Iran (2017). SWOT analysis and TOWS matrix were used by Rihanian et al. (2012) to figure out the necessary growth management strategies in Boujagh National Park (BNP), Iran. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has applied the SWOT strategy to devise sustainable tourism growth in the case of Bali, Indonesia (2012). In terms of possibilities for sustainable ecotourism growth using SWOT-AHP and TOW research, Asadpourian et al. (2020) selected Gahar Lake as the best tourism region in the Lorestan Province, Iran.

The study of Power, Vulnerability, Potential, and Danger (SWOT) is one such management technique that analyses an organization's opportunities, challenges, strengths and weaknesses. The company should develop strengths based on this appraisal, eradicate its vulnerabilities and use its opportunities to address threats (Kurttila et al., 2000; Heidari et al., 2014). SWOT is a list of statements or variables that define existing and future developments in both internal and external environments.





**Figure 2.** (i) Growth of Hotels in Sand dune and (ii) Violation of CRZ rules due to tourism developmental activities at Mandarmani-Tajpur tourism destination



## SUSTAINABLE TOURISM DEVELOPMENT STRATEGIES USING SWOT-AHP ON NEWLY DEVELOPED COASTAL TOURISM DESTINATIONS

The drawback of the SWOT report, however, is that it is subjective of nature and does not measure the value of variables. SWOT-AHP (Strengths, Weaknesses, Opportunities and Threats-Analytic Hierarchy Process) analysis is generally used to solve this challenge. The system of the Analytical Hierarchy Process was developed by Saaty to lead to more qualitative decision-making in situations of risk, complexity, variability and judgement (Saaty and Vargas, 1982; Fabac and Zver, 2011). This approach involves both qualitative and quantitative objectives. A hierarchy of priorities could be established and this strategy could be used to make a collective of decisions. An alternative, constructive solution may be chosen on the basis of this (Fabac and Zver, 2011). The judgment is affected by the subjective and analytical considerations that are used in this process (Golden et. al, 1989; Fabac and Zaver, 2011).

SWOT analysis is also useful for the design of tactics. The TOWS matrix was developed by Wehrlich as a pioneer step for SWOT in the development of alternative strategies (1982). Alternative solutions are built here based on rational combinations of existing strength or vulnerability indicators with external possibilities or hazard variables (Wickramasinghe and Takano, 2009). With the assistance of the TOWS Matrix, four types of strategies could be created. There are I SO (Strengths-opportunities) strategies: internal strengths will realize possibilities; ii) WO (weaknesses-opportunities) strategies: internal weaknesses can be minimized by external possibilities; (iii) ST (Strengths-Threats) approaches: internal strengths have been used to mitigate external threats; (iv) WT (Weakness-Threats) approaches: defensive tactics to eliminate internal vulnerabilities to prevent environmental threats (Chang and Huang, 2006; Rauch, 2007; Heidari et al., 2014; Mondal, 2017).

### METHODS

The analytical approach to the performance of AHP-SWOT has two primary stages in which the Force (S), Vulnerability (W), Opportunities (O) and Threats (T) sub-factors have been finalized in the main section, prioritizing the key values based on field survey, discussion of the focus group and expert feedback. For each sub-factor implementing the AHP method, the local priority and overall priority values were calculated on the basis of the Eigen value method, where two variables were compared with others in proportion as developed by Saaty in the 1970s (Yang and Lee, 1997). The detailed degree of significance for the pair wise matrix between factors and sub-factors was given in Table 1 with a range between 1-9 scales. In this study, AHP-SWOT was used to solve the significance and assess the special issues of newly developed coastal tourism sites. This approach has given comprehensive evidence using qualitative datasets that can be helpful in the strategic planning phase for sustainable tourism development.

**Table 1.** Descriptions of degree of importance for SWOT –AHP Analysis

Degree of importance	Descriptions
1	Two criteria contribute equally to objective
3	Experience and judgment slightly favour one criterion over another
5	Experience and judgement strongly favour one criterion over another
7	A criterion is strongly favoured and its dominance is demonstrated in practice
9	The evidence favouring one criterion over another is highest possible order of affirmation
2, 4, 6, 8	Intermediate value between two judgements

The value and degree of decision hierarchy for SWOT classes and variables is illustrated by experts (Figure 3). Nineteen questions were prepared from four categories and experts were provided to make their decisions on the variables and far-reaching SWOT groups (Table 2). For Mandarmani, two FGDs (Focus Groups) and one FGD for the Tajpur region have been created. The combination of two hotel/resort managers, three household heads, one Panchayat member, one agricultural worker or

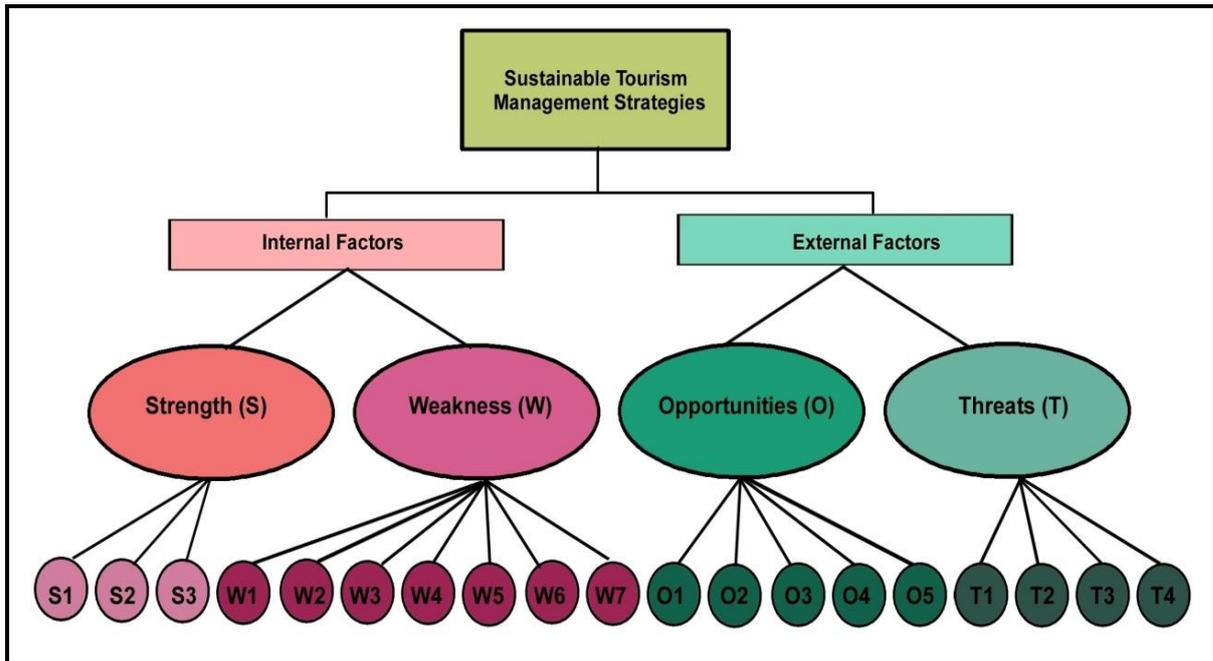
farmer, two local people (one male and one female) as hotel/resort maid servants and one shop keeper are FGDs in both regions (total of ten persons in each FGD). The geometric mean for the pair wise comparison matrix was determined for the assessment and agreement of the given response. The average accuracy ratio (CR) was measured independently for S, W, O and T and found to be less than 0.1, which is agreed by such a study.

**Table 2.** Description of SWOT Sub-Factors

INTERNAL FACTORS	
STRENGTHS (S) What are the strengths of Mandarmani as a tourism destination?	WEAKNESS (W) What are the weaknesses Mandarmani has as a tourism destination?
<p><b>S1 Beauty of the sea beach</b> Scenic beauty of the beach, calm and loneliness of the beach, rich biodiversity (especially red crab, mangroves, and casuarinas forest).</p> <p><b>S2 Accessibility</b> Easily accessible through roadways from Contai – Digha main road at Chaulkhola to Mandarmani tourism destination and from Contai – Digha main road at Balisai to Tajpur tourism destination.</p> <p><b>S3 Famous as weekend destination</b> Mandarmani and Tajpur are known as famous tourism destination.</p>	<p><b>W1 Unplanned development</b> No proper development plan was followed for construction of hotels and resorts and other tourism activities.</p> <p><b>W2 Room rent</b> Comparatively higher room rent.</p> <p><b>W3 Beach recreation facilities</b> Mandarmani and Dadanpatrabar sea beach of Mandarmani tourism destination and Tajpur beach of Tajpur tourism destination have less recreation facilities than other sea beaches.</p> <p><b>W4 Public infrastructure</b> Insufficient public infrastructure such as banks, ATMs, medical shops, Post Office, tourism information centres etc.</p> <p><b>W5 Tourism product</b> Lack of distinctive tourism products that can entice tourists into spending compared to other destinations.</p> <p><b>W6 Safety and security of tourists</b></p> <p><b>W7 Investment</b> Low investment of local people and Government.</p>
EXTERNAL FACTORS	
OPPORTUNITIES (O) What opportunities can be used?	THREATS (T) What threats do we need to be aware of?
<p><b>O1 Proper development</b> Availability of virgin beach through proper and planned development.</p> <p><b>O2 Ecotourism</b> Opportunity for ecotourism development.</p> <p><b>O3 Basic infrastructure</b> Improvement of basic infrastructure.</p> <p><b>O4 Livelihood opportunity</b> Employment and income opportunities for local people through direct and indirect way.</p> <p><b>O5 Cultural identity</b> Presentation of cultural identity through tourism.</p>	<p><b>T1 Environmental norm</b> Violation of CRZ norm.</p> <p><b>T2 Erosion and biodiversity</b> Coastal erosion and loss of flora and fauna diversity.</p> <p><b>T3 Pollution</b> Beach pollution by solid waste and sewage from hotels and resorts.</p> <p><b>T4 Social negatives</b> Increasing alcoholism and prostitution.</p>

Source: developed by authors

SUSTAINABLE TOURISM DEVELOPMENT STRATEGIES USING SWOT-AHP ON NEWLY DEVELOPED COASTAL TOURISM DESTINATIONS



**Figure 3.** Decision hierarchy for sustainable tourism management and strategy planning in Mandarmani and Tajpur area

**RESULTS AND DISCUSSION**

**Analysis of factors and sub -factors of AHP-SWOT in Mandarmani – Tajpur Area**

The determinant of a strategic marketing planning approach is a successful situational appraisal with good precision (Heath and Wall, 1992). This requires awareness of sub variables. Three factors for strengths, seven factors for vulnerabilities, five factors for opportunities and four factors for risks were classified as sub-factors based on prior findings and observational observations (Table 2). This move involved a pair-wise comparison to quantify two aspects: first, the priority measurement between four SWOT groups and second, the priority measurement within the SWOT group of each sub-factor (Table 3.1 and 3.2).

Threat (T) was most important among the SWOT classes with a priority weight score of 0.455 (CI=0.00345, CR=0.003837) in the case of the Mandarmani tourist destination. In terms of importance, Weaknesses (W) rank second with a weight score of 0.263, while Opportunities (O) and strength (S) ranked the same with a weight score of 0.141, i.e. third (Figure 4).

Among the Strength factors, the ‘S1: Beauty of the sea beach’ with a weight score of 0.46 were the strongest factors. The ‘S2: Famous as weekend destination’ came second with a weight score of 0.42. ‘W1: Unplanned development’ with 0.23 was the weakening factor of the Mandarmani tourism destination. ‘W5: Tourism products’ has ranked second with a weight score of 0.22 in Mandarmani. ‘W2: Room rent’ (0.14) and ‘W3: Beach recreational facilities’ (0.10) were ranked third and fourth, respectively (Table 3.1).

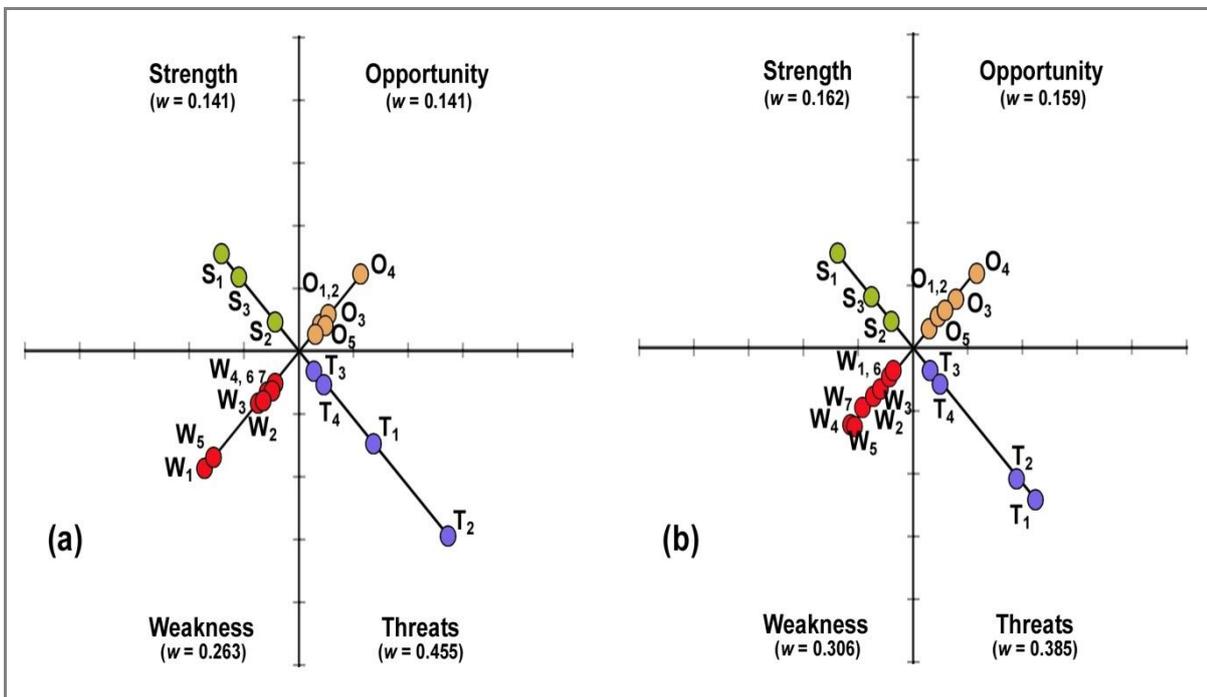
‘O4: Livelihood opportunities’ was the best opportunity with a weight score of 0.48 in the Opportunities factor. ‘O3: Development of basic infrastructure’ was Mandarmani's second chance. ‘T2: Erosion and biodiversity loss’ was the greatest challenge to the Mandarmani tourism industry with a weight score of 0.5030. The second threat was ‘T1: Violation of environmental norm’ like the CRZ rule.

As Mandarmani is renowned for its weekend destination and is just 250 km from the capital of the state, i.e. Kolkata, this location was visited by most visitors on the weekend with their personal car. The loneliness in the beach and tranquillity in the area draw the visitor so much that they become this destination’s key strengths. Public facilities and tourism goods have been described as a serious

vulnerability in the study field. Moreover, in the public infrastructure scenario, Mandarmani is in a much better condition, as it grew more than 5-7 years before Tajpur. The region has undergone a substantial change in the occupational structure and variety of livelihoods in terms of tourism growth and development. Most of the expert feedback findings described livelihood opportunities as the best opportunity for the region. The tourism-based economy also provides an impetus for diversification of livelihoods during the process of climate change and coastal hazards. Threats have been described as the key challenge for both countries, where both areas have breached CRZ requirements and the main problems of concern are the loss of habitat and degradation of local habitats and sand dunes. Via careful preparation and actions that need to be taken care of by the city authority and other neighbourhood members, such risks may be reduced.

Threats (T) were the most influential among the SWOT categories in the case of Tajpur tourism destination, obtaining a weighted score of 0.385. Weaknesses (W) ranked second in terms of priority with a weight score of 0.301 as in Mandarmani tourism destination, but strength (S) obtained third priority with a weight score of 0.16 and potential became last priority (Table 3.2). In the case of strength factors, the best factor with a weight score of 0.49 was S1 that replicated the attractiveness of the beach of Mandarmani. ‘S3: Famous as weekend destination’ with a weight score of 0.3119.

‘W4: Public infrastructure’ with a weight score of 0.1766 was the most weakened factor among the weakness factors. ‘W5: Tourism product’ was the weakened second element with a weight score of 0.1707. In relation to priority, ‘W7: Investment’ was ranked third with a weight score of 0.1514. In case of Opportunities, ‘O3: Basic Infrastructure’ and ‘O4: Livelihood opportunities’ were the most significant opportunity having the weight score of 0.1797. The most significant threat for Tajpur tourism destination were ‘T1: Environmental norm’ and ‘T2: Erosion and biodiversity’ having the weight score of 0.3708.



**Figure 4.** The expert’s feedback for sustainable tourism planning strategies for (a) Mandarmani and (b) Tajpur

SUSTAINABLE TOURISM DEVELOPMENT STRATEGIES USING SWOT-AHP ON NEWLY DEVELOPED COASTAL TOURISM DESTINATIONS

**Table 3.1.** *Priorities of the SWOT Groups and Factors of Mandarmani tourism destination*

SWOT Groups	Weight Score	Priority	SWOT Factors		Priority of Factors	Overall Priority
Strengths (S)	0.141	3	S1	Beauty of the Sea Beach	<b>0.458</b>	0.065
			S2	Accessibility	0.126	0.018
			S3	Famous as weekend destination	<b>0.416</b>	0.059
			<b>CI=0.004604, CR= 0.007938</b>			
Weaknesses (W)	0.263	2	W1	Unplanned Development	<b>0.234</b>	0.062
			W2	Room rent	0.135	0.036
			W3	Beach recreation facilities	0.105	0.028
			W4	Public infrastructure	0.095	0.025
			W5	Tourism Product	<b>0.217</b>	0.057
			W6	Safety and security of tourists	0.094	0.025
			W7	Investment	0.092	0.024
<b>CI= 0.033208, CR= 0.025157</b>						
Opportunities (O)	0.141	3	O1	Proper development	0.128	0.018
			O2	Ecotourism	0.128	0.018
			O3	Basic Infrastructure	0.136	0.019
			O4	Livelihood opportunities	<b>0.482</b>	0.068
			O5	Cultural identity	0.128	0.018
<b>CI=0.001481, CR= 0.001322</b>						
Threats (T)	0.455	1	T1	Environmental norm	<b>0.333</b>	0.152
			T2	Erosion and biodiversity	<b>0.493</b>	0.225
			T3	Pollution	0.076	0.034
			T4	Social Negatives	0.099	0.045
<b>CI=0.045251, CR=0.050279</b>						

**Table 3.2.** *Priorities of the SWOT Groups and Factors of Tajpur tourism destination*

SWOT Groups	Weight Score	Priority	SWOT Factors		Priority of Factors	Overall Priority
Strengths (S)	0.16	3	S1	Beauty of the Sea Beach	<b>0.491</b>	0.079
			S2	Accessibility	0.198	0.032
			S3	Famous as weekend destination	<b>0.312</b>	0.050
			<b>CI=0.004604, CR= 0.007938</b>			
Weaknesses (W)	0.306	2	W1	Unplanned Development	0.136	0.042
			W2	Room rent	0.125	0.038
			W3	Beach recreation facilities	0.147	0.045
			W4	Public infrastructure	<b>0.177</b>	0.054
			W5	Tourism Product	<b>0.171</b>	0.052
			W6	Safety and security of tourists	0.117	0.036
			W7	Investment	0.151	0.046
<b>CI= 0.033208, CR= 0.025157</b>						
Opportunities (O)	0.15	3	O1	Proper development	0.122	0.018
			O2	Ecotourism	0.140	0.021
			O3	Basic Infrastructure	<b>0.180</b>	0.027
			O4	Livelihood opportunities	<b>0.466</b>	0.070
			O5	Cultural identity	0.093	0.014
<b>CI=0.001481, CR= 0.001322</b>						

<b>Threats (T)</b>	0.385	1	T1	Environmental norm	<b><i>0.391</i></b>	0.153
			T2	Erosion and biodiversity	<b><i>0.351</i></b>	0.135
			T3	Pollution	0.107	0.041
			T4	Social Negatives	0.151	0.058
			<b>CI=0.045251, CR=0.050279</b>			

Source: Computed by authors, based on judgements of experts and local people, observations and findings of researcher

- a) The consistency ration between the SWOT Groups is .....
- b) The highest two factors from each group has been marked as **bold** and *italics*. Overall priority score has been calculated by multiplying result of priority factor and SWOT group weightage value.

It is very evident from the current study that the region of Mandarmani-Tajpur is one of the big and well-known coastal tourism sites for its beach, tranquillity and biodiversity. Yet the site is constantly compounded by anthropogenic stressors and the urban political-poverty nexus. In addition, most people in the Mandarmani-Tajpur region depend on agriculture and fishing as their key livelihood choices. In this sense, the growth rate of tourism in both regions will reduce the degree of poverty and create a wide variety of new jobs. Proper planning and action in this respect must be streamlined for both sustainable tourism development and economic viability. In this respect, TOWS review would be of value to the whole process.

#### **TOWS for Strategy formulation**

From the above discussion, it is clear that both destinations, Mandarmani and Tajpur, have been impacted by environmental challenges and have earned first priority with many threats, the second priority. Not so good are the strengths and prospects. In this case, four SWOT strategies need to be implemented according to following:

##### ***SO (Strengths – Opportunities) Strategy***

In this technique, to understand the possibilities, strengths are used. For both destinations, the most important strength factor is the calm, loneliness, and the sea beach with complete natural beauty and rich biodiversity. The most important approach now will be the creation of sustainable community-based tourism or ecotourism, where local citizens will have the ability to engage in tourism activities and have more livelihood choices.

##### ***ST (Strengths – Threats) Strategy***

Environmental challenges such as coastal flooding and depletion of biodiversity have been faced by Mandarmani and Tajpur. This minimizes the beauty of the most influential power factor, the natural world. The following strategic guidelines should be followed: (i) coastal erosion should be regulated; (ii) ecological diversity should be maintained and retained; (iii) all construction practices should conform to the rules of the Coastal Regulation Zone (CRZ); (iv) beaches should be pollution-free.

##### ***WO (Weakness – Opportunities) Strategy***

This technique is used to boost prospects by reducing vulnerabilities. Strategic suggestions include (i) the introduction of a proper planning strategy; (ii) the development of more visitor destinations such as parks, museums, etc.; (iii) it is important to build and upgrade public amenities such as highways, banking facilities, public toilet facilities; (iv) beach leisure facilities must be attractive and more, (v) high room rent for Mandarmani is a major problem for visitors. The rent for the space should be fair.

##### ***WT (Weaknesses – Threats) Strategy***

Both destinations, Mandarmani and Tajpur, have emerged and are growing very fast. The most significant vulnerability of these destinations is unplanned construction, resulting in breach of environmental norms, coastal degradation, loss of biodiversity, contamination, etc. Such environmental risks may be managed or eliminated by a proper planning strategy under which the ecosystem is given first priority.

## SUSTAINABLE TOURISM DEVELOPMENT STRATEGIES USING SWOT-AHP ON NEWLY DEVELOPED COASTAL TOURISM DESTINATIONS

### CONCLUSION

The growth and maintenance of the tourism sector is deemed to be sustainable for the tourism industry (Wang et al., 2008). The long-term approach to sustainable tourism decreases environmental risks and improves the socio-economic gains of tourist destinations (Vidishcheva and Bryukhanova, 2017). The AHP-WOT (AHP-SOWT) framework for formulating a strategic approach to sustainable tourism growth was used in this report. This study of SWOT (Strengths, Weaknesses, Opportunities and Threats) provides a summary of the strengths, weaknesses, opportunities and threats of the Mandarmani and Tajpur tourism destinations. The most reinforcing element for tourism growth is the clam and natural sea beach atmosphere of these two destinations. There have been many challenges to Mandarmani and Tajpur as well as a variety of vulnerabilities, such as high room rent, lack of tourism goods or attractions, lack of public facilities, etc. There are, however, several options for these destinations. Four SWOT methods have been proposed to solve this situation. These results will allow politicians and stakeholders to consider the existing tourism challenges and help to establish a practical plan of action or sustainable growth strategy for the tourism industry.

### REFERENCES

- ASADPOURIAN Z., RAHIMIAN M., GHOLAMREZAI S. (2020), SWOT-AHP-TOWs Analysis for Sustainable Ecotourism Development in the Best Area in Lorestan Province, Iran, *Social Indicators Research*, 152, 289-315.
- BEIRMAN D. (2003), *Restoring Tourism Destinations in Crisis – A Strategic Marketing Approach*, CABI Publishing, Oxon.
- CHAN W. W., MAK L. M., CHEN Y. M., WANG Y. H., LI D. (2008), Energy Saving and Tourism Sustainability: Solar Control window film in hotel room, *Journal of Sustainability Tourism*, 16(5), 563-574.
- CHANG H. H., HUANG W. C. (2006), Application of quantification SWOT analytical method, *Mathematical and Computer Modelling*, 43 (1), 158 -169.
- DINCER O. (2004), *Strategy Management and Organization Policy*, Beta publication, Istanbul.
- DODDS R. (2007), Sustainable tourism and policy implementation: Lessons from the case of Calvia, Spain, *Current Issues in Tourism*, 10, 296-322.
- DWER L., EDWARDS D. (2010), Sustainable Tourism Planning. In: Liburd J.J. and Edwards D. (eds.), *Understanding the sustainable Development of tourism* (pp. 19-44), Goodfellow Publishers, Woodeaton, UK.
- FABAC R., ZVER I. (2011), Applying the modified SWOT – AHP method to the Tourism of Gornje Medimurje. *Tourism and Hospitality Management*, 17(2), 201-215.
- FEILI H., QOMI M., SHEIBANI S., AZMOUN G. (2017), SWOT Analysis for sustainable Tourism Development Strategies using Fuzzy logic, *3<sup>rd</sup> International Conference of Science & Engineering in the Technology Era, Denmark, Copenhagen*, 1-10.
- GOELDNER C. R., RITCHIE J. R. B. (2003), *Tourism: principles Practices, Philoshophies*, 9<sup>th</sup> edition, John Wiley & Sons Inc., New York.
- GOLDEN, L. B., WASIL A. E., HARKER T. P. (1989), *The Analyse Hierarchy process- applications and studies*, Springer Verlag, New York.
- GORANCZEWSKI B., PUCIATO D. (2010), SWOT analysis in the formulation of tourism Development strategies for Destinations, *Tourism*, 20(2), 45-53.
- HEALTH E., WALL G. (1992), *Marketing Tourism Destination: A strategic Planning Approach*, John Wiley & Sons Inc., New York.
- HEIDARI M., ASHARI H. A., FARAHBAKHT S., PARVARESH S. (2014), Using the analytic network process (ANP) in a SWOT Analysis for the development tourism destination; case study: Kish Island, *International Journal of Management*, 5(6), 21-31.

- KISI N. (2019), A Strategic Approach to Sustainable Tourism Development Using the A'WOT Hybrid Method: A case study on Zonguldak, Turkey, *Sustainability*, 11(964), 1-19.
- KURTTILA M., PESONEN M., KANGAS J., KAJANUS M. (2000), Utilizing the analytic hierarchy process (AHP) in SWOT analysis – a hybrid method and its application to a forest-certification case, *Forest Policy and Economics*, 1, 41 -52.
- MONDAL S. H. M. (2017), SWOT Analysis and strategies to develop sustainable Tourism In Bangladesh, *UTMS Journal of Economics*, 8(2), 159-167.
- MULLER H. (1994), The Thorny Path to Sustainable Tourism development, *Journal of Sustainable Tourism*, 2(3), 131-136.
- NIEDZIOLKA I. (2012), Sustainable Tourism Development, *Regional Formation and Development Studies*, 3(8), 157-166.
- PAHARI D. P. (2013), *Coastal Resorts of West Bengal: An Environmental Appraisal* (PhD thesis, University of Burdwan, West Bengal, India). Available from: <http://hdl.handle.net/10603/54189>.
- RAUCH P. (2007), SWOT analysis and SWOT Strategy formulation owner cooperations in Austria, *European Journal of forest research*, 126(3), 413-420.
- REIHANIAN A., MAHMUD N. Z. B. M., KAHROM E., HIN T. W. (2012), Sustainable tourism development strategy by SWOT analysis: Boujagh National Park, Iran, *Tourism Management Perspectives*, 4, 223-228.
- REZAPOURAGHDAM H., ESMAEILI B. (2017), *Sustainable Desert – Tourism Development Strategies in Khara, Iran: A SWOT Analysis approach*. Proceedings of the 7<sup>th</sup> conference of advances in hospitality and tourism marketing and management, 10-15<sup>th</sup> July, North Cyprus.
- SAATY T. L., VARGAS G. L. (1982), *The Logic of Priorities*, Njihoff Publishing, Kluwer.
- SAHA J., PAUL S. (2020), Tourist's Attitude and Satisfaction of Newly Developed Coastal Tourism Destination of West Bengal, India, *Asia Pacific Journal of Multidisciplinary Research*, 8(1), 72-80.
- SONMEZ S., APOSTOLOPOLOUS Y., DAET R. (1999), Tourism in Crisis: Managing the effects of Terrorism, *Journal of Travel Research*, 38(1), 13-18.
- SULISTYADI F., EDDYONO B., HASIBUAN (2017), Model of sustainable Tourism Development Strategy of the Thousand Islands Tourism Area – Jakarta, *Journal of Economics, Management and Trade*, 19(1), 1-17.
- TASUAR S.-H., WANG C.-H. (2007), The Evaluation of sustainable tourism Development by Analytic Hierarchy Process and Fuzzy Set Theory: An Empirical study on Green Island in Taiwan, *Asia Pacific Journal of Tourism Research*, 12(2), 127- 145.
- UNESCO (2012), *Cultural Landscape of Bali Province: The Subak System as a Manifestation of the Tri Hita Karana Philosophy*. Available from: <https://whc.unesco.org/en/list/1194/documents/> [Accessed on 7 January 2020].
- VIDISHCHEVA E. V., BRYUKHANOVA G. D. (2017), Analyses of the Sustainable Tourism Development Factors: the Example of Sochi-City, *Journal of Advocacy, Research and Education*, 4(3), 172-180.
- VLADI E. (2014), Tourism Development Strategies, SWOT analysis and improvement of Albania's image, *European Journal of Sustainable Development*, 3(1), 167-178.
- WICKRAMASINGHE V., TAKANO S. (2007), *A Model to evaluate the response and travel motivations to visit Tourism Destinations in Disastrous regions*, Proceedings of the 11<sup>th</sup> World Conference on Transportation Research (WCTR), Berkeley, USA, 7.
- YANG J., LEE H. (1997), An AHP decision model for facility location selection, *Facilities*, 15(9), 241-54.