

# Porto Novo Vellar Estuaries: Design and Testing of Eco-Tourism in the Bay of Bengal, India

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**Abstract - In current scenario Mass tourism or Beach tourism or Coastal tourism occupies more percentage of recreational tourism while ecotourism contributes less percentage which can be overcome by innovation in ecotourism like Estuary Mouth Tourism [EMT] and Small Island Tourism [SIT] in the form of cooperative tourism management. This study is conducted at Porto Novo-Vellar Estuary to assess the awareness and preferences of tourist in addition to the Mangrove Boating Tourism [MBT]. Data are collected from 35 students at the post graduate and doctoral level in the University using sixteen pictorial profiles of tourism packages combining all alternative tourism packages and 35 tourist respondents who visited the destination about the strength and opportunities of the destination. Conjoint analysis and SWOT analysis are applied for the study. Since floating market contributes a lot to Thailand's economy. Implementation of cooperative ecotourism, with innovations at this estuary can contribute to economic growth.**

Keywords - *Ecotourism, Mass tourism, Conjoint analysis, SWOT analysis, Cooperative tourism.*

## I. INTRODUCTION

Tourism is big business that attracts approximately US\$15 trillion in the year 2018 according to the World Travel & Tourism Council (Blanke and Chiesa, 2008). The world travel & tourism (T&T) industry generates 9% of global GDP and employs as many as 220 million people worldwide (Blanke and Chiesa, 2009). The industry is expected to keep its leading role in driving global growth, creating jobs and alleviating poverty. It is also the primary source of foreign exchange earnings in 46 of the 49 Least Developed Countries (UNWTO, 2006). The predicted growth rates of between 5% and 6% per year for Africa and South Asia. Developing countries actually have a comparative advantage over developed countries in terms of cultural heritage, natural wildlife, climate, attractiveness of rural and remote areas, etc. It offers an opportunity to support traditional activities such as fishery, agriculture, handicraft, etc. It is again a labour intensive industry and therefore it provides jobs for men and women and young people. It brings international recognition to local communities of their culture and the surroundings natural environment, in addition to poverty alleviation, climate change, natural disasters and biodiversity loss are also the causes of tourism.

Tourism products is defined (Burkat and Medlik,

1981) as an array of integrated products, which consist of objects and attractions, transportation, accommodation and entertainment, where each element of the tourism product is prepared by individual companies and are offered separately to consumers (tourist). The other definition (Medlik and Middleton, 1973) of it consists of a variety of elements, which is a package that is not integral to each other and meet the needs of tourists from leaving his residence to the place of destination and back again to the place of origin. Fennell (2001) defined tourism as the interrelated system that includes tourists and the associated services that are provided and utilized (facilities, attractions, transportation and accommodation) to aid in the improvement. Tourist is a person travelling for pleasure for a period of at least one night, but not more than one year for international tourists and six months for persons travelling in their own countries with the main purpose of the visit being other than to engage in activities for remuneration in the place(s) visited.

Mass tourism or Beach tourism or Coastal tourism is one of the most common tourism that occupies 90% from recreation tourism and small percentage come from ecotourism, educational-tourism, religious tourism, third age, health tourism, wine tourism, sports tourism and Professional tourism (Akrivos *et al.*, 2014). The livelihood option for villages in the coastal region is the geopark that is aimed at preserving the geological structure of the coastal areas. Among the Asian countries, the growth of tourism in India is progressing steadily. Integrated Coastal Zone Management (ICZM) has been promoted by the United Nations since 2009 to till date across the globe.

The coastal is based on a unique resource combination at the inter face of land and sea offering amenities such as water, beaches, scenic beauty, rich terrestrial and marine biodiversity, diversified cultural and historic heritage and health food. It facilitates the development of tourism capacities like hotels, resorts, second homes, restaurants and support infrastructures like mini ports, marinas, fishing and diving shops and other facilities. Examples for the successful coastal tourism include sailing in the Gulf of Mexico, surfing on the beaches of Australia and Hawaii, or scuba diving in the Red Sea. Besides physical conditions, the development of tourism in coastal area is related to socio-economic features of the receiving environment such as local community interests, health and security

conditions, political factors including unpredictable crisis, exchange rate fluctuations, and traditional models of tourism exploitation, a successful or less effective marketing- led depiction of a destination.

Ecotourism is the major component of the tourism in coastal areas as its aim is to undisturbed the natural plants and fishes in the region. Ecotourism is defined as 'environmentally- sustainable tourist activities in relatively undisturbed natural areas to enhance the appreciation of and learning about ecosystem while providing benefits to local communities (Kang, *et al.*, 2010). Ecotourism companies provide ecotourism products with a combination of services, activities and resources. The tourist trips are mixed with sports activities or cultural experiences that are combined in the nature areas. The sports activities are based on water and land. The land-based sports activities are hiking, biking, horseback riding, hunting, skiing, snow shoeing and snowmobiling. Water based activities are boating, canoeing, kayaking, rafting, underwater diving, fishing and fly fishing. In addition, business activities like camping, lodges, cabins and guest houses. Countries like Queensland and Australia provide the most popular ecotourism activities.

#### **Cooperative Ecotourism**

The basic concept of ecotourism lies in the sustainability of local communities' livelihood and natural resources in the estuaries. The innovation in ecotourism has been practiced in Indonesian coastal villages in the form of cooperative tourism among the members of local communities by sharing the activities of tourist products like accommodation, transportation, facilitation, etc. (Nugroho and Negara, 2013). In the interest of promoting innovative capability of members of local village, a mechanism of monitoring and evaluation (money) has been design to foster the cluster economy. The categories of tourist product and services are environmental view and cultural attraction, benefits of landscape, accommodation and services facility, equipment and supply, education and training, award and appreciation.

## **II. REVIEW OF LITERATURE**

The review of related research articles has been done following sub-headings:

### **A. Tourism**

The tourism industry is becoming one of the largest and fastest growing economic sectors of the 21st century. It represents a massive and complex interaction of people, who demand a wide range of services and facilities, and inputs (Price *et al.*, 1997). The notion of sustainable tourism development has emerged to describe development that strives to contribute to the sustainability of the environment, socio-cultural resources, and overall socio-

economic development (Neto, 2003). Sustainability in tourism development is especially pertinent in the context of mountain-environments due to the fragility and vulnerability of mountain- ecosystems, which makes them susceptible to degradation (Colin and Inbakaran, 2002).

Tourism crosses multiple sectors and includes a diversity of stakeholders. Thus, sustainability in tourism requires holistic planning that integrates multiple sectors and incorporates meaningful public participation in decision-making (Choi and Sirakaya, 2005). It is an approach to promoting grassroots level involvement in governance and decision-making process. The traditional form of top-down governance is not dynamic enough to cope with the world that is getting more complex by the day. Given the complexity of factors, public involvement in the decision-making and governance process is highly recommended in the literature (Kent *et al.*, 2011).

### **B. Coastal Tourism**

The concept of coastal tourism embraces the full range of tourism, leisure and recreational activities that take place in the coast and offshore coastal waters. These include the development of accommodation, restaurants, food industry, second homes in the coast, infrastructure supporting coastal development as well as tourism activities such as recreational boating, coast- and marine-based ecotourism, cruises, swimming, recreational fishing, snorkeling and diving (Hall and Page, 2006). Environmentally, poorly planned coastal development and poorly linked transport and service lines led to habitat degradation or loss; off-road recreation vehicle and camping activities caused coastal vegetation destruction and erosion impacting on wildlife, terrestrial and marine biota of introduced species, coastal waters, estuarine and coastal wetland, especially mangrove and sea-grass (Harvey and Caton, 2003). Traditionally, the study of sustainable tourism emphasizes three aspects: economic efficiency, environmental integrity, and social equity. Most research focuses on environmental sustainability while ignoring the needs of both the tourists and local inhabitants. In Addition to this, research shows that the core of sustainable development is equity, which can only be achieved when participation occurs and local people become involved in the decision making process (France, 1997). Although sustainability has become an adaptive paradigm of tourism in the real world, sustainable tourism principles are imperfectly understood and applied in some coastal areas (Hunter, 1997).

### **C. Eco-tourism**

The ecotourism stem can be traced back to the late 1980s (Orams, 1995). Ecotourism should satisfy conservation and development objectives (Lindberg *et al.*, 1996). Ecotourism is perceived as a viable alternative route by which a measure of economic benefit can be reaped

from tourism, with minimal damage to the environment and society and maximum advantage to local people (Batra and Chawla, 1994). Ecotourism is important for long-term conservation and bio-diversity. In most protected areas, ecotourism remains an unrealized possibility and the links between ecotourism development and conservation are poorly understood (Yadav, 2010). Ecotourism developments are often limited by a narrow focus on infrastructure development and have failed to maximize opportunities for generating local benefits. According to Weaver (2006), associated cultural influences are recognized as essential ecotourism attractions especially in the case of indigenous territories. This is based on the arguments that direct and indirect human influences critically affect the dynamics of any contemporary ecosystem and form a vital part of the ecosystem's interpretation and understanding. Ecotourism does not lack criticism on its theory and operations. Most tourism authorities agree that to be successful, ecotourism should promote conservation of natural resources and also provide financial gain for the host country and the local people (Cater, 1994). Developing countries have increasingly turned towards ecotourism to earn foreign exchange and at the same time, preserve the environmental resource base. The potential of ecotourism as a source of employment and economic growth worldwide is significant. The ecotourism industry is complex because of its nature and the dynamics between its stakeholders (Lawrence *et al.*, 1997).

#### D. Island Tourism

The 'warm water' destinations have historically focused on sun, sea and sand tourism for development purposes and many destinations are dependent on this type of mass tourism for a large proportion of their GDP (Gossling and Wall, 2007). Mass tourism, developed quickly and with little differentiation, has forced islands to compete with other islands, often resulting in the neglect of historical, cultural and environmental impacts for the rest of the island. Apart from this, up/down turns in tourism numbers have rapid multiplier effects on the rest of the island economy and infrastructure strains are quickly felt as are the ratio of visitors to locals. Butler, (1980) explained various stages of destination lifecycle model, which a destination faces moving from exploration to involvement, development, consolidation and then either decline or improve. With uncontrolled growth and overdevelopment, the quality of the tourist experience is often eventually reduced and a destination's comparative natural-unique-real advantage is lost.

#### E. Estuary Tourism

Human impacts on the estuary date back ca. 7000 yrs when there was a sharp decrease in forest cover (based on pollen diagrams Fletcher *et al.*, 2007). Many studies on the

economic value of the oceans have focused on the economy of various regions as influenced by the oceans, both nationally as well as internationally (Colgan and Plumstead, 1993). Environmentally and culturally sensitive harvesting mechanisms promise to facilitate a sustainable fishery in coastal and estuarine environments (Zetina-Rejon, *et al.*, 2004). Recreational fishing and fish consumption has significant consequences for human health in some aquatic ecosystems, as evidenced by the contaminant, heavy metal and estrogen loads reported for highly sought after species in many estuarine and freshwater systems (Yilmaz, 2003). Apart from boating, there are many other activities which have had a greater impact on aquatic ecosystems. As the list of contaminants from antifouling paints on recreational vessels continues to grow, there remains no doubt that these chemicals can accumulate to highly toxic concentrations in sediments of freshwater and estuarine ecosystems (Schiff *et al.*, 2004).

### III. RESEARCH METHODOLOGY

The present study has been done to test three tourist products like packaged tour as an independent product and also as a combo-pack. The focus of the study is to identify the preference for the tourist product among tourists in the form of estuaries, island and mangroves on one aspect and the scope for cooperative ecotourism among local communities in three villages.

#### A. Need for the study

Vellar Estuaries has the potential for ecotourism as the local communities fishing related activities have been constrained after the intervention of Power projects and other industrial initiatives.

#### B. Research Problem

The alternative opportunity for the local communities is Ecotourism which is partially promoted in the local area by the Tamilnadu Tourism Development Corporation (TTDC), India. The tourism is known as Mangrove Boating Tourism (MBT), apart from this kind of tourism, there are two more tourism potentials available in the estuaries. They are 'Estuaries Mouth Tourism (EMT)' and 'Small Island Tourism (SIT)'. The tourist product alternatives have not been educated to tourists who visit for the pleasure experience of boating. The prime focus of the study is to assess the awareness about the three alternative choices in the estuaries. In addition, the interest and preparedness among the tourist for cooperative tourism have also been assessed using strength, weakness, opportunity and threat (SWOT) analysis.

#### C. Objectives of the study

The following two specific objectives have been proposed to study the interest of tourist for a combo package tour and cooperative ecotourism.

1. To rank the single and combo eco-tourist product and services among tourist visiting Pichavaram tourism destination
2. To analyze the preparedness of tourist towards the strength and opportunity available in Vellar Estuary keeping aside its weakness and threats.

#### D. Research proposition

There are twin research propositions **that** have been proposed for the purpose of the study. It is assumed that the tourist come for unique pleasure or multiple pleasure and prepared to opt for cooperative ecotourism in the vellar estuary.

H<sub>01</sub>: Tourists prefer multiple pleasure experience more than the single form eco tourist product and service.

H<sub>02</sub>: The Tourists are prepared to opt for multiple tourism choices in the strength and opportunities in this existing tourism destination.

#### E. Research Design

The design of research is concept testing by way of ranking combination of three different tourist product and services among tourists. The population for the study is indefinite in nature, however, the seasonal variation in the estuaries has been considered for the study. The period of study has been chosen between May-June, 2015. The proportionate sampling has been adopted in choosing 35 tourist respondents. The tourist product concepts have been designed as profiles using orthogonal design of data structure. The conjoint analysis has been adopted for the purpose of raking the profiles with range of utility scores. Both design of orthogonal plan file and preference file have been created in line with the execution of the conjoint analysis. The design profile comprised of the factors such as tourist product choice (Unique/Combo), price (low/high tariff), time (half-a-day/ full-day), type of tourist (Single/Group), preference for seafood (yes/no) and type of pleasure (Boating, Beach, adventure).

#### Mangrove Boating Tourism (MBT)

It is defined as the educational tourism of mangrove forest along with a boating experience of pleasure tourist product. The significant educational aspect is added about the heritage of the 'Thillai Tree' which is named after the Lord Nataraja. The latex of the tree has the medicinal property to cure the leprosy disease among human beings. The habitation of mangrove forest and its property of protective cover against heavy storms like 'Tsunami' in addition to its capacity to support predatory fish species. The pre-set boating avenues have been extended to tourists as rowing boat and motorized boat. The tariff of

rowing boat is Rs.55 per hours (US\$1) and for the Motorized boat is Rs.120 (US\$2) for single tourist. The tourists are given with a risk cover by way of life jacket. There are about ten motorized boats and twenty rowing boats. There is an association like group of persons who act as boat drivers-cum-tourist guide appointed on commission basis by the TTDC. The tourism centre is facilitated with a hotel and restaurant and the transportation is supported by bus facilities which are operated by Tamil Nadu State Transport Corporation (TNSTC) at frequent intervals of half an hour spread.

#### Estuaries Mouth Tourism (EMT)

It is defined by the researcher as an experience tourist gets in the form of pleasure of sailing in a boat by crossing the waves that mix with river water. The estuary has five stations based on its ecological perspective viz., mouth, sea-grass-bed, biological station, avicennia zone, and Rizophora zone (Khan *et al.*, 2014). The estuary is naturally formed between Porto Novo (Parangipettai) and MudasalOdai (River-Sea Mouth). The shallow sea-land has naturally formed which is surrounded by the deep sea. The tourist can park their boat on the sea-land and feel the experience of shallow sea and the swimming experience is exciting. The local fishermen are extending the tourist product informally to those who really look for the experience of EMT at a tariff of Rs.2000 (US\$30) with an extra pleasure trip of deep sea fishing. The tourist also gets the fresh seafood cooked in fishing vessels at a cost depending on the type of fish available at the time of sailing.

#### Small Island Tourism (SIT)

It is defined as another form of beach tourism that provides opportunity to experience sunbath, swimming on the seashore, sea water sports, camping for Yoga, etc. The tourist product has been offered by the local communities of Muzhukkuthurai (Mini Port) and M.G.R. Thittu (Island) on lease basis to commute tourist on waterways up to the Island.

The tariff for commuting tourist has been observed as Rs.300 to Rs.500 (US\$5 - US\$8). The opportunity for local communities to get the lease of operating motorized boating for commutation range from Rs.2, 00, 000 (US\$3000) to Rs.3,00,000 (US\$5000) per year on alternative basis among two villagers. There are bunch of coconut trees and small house buildings and very clean beach with sand dunes naturally present that gives pleasure to tourist in the form of small Island experiences.

#### F. Concept development and Testing

The concept of inclusive innovative ecotourism is developed, as the Vellar estuary is a potential area for tourism development, but was given less importance until now. It is naturally gifted with mangrove forest, beach and

islands leading to provision for Small Island Tourism (SIT), Estuaries Mouth Tourism (EMT) and Mangrove Boating Tourism (MBT). Several criteria are identified from tourist needs, which include the type of pleasure they want to experience, the time limit, pricing, option for boating devices, provision for sea food etc. The need for combination of tourist package for all the three types of tourism was also identified and developed with provision for unique, combo pack for individual tourist as well as group tourist. Totally sixteen Tour package profiles were generated (Table 1).

PACKAGE PROFILES

ID	Tour Package	Price	Time	Boating	Tourist	Food
1	SIT -SINGLE	Low	Long	Rowing	Group	Yes
2	M-ST COMBO	High	Short	Motor	Group	Yes
3	S-ET COMBO	High	Short	Rowing	Individual	Yes
4	MBT-SINGLE	Low	Short	Motor	Group	Yes
5	EMT-SINGLE	High	Long	Motor	Individual	Yes
6	MBT-SINGLE	High	Long	Rowing	Individual	No
7	M-ET COMBO	Low	Short	Motor	Individual	No
8	M-ET COMBO	High	Long	Rowing	Group	Yes
9	MBT-SINGLE	High	Long	Motor	Group	No
10	M-S-ECOMBO	High	Short	Rowing	Group	No
11	M-S -COMBO	Low	Long	Rowing	Individual	No
12	EMT-SINGLE	Low	Short	Rowing	Group	No
13	MBT-SINGLE	Low	Short	Rowing	Individual	Yes
14	SIT-SINGLE	High	Short	Motor	Individual	No
15	S-ET-COMBO	Low	Long	Motor	Group	No
16	M-S-ET-COMBO	Low	Long	Motor	Individual	Yes

Sources: Primary Data

G. Statistical Design There are two sets of tools adopted for analysis viz., conjoint and SWOT analysis. The conjoint analysis is used to ranking of factors that form partly as well as collectively. It is ascertain the utility score or the profile of the profiles both independent and dependent design of factors. The second tool SWOT is used to assess the preparedness of fishers in the village towards cooperative tourism in the estuaries natural ecotourism products in integrated services.

H. Operational Design

The profile designs have been made in a pictorial format and the field investigators both students and local persons were deployed for the purpose of collecting data. The consent of the tourists has been obtained prior to the conduct of interview with respondents. Seven students and seven local people have been deployed to execute the task of collecting data.

Pictures1-16Ecotourism Package Orthogonal Design





IV. ANALYSIS AND INTERPRETATION

The analysis about the conjoint analysis and SWOT analysis have been presented in the form of table formats.

TABLE 2: CONJOINT ANALYSIS

UTILITY			ESTIMATES		
Profile of Tour Package	Utility Estima	Std. Err	Service Design	Average	
Design of Tourism Package	MBT-	-.434	.776	Tour	42.826
	SIT-	-.425	1.02	Boat	8.183
	EMT-	-.147	1.02	Tourist	12.670
	MBT-	1.298	1.02	Seafoo	11.731
	SIT-	-.110	1.02	Price	15.950
	MBT-	.872	1.02	Time	8.640
	MBT-	-1.054	1.02	B Coefficient Estimate	
Boat	Row	.093	.392		
	Motor	-.093	.392		
Tourist	individ	-.542	.392	Price	-1.250
	Group	.542	.392	Time	.676
Seafo	Yes	.472	.392	Correlation	
	No	-.472	.392		
Price	Low	-1.250	.784	Value	Sig.
	High	-2.500	1.56	Pearson	.000
Time	Short	.676	.784	Kendall	.001
	Long	1.352	1.56		
(Constant)		9.415	1.71	a. Correlations	

Sources: Primary Data

SWOT Analysis for Porto Novo (Bay of Bengal-Vellar)

Mudasal Odai Estuary Ecotourism

<p><b>Favorable Internal: Strength</b></p> <ul style="list-style-type: none"> <li>i. Preferred destination: Natural surroundings (17.14%), Boating services (22.86%), Mangrove forest (40.00%), Islands (14.29%), Eco park awareness center (5.71%)</li> <li>ii. Group Tourism: Family (31.43%) and friends (40.00%)</li> <li>iii. Coordination: support from local fishing community (88.57%)</li> <li>iv. Tourist attraction: offer double boating opportunity (77.14%)</li> <li>v. Access ability: Availability of Transport facilities (68.57%)</li> <li>vi. Uniqueness: Mangrove forest are unique (60.00%)</li> <li>V. Ecotourism Professionalism by Tourist guides (42.86%)</li> </ul>
<p><b>Unfavorable Internal: Weakness</b></p> <ul style="list-style-type: none"> <li>i. Rules and regulations: Strict enforcement (45.71%).</li> <li>ii. Scope: Areas need to be explored (40.00%)</li> <li>iii. Specialized Services: Sensitive local people (37.14%)</li> <li>iv. Accommodation: Lack accommodation (31.43%)</li> <li>v. Waste: Lack of improvement (20.00%)</li> </ul>
<p><b>Favourable External: Opportunities</b></p> <ul style="list-style-type: none"> <li>i. Foreign tourist: Attraction campaign (71.43%)</li> <li>ii. Seasonality: Vocational (65.71%)</li> <li>iii. Mass tourism: Promote beach tourism (62.86%)</li> <li>iv. Local product and sea food: Increase in sales (60.00%)</li> <li>v. Cooperative tourism: Existing fisher can initiate                         <ul style="list-style-type: none"> <li>a. Cooperative Ecotourism (54.29%),</li> <li>b. development of hotels and restaurants (51.43)</li> </ul> </li> <li>vi. Local people participation as home guard workforce to improve security (54.29%)</li> <li>vii. Revenue Leads to development: (51.43%)</li> </ul>
<p><b>Unfavourable External: Threat</b></p> <ul style="list-style-type: none"> <li>i. Threat to life among tourist due to poor security (65%).</li> <li>ii. Support: lack of involvement from workforce (37.14%)</li> <li>iii. Competition: Unhealthy competition (20.00%)</li> </ul>

Note: Indicators have been arranged as per the priority and proportions of respondents given by the tourist.

V. FINDINGS

The following are the results obtained in the study.

1. It is found that MIT-SIT combo tour package has higher utility value indicating greater preference by the tourist followed by preference for MBT-EMT combo pack.
2. The least preference are given to single tour packages like MBT, SIT, EMT all having larger negative values. Combo pack of MIT-SIT-EMT all three together was also less preferred and has negative utility value of -1.054.
3. There is inverse relationship between price and utility with high price corresponding to lower utility score (Higher negative value). Group tourism, long duration and provision for sea food has higher utilities as expected.
4. It is found that with respect to preference for boating device, Row boat has more utility value than motor boat. The linear regression coefficient for price and time are -1.250 and 0.676, respectively.
5. The importance score value results indicated that tour package has most influence on overall preference by the tourist followed by the price of tour package and the boat type was given least preference.
6. The Pearson's R correlation coefficient value is 0.846 which is greater than 0.7 and this shows that there is highly strong positive relationship between the observed and estimated preferences and this supports hypothesis 1.
7. Similarly the Kendall's tau coefficient value is 0.588 which shows positive towards the degree of concordance between observed and estimated preferences.
8. Therefore, it is found that the preferences of tourists are highly influenced by the tour packages offered
9. The tourist would like to travel as groups and prefer combo pack of any two combination using rowboat for long duration and less price with provision for sea food.
10. It is found that the presence of mangrove forest, boating services, provision for group tourism and coordination of local people add strength (42.38%) to this destination even though there lies some weakness (34.86%) related to strict rules and regulation, lack of good accommodation and waste management practices.
11. It is found that the existing threat (40.71%) is due to poor security force, lack of involvement of work force and unhealthy competition but it can be compensated by available opportunities (58.93%) like participation of local people as home guard to improve security, development of cooperative tourism, mass tourism, sale of local products and increase in revenue. Since the percentage of

opportunity is more than the threat it supports hypothesis 2.

12. The internal factors contribute to 38.62% while the external factors contribute to 49.82% for attaining the objectives of this study.

## VI. SUGGESTIONS AND RECOMMENDATIONS

The floating market in the estuary ecotourism contributes a lot to Thailand's economy. There is possibility for developing such floating market at Porto Novo involving all three Tourism. Implementation of cooperative ecotourism, with innovations at Porto Novo can contribute a lot to economic growth provided the government support such activities through new policy formulation, provision for incentives, business license and loan facilities for operating Tourism projects.

## VII. MANAGERIAL IMPLICATION

Tourism has become a popular global leisure activity and is a major source income for many countries. It effects the economy of both source and host country. In Thailand, tourism is a major economic factor. In 2013 it is estimated that for 9% and 20.2% of Thailand's GDP are directly and indirectly contributed by tourism respectively (**Turner, 2014**). In 2012 the Ocean Marina Pattaya Boat Show generated THB 90 million revenue for the marine tourism industry. The Tourism Authority of Thailand (TAT) initiate a strategy to promote high-end tourism in Pattaya, working closely with the marine tourism sector on Thailand's east coast. The Gulf of Thailand's popularity continues to grow with approximately 8.5 million international tourists per year visiting the three leading tourism destinations of Pattaya, Hua Hin and Koh Samui (Koumelis, 2014). It is estimated that 21 million tourists visited Thailand 2012 according to Thailand Tourism Authority and they expected 25 million tourists in 2013 contributing \$38 billion revenue for the country (**Mahthni, 2013**). One of the interests in Thailand is floating market which is a market that is located next to a body of water and vendors sell things directly out of their boats. Damnoen Saduak Floating Market is a notable floating market in Ratchaburi, Thailand, and a major tourist destination. other floating markets are Taling Chan Floating Marke, Tha Kha Floating Market, Don Wai Floating Market, Amphawa Floating Market Bang Noi Floating, Bang Nok Kwae Market, Ayothaya Floating Market, Ayutthaya Klong Sa Bua Floating Market, Bang Nampheung Floating Market etc. (**Barrow, 2011**). Thus, floating market contributes a lot to Thailand's economy.

## VIII. CONCLUSION

Tourism is a popular global leisure activity and is a major source income for many countries. An attempt has been made to study the awareness and preferences of alternative tourist packages and preparedness for cooperative ecotourism. Data collected from tourist using

pictorial profiles and through interview schedule, were analyzed through conjoint analysis and SWOT analysis. Tourists prefer to travel as groups with combo package in row boats. It was found that tourists are concerned about price and food. The study has brought out the preference of tourist for combo package than single and group tourism, opportunities for developing cooperative ecotourism by involving local people. The results of SWOT analysis has revealed that mangrove forest, boating services and coordination by fishing community are main strengths of study area. The weaknesses of the area were found to be strict enforcement of rules, sensitiveness of localities, lack of accommodation and contribute for weakness. The study area has opportunities to develop cooperative tourism. The threat lies with the poor security force, lack of involvement of workforce which can be overcome by local people participation as home guards.

Floating market contributes a lot to Thailand's economy similarly Implementation of cooperative ecotourism, with innovations at Portonova can contribute a lot to economic growth provided the government support such activities through new policy formulation, provision for incentives, business license and loan facilities for operating Tourism projects.

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#### Appendix I: Items used in SWOT schedule

1. Preferred destination	8. Accommodation
2. Suitability	7. Services
3. Uniqueness	9. Waste management
4. Access ability	10. Scope
5. Coordination	11. Rules and Regulation.
6 Tour package	12. Development
7. Alternatives	
13. Seasonality	24. competition
14. local products	25. Government support
15. Revenue	26. Pollution
16. Foreign tourist	
17. Mass tourism	
18. Cooperative-accommodation	
19. Cooperative- Transportation	
20. Cooperative- Services	
21. Cooperative- Hotels	
22. Cooperative-Campaign	
23. Cooperative- Celebrations	

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