Excogitated Coastal Tourism Competitiveness by Implementing Eco-tourism in Anyer, Banten, Indonesia

S.H. Hengky

School of Tourism, Hospitality, and Environmental Management (STHEM); College of Law, Government, and International Studies (COLGIS), Universiti Utara Malaysia (UUM), Sintok, Malaysia; Associate Professor TRIGUNA, School of Economic, Bogor, Indonesia; ITU (International Telecommunication Union) Fellow, UUM; CUIC (Centre for University Industry Collaboration) Fellow, UUM; Director of SHINE Institute, Bogor, Indonesia

Corresponding author email: hengky_halim@uum.edu.my; hengky_halim@yahoo.com.au


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Abstract The aim of the research is to conserve Anyer coastal environment from negative environmental impact and improving coastal and coastline competitiveness by implementing the ecotourism concept. 216 data were collected by triangulation technique: open observation; structured interview, and interview, in the one-year Anyer sub-district and tabulated by content analysis based on ecotourism and competitiveness concepts with zoning and landscaping as well. It conserved spatial planning and decreased hospitality industry pollution and coral reef and seaweed as well as open new sea natural scenery, following coastline border regulation and conserve: coastal environment from utilizing coastal ecotourism activities. It also develops open new natural sea view and water recreation opportunity spectrum provided with water resources as an along the coastline zone, and coastal ecotourism attractions with undersea life.

Keywords Ecotourism; Coastal tourism; Competitiveness; Zoning; Landscaping; Anyer

Introduction Tourism industry towards the 21st century will be the mainstay of the national economy and to spur economic development of a country. The coastal tourism industry will continue to grow on average by 3 % per year compared to the world economy as a whole 2.3 % in the same year. Tourism industry in 2012 contributes foreign exchange on gross domestic product (GDP) by 8.9 %. The growth of tourism in the same year is expected to 9.4 million peoples in Indonesia (WTTC, 2013).

Moreover, WTTC (2013) stated about improving the competitiveness of tourism in Indonesia should tailor the trend environmentally sustainable tourism is increasingly considered by the world community. Indonesia also began to follow up with various forms of tourism in line with environmental conservation. The tourism sector was ranked third after textiles and wood in the national economy of Indonesia. Indonesia's natural wealth when it is planned, developed, and managed properly can provide both economic contributions to society and for nature conservation. Tourist behavior is now changing, more travelers are choosing natural shades object coastal tourist attraction. Ecotourism is a tourism concept that combines the interests of the coastal tourism industry, tourists, and environmentalists.

Coastal tourism is tourism that utilizes the junction between land and sea. Landward coastal areas include: land portion, both dry and submerged in water, and which is still influenced by the properties of the sea like the tides, ocean breezes, and salt water intrusion (Supriharyono, 2000), while according to Law No. 32 year 2004 marine resource management authority is 4 miles measured from the shoreline seaward to the district or city.

While the number of foreign tourists who visited Indonesia in 2012 reached 8.04 million people and contributed economically USD 9.1 million. One of the coastal tourism in Indonesia which has objected coastal tourist attraction as natural shades is namely Anyer coastal tourism. This coastal tourism is located 10 km from Labuan, in the western part of Banten, and it is closed to Indonesia international airport of Soekarno-Hatta. The object coastal tourist in 2012 was...
visited by 4 million international tourists (Ratna, 2013; and Mdika, 2012).

Recently, the utilization of a pattern of attraction tourist attraction in the coastal coast of Anyer does not pay attention to aspects of nature conservation. The indicator is the presence of sand mining activities and the encroachment of mangrove forests to open ponds. Both of these events cause abrasion in Anyer beach and the quality of the coastal environment object coastal tourist attraction, given the distance to the beach when the building is generally not more than 30 m (BPES, 2013).

Furthermore, around the Anyer coastline there is seaweed *Haliphila spinulosa* as well as four main type’s coral reefs: *Porites massive*; *Enchingora lamellate*; and *Montipora digitata*. 53% of the coral reefs damaged because of the development of hotels, resorts, and villa construction. They violate spatial, break the rules of national or provincial coastline border which stated that coastline border for building development is less than 100 m from the coastline. There are also throwing anchor ship activity, oil mining, and marine pollution. The destruction of coral reefs increasing water carbon dioxide levels, which would cause the death of marine biota which impact on human survival as well as the decline in environmental quality and Anyer coast.

There are Environmental phenomena indicated by the declining quality of natural resources and high activity encroachment caused by economic pressures on coastal areas Anyer. The indicators are: (1) the conversion of mangroves into fishponds has reached 50 acres and (2) the encroachment activities in Anyer coastal area. Both of these reduce the productivity of oxygen and water absorption (WRI, 2013; and Wheeler et al., 2009).

However, Anyer natural coastal tourism activities can be done by conserving coastal environment and improving coastal tourism competitiveness as well. Conserved coastal environment and utilizing it for natural coastal attraction by zoning refers to coastal tourism development (Smith et al., 2009; and Ergin et al., 2009) and landscaping natural coastal tourism (Ankre, 2009) based on ecotourism (Fennel, 2001; Hengky, 2006; and UNEP and WTO, 2012) and competitiveness concept (Pearce and Robinson, 2005). Zoning refers to coastal tourism development consists of three areas: core zone for low impact use; buffer zone for cooperative activities as ecotourism; and transition area for a multi-use area as agriculture and sustainable natural resources. Therefore, zoning not only a tool to develop control regulation of two land use of coastal tourism industry and conservation coastal environment, but it is also simply for industrial land-use both uses with profit functions. Zoning and landscaping previous coastal tourism to conserve and protected natural coastal tourism as carrying capacity for a limited number of tourists, it needs development of natural coastal tourism in Anyer destination for coast environmental, local community, ecotourism, scenery, coral reef and seaweed, conservation, and minimized environmental impact (Smith et al., 2009; and Ergin et al., 2009).

Nature coastal tourism landscaping based upon: active use and change of landscape opposite coast view and exploring scenery; and specialization to adapt. Moreover, the landscape was influenced by human’s use. Almost 66% of the eco-tourists aims are to enjoy the landscape. The other words, landscape perceived by person’s character and its interaction with natural and human factors. So a coastal tourism landscape depends on the stakeholders with their interpretation (Ankre, 2009).

There is the concept that would conserve environmental which utilized for tourism activities and tourist operators’ destructive behavior and it’s namely ecotourism based on contribution to local welfare, minimized environmental impact, served tourism environmental friendly education and learning, community based environmental protection (UNEP and WTO, 2012).

Fennel (2001) examined 85 definitions of ecotourism by using content analysis. The study resulted in the definition of ecotourism with 6 elements, namely: conservation, education, ethics, sustainable development (sustainable development), impact (impact), and local benefits.

While, Hengky (2006) explored and elaborate 45 ecotourism concepts from 1987-2005: (1) Landscaping by creating zoning new coastal tourism; (2) Nature tourism, cultural attractions, the community empowerment; (3) Interpretation of nature and culture...
(Planned and created); (4) Utilization of natural coastal tourism; (5) Enjoy the beauty of the landscape, Fishing, and Eco lodge; and (6) Open source coastal tourism.

According to Pearce and Robinson (2005), competitiveness criteria: (1) creativity and human resources (HR), (2) excellence in operational control object coastal tourism attraction, (3) the effectiveness of the distribution of objects promotion of coastal tourism attraction, (4) price advantage, and (5) the object quality coastal tourism attraction.

Based on the provincial spatial plan of West Banten, there are environmental problems in Anyer coast. The indicators are: (1) coastal erosion in the coastal areas due to destruction of mangroves and sand mining activities are not environmentally sound; (2) the occurrence of saltwater intrusion in Anyer coast due to destruction of mangrove forests, coastal erosion, and groundwater extraction uncontrolled; (3) object coastal tourist attraction also have other environmental problems, namely the obstruction object coastal tourist attraction by privately own buildings which caused people are not free to enjoy the coast, because they loss of access to public goods due to the construction of resort hotels, and restaurants that violate the provisions of the coastline national/provincial (BPES, 2013).

The reason of conducting this research is responding WTTC (2013) statements and conserves Anyer coastal tourism become Anyer coastal ecotourism, where the destination is closed to the Indonesian International Airport Soekarno Hatta and it’s located close to the Indonesian capital as well. It’s become Indonesia capital buffer zones.

The aim of the research is to conserve Anyer coastal environment from negative environmental impact and improving coastal tourism competitiveness by implementing the ecotourism and competitiveness concept.

1 Methodology

The research is conducted from January 2011 – January 2012, in one-year Anyer beach of Serang sub-district, Indonesia (Figure 1), descriptive and questioning respondent by purposive (Knotters and Brus, 2013; Teddlie and Yu, 2007) and stratified (Ploeg, 1999) to 216 respondents, and it was collected in the Serang sub-district by triangulation technique: open observation; structured interview; and the interview (Marwick and Uniger, 1975). The respondent: Association of the Indonesia tour & travel.
agencies, Local government bodies, Department of Culture and Tourism, Department of Marine and Fisheries, Association of Indonesian Hotels and Restaurants, Local people of coastal community, Custom Crafts, NGOs, Tour operators, Bureau of statistics, domestic tourists and international tourists.

The collection of data used in this study is the technique of triangulation, namely: observation, open interviews, structured, and secondary data analysis for verification of information (Marwick and Uniger, 1975). Factors that affect the interaction of the interview include: current situation of conducting of the interviews, interviewer’s interest, respondent opinion, and interview topics.

Moreover, the data was tabulated by the Content Analysis’ (Cohen, 1960) statistics based on competitiveness concept as well as ecotourism concept: exploration a coastal tourism; parameter ecotourism; posting of each ecotourism parameter; ecotourism frequency matched; ecotourism frequency counted; and result analyzed (Henderson, 1991; Smith et al., 2009; and UNEP and WTO, 2012).

The new object of Anyer natural coastal tourism is consistency obtained with a repetition frequency analysis of the expression parameters ecotourism concept of Cohen's Kappa (K) (Landish and Koch, 1977).

However, on one hand, the requirement for implementing the ecotourism concept: coastal tourism contributes to conservation; empower local community; educated about friendly tourism to tourists and local communities; contributes wealth to local community and conservation; minimized environmental impact and increased coastal value added; and open region coastal tourism. On the other hand, improving coastal tourism competitiveness requires: creativity; manage and control; promote; pricing strategy; and quality destination improvement needs (Hengky, 2006).

2 Results
2.1 The utilization of coastal tourism attraction of Anyer

Utilization of coastal tourism attraction of the coast of Anyer has not implemented the concept of ecotourism. The indicators are: (1) entrepreneurs have not been involved in the process of exploiting the potential attraction of the sustainable coastal tourism (Pujansari, 2003), (2) business has not empower people (Lanjumin, 2004), (3) the economic contribution to society is not significant (WRI, 2013), (4) utilization of attraction of coastal tourism in Anyer beach negative impact on the environment, coral reefs have been damaged (WRI, 2013), and (5) business has not been involved in the interpretation of the potential utilization of objects coastal tourism attractions, so that the tourism management professionals do not impress (Pujansari, 2003).

In general, the exploration coastal tourism attraction of nature with the concept of ecotourism in Anyer beach indicates a gap between the attraction of the current coastal tourism and utilization of coastal ecotourism attraction of the concept of ecotourism. The gaps include: patterns of utilization and conservation of the environment, the negative impact on the environment, education/interpretation, and community empowerment.

Environmental phenomena indicated by the declining quality of natural resources and high activity encroachment caused by economic pressures on coastal areas of Anyer. This phenomenon lowers water absorption and decrease the production of oxygen. In addition, encroachment occurs, thus lowering the quality of the environment and biodiversity potential.

In 2000, along coastal tourism attraction of Anyer covered hundreds of coconut trees lined along the shore, but now only covered some of the remaining coconut trees. This lowers the potential beauty of the landscape and the quality of the coastal environment, given the distance of the building to the beach less than 30 m, and the development along the coastline of Anyer not give the impression of a professional.

Furthermore, the current trend of tourism area management is generally not professionally both product and packaging facilities and infrastructure. All of their coastal tourism activities degrade the quality of coastal tourism attraction of which impact on decreasing the resale value of it.

The Anyer coast is the famous attraction of coastal tourism historical relics of King Willem III. But it is less well maintained. It is an indicator of a lack of
understanding of the business to capitalize on the potential attraction of the history of coastal tourism. The impression is not managed by a professional looks at all. The artifact is located in the village of Kampung Ayam.

2.2 Social
According to Bappeda (2012), the population of in as many as 1,080,012 people have a primary job in tourism, agriculture and fishing as much as 62.62%, trade sector, hotels, and restaurants 13.82%. The private education sector plays as an important role to educate and develop human resources (HR) in the coastal tourism area of Anyer beach.

2.3 Economy
The one-year Anyer coastal tourism sector contributes to the economy amounted to 32.69% of total revenue (Punjasari, 2003). While the contribution of the coastal tourism sector to the working age population as much as 27.65% (Bappeda, 2012).

2.4 Environmental performance
The Anyer coastal tourism declined in environmental quality. The indicators are: (1) the conversion of mangrove forests into farms has reached 50 acres and (2) the existence of forest clearing activities in the coastal area of Anyer and Carita. Both of these lower productivities and water absorption of oxygen (WRI, 2013).

On the other hand, the high activity logging caused land use changes that impact on the environment, with indicators of increased sedimentation and nutrient influx into the catchment area. Sediment in the water column affect a coral growth, corals can even cause death. The sedimentation and pollution damaged of a coral reefs and seaweed in Anyer coastal (WRI, 2013; DKP Banten, 2004).

Moreover, 53% of coral reefs in the coastal area of Anyer beach damaged by construction of the hotels, resorts, and villas, that violates the layout, breaking the rules of national or provincial coastal border, throwing anchor ships, oil mining, and marine pollution. Thus, the destruction of coral reefs, causing higher water levels of carbon dioxide, which would cause the death of marine biota which impact on human survival (WRI, 2013).

2.5 Existing environmental impacts of the coastal spatial planning Anyer, Banten
Based on the spatial structure plan western province of Banten, there are environmental problems in Anyer coast. The indicators are: (1) the existence of three coastal erosion in the coastal areas due to the destruction of a mangrove and sand mining activities are not environmentally sound, and (2) the occurrence of saltwater intrusion in Anyer due to the destruction of a mangrove forests, coastal erosion, and groundwater extraction uncontrolled (BPES, 2013).

However, based on spatial plans of West Banten Province, the famous of Anyer coastal tourism attraction also have other environmental negative impacts, in the form of obstruction of the attraction of the coastal tourism by the development of privately owned buildings, so that people are not free to enjoy the beach, because of the loss of access to public good due to the construction of resort hotels, and restaurants that violate the provisions of the national coastline border zone /province (BPES, 2013).

Based on ecotourism concept and content analysis tabulation (Table 1) indicated: developed new natural coastal tourism view by zoning and landscaping, to improve access pathways across landform vegetation and tree planting along frontage as well as its develop aesthetics of the new scenery by tailoring them with environmental coastline border regulation and contributes to environment conservation (score 14.83); natural coastal tourism with local community empowerment (score 16.75); interpretation of natural and cultural (score 18.66); utilization of natural coastal tourism (score 17.22); enjoy the beauty of the landscape, fishing, and eco-lodge (score 17.70); and improved carrying capacity (Tejada et al., 2009) on open region Anyer natural coastal tourism (score 14.83). Coefficient Kappa K=0.71 (there are enough potential).

From the tabulation of the Anyer coastal ecotourism concept (K=0.71) indicated that an interpretation of the natural coastal landscape becomes the most important thing for the eco-tourists and followed by enjoying the scenic beauty of the coastal landscape, fishing activity and Eco lodge. The interpretation is about how to utilize natural coastal ecotourism by minimizing coastal ecotourism activities and appreciate undersea life as coral reefs, seaweed, and fish.
Table 1 Tabulated data of Anyer Coastal Ecotourism

<table>
<thead>
<tr>
<th>No.</th>
<th>Anyer Ecotourism’s Parameter</th>
<th>Value</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Landscaping by creating zoning new Anyer coastal ecotourism</td>
<td>31</td>
<td>14.83</td>
</tr>
<tr>
<td>2</td>
<td>Nature tourism, cultural attractions, the community empowerment</td>
<td>35</td>
<td>16.75</td>
</tr>
<tr>
<td>3</td>
<td>Interpretation of nature and culture (planned and created)</td>
<td>39</td>
<td>18.66</td>
</tr>
<tr>
<td>4</td>
<td>Utilization of natural coastal tourism</td>
<td>36</td>
<td>17.22</td>
</tr>
<tr>
<td>5</td>
<td>Enjoy the beauty of the landscape, Fishing, and Eco lodge</td>
<td>37</td>
<td>17.70</td>
</tr>
<tr>
<td>6</td>
<td>Open Source Anyer Coastal Tourism</td>
<td>31</td>
<td>14.83</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>209</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Note: Coefficient Kappa = K= 0.71

Table 2 Tabulated data of Anyer Coastal Competitiveness

<table>
<thead>
<tr>
<th>No.</th>
<th>Anyer nature coastal ecotourism competitiveness Parameter</th>
<th>Value</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Creative developed and conserved Anyer natural coastal ecotourism by landscaping and zoning</td>
<td>23</td>
<td>11.86</td>
</tr>
<tr>
<td>2</td>
<td>Landscaping, zoning, and tailoring with coastline border regulation</td>
<td>38</td>
<td>19.59</td>
</tr>
<tr>
<td>3</td>
<td>Manage and control for improving quality of Anyer natural coastal tourism</td>
<td>37</td>
<td>19.07</td>
</tr>
<tr>
<td>4</td>
<td>Promote Anyer natural coastal tourism</td>
<td>35</td>
<td>18.04</td>
</tr>
<tr>
<td>5</td>
<td>Pricing strategy and developed Anyer natural coastal tourism diversity</td>
<td>33</td>
<td>17.01</td>
</tr>
<tr>
<td>6</td>
<td>The quality of Anyer natural coastal tourism improvement</td>
<td>28</td>
<td>14.43</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>194</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Note: Coefficient Kappa = K= 0.61

Furthermore, based on competitiveness concept and content analysis tabulation (Table 2) indicated: creative developed and conserved natural coastal tourism by landscaping and zoning (score 11.86), landscaping, zoning, and tailoring with coastline border regulation (score 19.59); manage and control on improving quality of Anyer natural coastal tourism (score 19.07); promote Anyer natural coastal tourism (score 18.04); pricing strategy and developed natural coastal tourism diversity (score 17.01); and quality natural coastal tourism improvement (score 14.43). Coefficient Kappa = K= 0.61 (there are enough competitive).

Based on the competitiveness concept, Anyer coastal ecotourism could be competitive with the main point: landscaping, zoning, and tailoring with coastline border regulation. Its indicated that by tailoring coastline border regulation the eco-tourists could easily enjoy the scenic landscape of natural coastal tourism attraction. The other important thing is managing and controlling Anyer coastal ecotourism for improving coastal scenic landscape and undersea life.

3 Discussions

The Anyer coastal tourism in Serang District is famous for its white sandy beaches and ramps. Now the coastal tourism potential declined due to the rapid development of the coastal area is off limits coastal border. "CV Asia Pacific Aquatic" activities caused damaging to marine resources, declining in biodiversity, and coastal degradation. Those activities were permitted by the Directorate General of Forest Protection and Conservation Department with license number 88/KPTS/DJ-V/2000, dated 4 September 2000, which permits to exploit the coral reefs. It’s indicated: (1) the conversion of mangroves into fishponds has reached 50 acres and (2) the encroachment activities in Anyer coastal areas are both of these reduce the productivity of oxygen and water absorption.

On the other hand, the high activity logging caused land use changes that impact on the environment, with indicators of increased sedimentation and nutrient influx into the catchment area. Sediment in the water column greatly affects coral growth, corals can even cause death. Sedimentation and pollution damage 21 % of coral reefs along the south part of the coastline, and about 46 % of coral reefs damaged by construction activities that violated spatial and exceed the coastal border, high sedimentation, pollution of the harbor, oil spills, shipwrecks, and the disposal of waste from the ship (Wheeler et al., 2009).

Moreover, the behavior of businesses in the tourism object coastal tourist attraction Anyer coast likely violates along the south coast, lack of attention to landscape architecture, and against the coastal border
limit. The indicator is the behavior of hospitality industry player building Cottage, Stalls, and the Castle in this forbidden coast border limit.

Furthermore, the destruction of coral reefs caused the higher carbon dioxide levels water. This high carbon dioxide levels water can lead to the death of marine biota which impact on humans. Ecological function of coral reef itself, among others, is the island refuge from the onslaught of the storm and the habitat for many organisms (Regional Planning Board, 2013; WRI, 2013).

Recently, Anyer coastal tourism not applies yet the concept of ecotourism. It indicates: (1) businesses not involved in the process of exploiting the potential of sustainable object coastal tourist attraction (Pujansari, 2003; and Smith et al., 2009), (2) empower businesses yet (Lanjumin, 2004), (3) the economic contribution to society is not significant, (4) utilization in Anyer coastal tourism made negative impact on the environment as well as 53% of coral reefs have been damaged (WRI, 2013), and (5) tourism businesses not involved in the utilization of the potential object coastal tourism attraction by interpretation, thus managing the tourism professional is not impressed (Pujansari, 2003).

The potential of Anyer coastal ecotourism attraction is obtained by utilizing the beauty by landscaping, and zoning (Ergin et al., 2009). Travelers and tourists can traditionally fishing or enjoy eco lodge while enjoying new landscape and local cultural attractions. It’s located in Kampung Ayam. Every year there are competitions in traditional fishing in the Sunda Strait which can be used as potential nature coastal tourism activity packs.

However, zoning and landscaping the coastal area in Anyer coast at Kampung Ayam by implementing the ecotourism concept developed new natural scenery (Ergin et al., 2009) and Anyer coastal ecotourism destinations as well as it conserves a coral reef and seaweed around the coastline. It also develops an open new natural sea view and water recreation opportunity spectrum provided with the water resources as a coastal zone.

4 Conclusions
Implementing ecotourism and competitiveness concept in Anyer coastal tourism by zoning and landscaping conserve spatial planning and decreased hospitality industry pollution as well as open new sea natural scenery develop Anyer coastal ecotourism which following coastline border regulation and conserve: coastal environment from utilized coastal ecotourism activities; and coral reef and seaweed where completed coastal ecotourism attraction with undersea ecotourism as well the whole activities contribute wealth to local community and contribute economy for conserve expenditure with minimized environment impact from utilizing coastal ecotourism.

5 Implications
Zoning and landscaping the coastal area in the Anyer coast at Kampung Ayam by implementing the ecotourism concept developed new natural scenery (Ergin et al., 2009) and Anyer coastal ecotourism destinations as well as it conserves a coral reef and seaweed around the coastline. It also develops an open new natural sea view and water recreation opportunity spectrum provided with the water resources as a coastal zone.

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