

## **Environmental Considerations for Ecotourism Development in East Coast Economic Region (ECER), Malaysia**

Md. Anowar Hossain Bhuiyan  
Chamhuri Siwar  
Shaharuddin Mohamad Ismail  
Institute for Environment and Development (LESTARI)  
Universiti Kebangsaan Malaysia (UKM)  
43600 UKM, Bangi, Selangor, Malaysia.

### **ABSTRACT**

Ecotourism is a potential sector in tourism industry. It allows the use of natural areas which are less economic value for these countries, but perfectly meet the demands of this growing industry. Malaysia is one of the tropical countries that have focused on tourism to generate foreign exchange earnings and to create jobs. Tourism is the second largest economic sector for foreign exchange earning of this country. The National Ecotourism Plan has drawn up a comprehensive guideline for the sustainable ecotourism development in the country. The East Coast Economic Region (ECER) consists of three states- Kelantan, Terengganu, Pahang and District of Mersing in Johor. Ecotourism can be promoted to ensure the sustainable tourism development in region with environmental well being. This paper examines the environmental impact of ecotourism development in ECER. The study also analyzes the strategies of ecotourism development in this region in light of environmental sustainability. The data for analysis is obtained from the secondary sources. The study reveals that some environmental advantages remain in the ECER to develop ecotourism. These are coastal beaches and islands, terrestrial and marine ecotourism, natural resources, infrastructure efficiency and limited natural disaster. ECER has also some short coming for ecotourism development, such as; integrated approach, less focused on environmental, capacity building, inadequate directional signs and pollution in ecotourism sites. The study shows that identifying ecotourism assets, sustainable use of resources, implement proper policy, Community involvement and conservation development may be the main strategies for environment friendly ecotourism development in this region. Malaysian government gives emphasize to develop ecotourism in this region ensuring environmental well being. Collective efforts between government, ecotourism stockholders and stakeholders are necessary for environment friendly ecotourism sites. Finally, the stake holders need to take necessary steps to enhance concern and awareness of tourists for sustainable natural resources use of ecotourism sites in ECER.

Keywords: Ecotourism, Environment, Development, Sustainability, ECER.

### **INTRODUCTION**

Ecotourism is an important element of the tourism industry in the world today. It is important for the ecotourism to understand its environmental impacts, because it often depends on the appeal of attractive natural capital – clean beaches and oceans, pleasant climate, and wildlife. Ecotourism may therefore be vulnerable to its local impacts; for example, degradation of beaches or biodiversity loss. In addition, ecotourism also contributes to global environmental issues (Gossling, 2002). Environmental degradation is one of the disadvantages commonly associated with ecotourism in developing regions (Brohman, 1996). Although climate induced environmental change was found to have a potentially important negative impact on visitation. Climate indirectly affects ecotourism by impacting the physical resources that define the nature and quality of natural environments. Any changes in the natural characteristics of environments could negatively influence ecotourism by reducing the perceived attractiveness of the region or area (Elsasser & Burki, 2002). For example, drought, cyclone, flood and other natural disaster can contribute to less the attraction of visitors in any ecotourism place.

Ecotourism is increasingly built on the marketing of nature and natural resources, which have become its central elements (Urry 1995). It has been argued that the marketing of immobile resources such as landscapes, sights, and cultures represents an important economic advantage for tropical developing countries, because their immobility makes it necessary for tourists to travel in those areas

(Urry 1990). Moreover, ecotourism allows the use of natural areas which are less economic value for these countries (such as remote beaches), but perfectly meet the demands of this growing industry (WWF, 1995).

Malaysia is one of the tropical countries that have focused on tourism to generate foreign exchange earnings and to create jobs. Tourism is the second largest economic sector for foreign exchange earning of this country after manufacturing. The Malaysian government has spend RM1.8 billion under the Ninth Malaysian Plan (2006–2010), on upgrading tourist destinations and infrastructure, as well as on marketing promotions (Government Malaysia, 2006). The fact is that Malaysia, like few other places, represents the image of the tropical paradise: beaches, green palm trees and shaped by the blue waters of the China Ocean, colorful coral reef gardens attract tourists from all around the world. Its Islamic culture and its mixture of ethnic groups have presented the suitable tourist destination. Malaysia has huge opportunities to develop ecotourism in all over the country. Ecotourism ensure environmental well being for the local community. It has minimum negative environmental impact. In order to the tourism development, Malaysia give emphasize on ecotourism for tourism promotion. Malaysia has formulated separate plan for sustainable ecotourism development in the country. The Ministry of Culture, Arts and Tourism has formulated The Malaysian National Ecotourism Plan. The Plan was drafted in 1995 and was accepted by the government in 1996. This plan ensures conservation of Malaysia's natural and cultural heritage (Bhuiyan et al., 2011). The National Ecotourism Plan has been drawn up the comprehensive guidelines for the sustainable ecotourism development in the country.

The East Coast Economic Region (ECER) consists of three states- Kelantan, Terengganu, Pahang and District of Mersing in Johor. It covers 51% of the land area of Peninsular Malaysia and represents 14% of the national population. The East Coast Economic Region (ECER) has attractive ecotourism resources including well-known hills such as Cameron Highlands, Fraser's Hill, Genting Highlands; mountains like Gunung Stong and related attractions at Gua Musang. There are also lakes and inland waterways at Tasik Kenyir in Terengganu, Tasik Bera and Tasik Chini in Pahang, as well as State and National Parks such as Taman Negara and Endau Rompin. Other ecotourism attractions include Rantau Abang, Kenong Rimba Forest Park, Gunung Benom, Cemerong Forest Reserve, Lojing, and Sungai Perias. All of these attractions are suitable for ecotourism development in this region. Ecotourism can be ensuring the sustainable tourism development in region with environmental well being. This paper examines the environmental impact of ecotourism development in ECER. The study also analyzes the strategies of ecotourism development in this region in light of environmental sustainability.

## **METHODOLOGY**

The data for analysis is obtained from the secondary sources. The secondary data as well as the necessary documents, relevant research reports, articles, books, annual reports, acts, regulation, and policies are collected from the relevant departments and ministries of the government of Malaysia. There are relevant research reports, articles, books, annual reports are also being reviewed in order to accumulate secondary data.

## **FINDINGS**

Table-1 presents the number of accommodation rooms in the ECER for the period 2001 to 2006. Pahang has the largest number of accommodation rooms and the state total has raised from 14,620 in 2001 to 20,543 rooms in 2006. The number of rooms in Terengganu has increased from 5,607 rooms in 2001 to 7,113 in 2006 while Kelantan has been seen an increase from 2,564 rooms in 2001 to 3,513 rooms in 2006.

Table-2 shows the average occupancy rates of accommodation rooms in the ECER for the period 2001 to 2006. In 2001, occupancy rates of accommodation rooms were 36.3 and 48.54 in Kelantan and Pahang respectively. Again, occupancy rates of accommodation rooms were 55.3, 63.4 and 74.2 in Kelantan, Terengganu and Pahang respectively in 2006.

The projected demand for accommodation by state in ECER is shown in Table-3. The projected number of accommodation will be 2,511,565, 3,969,125 and 18,066,861 in Kelantan, Terengganu and Pahang by 2020.

Table-4 represents the projected number of accommodation rooms by state capital. The total number of accommodation rooms is projected to be 20,643, 25,373 and 41,248 in Kota Bharu, Kuala Terengganu and Kuantan until 2020.

Table-5 reveals that additional number of accommodation rooms required by states in the ECER. The total estimated number of hotel rooms by 2020 is 130,132 with an additional requirement of 98,973 for the region. The additional requirement for rooms is 19,475, 29,846 and 49,652 for Kelantan, Terengganu and Pahang respectively until 2020.

## DISCUSSION

Ecotourism has limited environmental degradation and negative impact. Ecotourism development depends on the environmental well-being and sustainable use of natural resources, ecology, flora and fauna. There are some environmental advantages remain in ECER for the development of ecotourism in this region.

**Coastal beaches and Islands:** The resources in the ECER are exceptionally well-endowed include mainland coastal beaches especially in Terengganu and Pahang, and islands such as Tioman, Redang and Perhentian.

**Terrestrial and Marine Ecotourism:** The region has numerous terrestrial and marine ecotourism resources including well-known hill resorts, lakes, inland waterways, parks and wetlands.

**Natural resources:** ECER is full of natural resources and rich in biodiversity. These are suitable for ecotourism development in this area. Environmental benefits need to consider for the development of ecotourism on the basis of these resources.

**Infrastructure efficiency:** Infrastructure is one of the key elements for ecotourism development. The infrastructural efficiency has created huge opportunities in the ECER for flourishing ecotourism. Physical infrastructure development in this region is actively pursued by federal, state and local agencies.

**Limited natural disaster:** Natural disaster may hamper development in the ecotourism sites. Many ecotourism sites have been losing tourists due to natural disaster. ECER has limited natural disaster which is one of the environmental advantages to develop ecotourism.

In spite of above advantages, ECER has also some short coming for ecotourism development.

**Integrated approach:** An integrated approach to ecotourism planning and implementation is needed for environmental friendly development of the industry. A sustainable approach to the development of ecotourism in this region is critical.

**Less focused on environmental:** There are huge ecotourism resources in the region but focus is needed so that these resources can be utilized in environment friendly manner. Huge ecotourism resources are still intact in the ECER.

**Capacity building:** There is a need to enhance capacity building for ecotourism development and develop environmental concern. The small entrepreneurs should not overlook the environmental issues of ecotourism development.

**Inadequate directional signs:** Inadequate directional and interpretive signs regarding environment to many ecotourism attractions have resulted in low awareness and few visitors.

**Pollution in ecotourism sites:** Pollution free ecotourism sites is essential for sustainable tourism development. The ecotourism sites of ECER are not free from environmental pollution and degradations.

## Strategies of ecotourism development

The following steps should be taken for environmental well being ecotourism development in the ECER.

**Identifying Ecotourism assets:** Existing ecotourism resources of ECER must be identified emphasize on environmental issues. Identifying of resources will be fruitful for ecotourism development in this region.

**Sustainable use of resources:** The success and life time of ecotourism sites' depends on sustainable use of natural resources. Effective uses of natural resources ensure environmental pollution and degradation in ecotourism site.

**Implement proper policy:** Proper policies and legislations are necessary to ensure environment friendly ecotourism development. Federal government and local government can formulate and implement rules and regulations for ecotourism development in this region.

Community involvement: Local communities are vital stakeholders for ecotourism development in any region. They can contribute to maintain pollution free tourism activities.

Conservation development: The attractiveness of ecotourism depends on preservation and conservation of natural resources. Ecosystem, biodiversity, flora and fauna are the considerable factors for ecotourism. These resources must be kept and well arranged for sustainable ecotourism development in ECER.

## CONCLUSION

ECER is one of the suitable regions for ecotourism development in Malaysia. This region is full of natural beauties, attractive biodiversity and ecosystem. Malaysian government gives emphasize to develop ecotourism in this region to ensure environmental well being. Public-private partnership building, effective marketing, local people involvement and entrepreneurship development can be ensured for ecotourism development in ECER. Again, collective efforts between government, stockholders (communities and private sector) are necessary for environment friendly ecotourism development. Training programs should be arranged for the tour operator and guides, so that they can ensure pollution free and undegradable ecotourism. Finally, take necessary steps to enhance concern and awareness of tourists for sustainable natural resources use of ecotourism sites in ECER.

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TABLE 1: Number of Accommodation Rooms in the ECER, 2001-2006

| Year     | Kelantan | Terengganu | Pahang |
|----------|----------|------------|--------|
| 2001     | 2,564    | 5,607      | 14,620 |
| 2002     | 2,564    | 5,903      | 14,850 |
| 2003     | 2,834    | 6,913      | 20,428 |
| 2004     | 3,184    | 6,305      | 19,387 |
| 2005     | 3,462    | 6,402      | 21,295 |
| 2006     | 3,513    | 7,113      | 20,543 |
| AAGR (%) | 7.6      | 11.1       | 9.8    |

Source: Statistics on Hotel Rooms, Tourism Malaysia  
Leisure Stock Report, Ministry of Finance

TABLE 2: Average Occupancy Rates of Accommodation Rooms in the ECER, 2001-2006

| Year | Kelantan | Terengganu | Pahang |
|------|----------|------------|--------|
| 2001 | 36.3     | NA         | 48.54  |
| 2002 | 40.8     | NA         | 47.01  |
| 2003 | 37.2     | 38.8       | 52.5   |
| 2004 | 43.5     | 49.2       | 63.9   |
| 2005 | 50.9     | 54.9       | 70.3   |
| 2006 | 55.3     | 63.4       | 74.2   |

Source: Tourism Malaysia  
UPEN Terengganu  
Fraser's Hill Development Corporation

TABLE 3: Projected Hotel Guests for the ECER by State

| Year | Kelantan  | Terengganu | Pahang     |
|------|-----------|------------|------------|
| 2005 | 689,520   | 950,267    | 5,695,428  |
| 2010 | 1,060,912 | 1,530,270  | 8,368,452  |
| 2015 | 1,632,345 | 2,464,514  | 12,296,002 |
| 2020 | 2,511,565 | 3,969,125  | 18,066,861 |

Source: Tourism Malaysia

TABLE 4: Projected Hotel Rooms by State Capital of ECER

| State Capital    | Hotel Rooms (2010) | Hotel Rooms (2015) | Hotel Rooms (2020) |
|------------------|--------------------|--------------------|--------------------|
| Kota Bharu       | 8,719              | 13,416             | 20,643             |
| Kuala Terengganu | 9,783              | 15,754             | 25,373             |
| Kuantan          | 19,106             | 28,073             | 41,248             |

Source: ECER Master Plan, 2007

TABLE 5: Additional Number of Hotel Rooms in the ECER

| State      | 2005   | 2020   | Additional Rooms Required |
|------------|--------|--------|---------------------------|
| Kelantan   | 3,462  | 22,937 | 19,475                    |
| Terengganu | 6,402  | 36,248 | 29,846                    |
| Pahang     | 21,295 | 70,947 | 49,652                    |

Source: Tourism Malaysia