

Destination Tourism Management in Adaptation for Climate Change in Songkhla Lake Basin

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Abstract

This paper objectives are to survey the tourism sites and linkage in understanding and anticipating the potential geographic and seasonal shifts in tourist demand and to serve as a guideline for climate-friendly tourism development in Songkhla Lake Basin (SLB). A number of activities and studies were taken during March 2009 - February 2010 in order to achieve certain outputs crucial for the development of local climate resilience strategies for destination tourism management in SLB. Climate, the natural environment, and personal safety are three primary factors in destination choice. The study showed tourism resources with high qualities are diversified and unique with 212 tourism sites with 79 natural based and 133 historical-cultural based sites. Impacts and its adaptation at tourism destinations as SLB include direct climatic impacts, indirect environmental change impacts, impacts of mitigation policies on tourist mobility and indirect societal change impacts. Hence, their destination vulnerability can be divided into two main categories as; destination vulnerability hotspots and destination level adaptation. However, all tourism businesses and destinations will need to adapt to climate change as well as understanding governance and institutional dimensions that affect access and use of information, inclusive and coordinated planning processes, and ability to be responsive and flexible to climate impacts are necessary for green destination tourism management.

Keywords: Songkhla Lake Basin (SLB), destination tourism management, climate change, hotspots, adaptation

1. Introduction

Songkhla Lake Basin (SLB) lies in 3 provinces: Phattalung, Songkhla and Nakhon Si Thammarat. The Basin covers approx. 8,730 sq.km. consisting of approx. 7,688 sq.km. of land area and approx. 1,042 sq.km. of the Lake area. The Basin is bounded by two mountain ranges. To the west is Banthad mountain range which lies in north-south direction, and to the south is part of Sangala Kiri mountain range. The higher grounds of the two mountain ranges are covered with rainforests, constituting an upstream portion of the catchment area.

The SLB has in the past undergone rapid social and economic development. Such a process has exploited, and before long, depleted and deteriorated the once abundant natural resources. The conflicting issue of utilization vs. conservation of natural resources and environment has become more and more critical, and oftentimes developed into serious social conflicts. This led to their rapid deterioration and depletion. Tourism resources, being part of the former, were no exception. Notable include the decline of biodiversity which in turn affects life supporting system, siltation of Songkhla Lake and canals discharging into the Lake, deteriorated water quality, decline of catch fish, freshwater shortage in dry seasons, water use conflicts which in turns affect

ways-of-life, and consequently threaten sustainability of SLB [4]. Tourism resources in Songkhla Lake Basin are diversified and widely spread throughout the basin. They include SLB natural resources and environment such as waterfowl and archipelagoes, rainforests, upstream watershed, wildlife and biodiversity, arts and culture, and community ways-of-life [6]

The tourism industry and destinations are clearly sensitive to climate variability and change [1][2],[3],[5]. Climate defines the length and quality of tourism seasons and plays a major role in destination choice and tourist spending. Climate, the natural environment, and personal safety are three primary factors in destination choice, and global climate change is anticipated to have significant impacts on all three of these factors at the regional level. Tourists also have the greatest capacity to adapt to the impacts of climate change, with relative freedom to avoid destinations impacted by climate change or shifting the timing of travel to avoid unfavourable climate conditions. As such climate vulnerability assessment is an important component, providing a basis for better understanding how different individuals, communities and systems may be affected by future climate impacts, both directly and indirectly, and what their existing capacities are that can enhance their ability to adapt and be more resilient to climate change[7]. Information on lake community-level vulnerability to current climate and scenarios of future climate is also important for the working group to priorities and select sectors for further assessments. In addition, the information will be used to guide the lake climate resilience strategy planning processes. The aforementioned problems and issues have been well taken into account when promoting and administering tourism resources under the framework set forth by the Master Plan for SLB Development. Strategic measures were proposed in order to promote public participation in conservation, rehabilitation and management of tourism resources.

By so doing, it is anticipated that ecotourism will serve as an alternative source of income, be a mechanism for income distribution as well as for making public aware of values and significance of tourism resources, which are the basis for sustainable tourism and could lead the region to world-class destination in the future.

2. Objective

1. To survey the tourism sites and linkage in understanding and anticipating the potential geographic and seasonal shifts in tourist demand.
2. To serve as a guideline for climate-friendly tourism development in Songkhla Lake Basin.

3. Methodology

Study sites

This research takes place in the Songkhla Lake Basin (SLB),Thailand.Three provinces, including Songkhla, Phattalung and Nakornsrihammarat. (Figure 1)

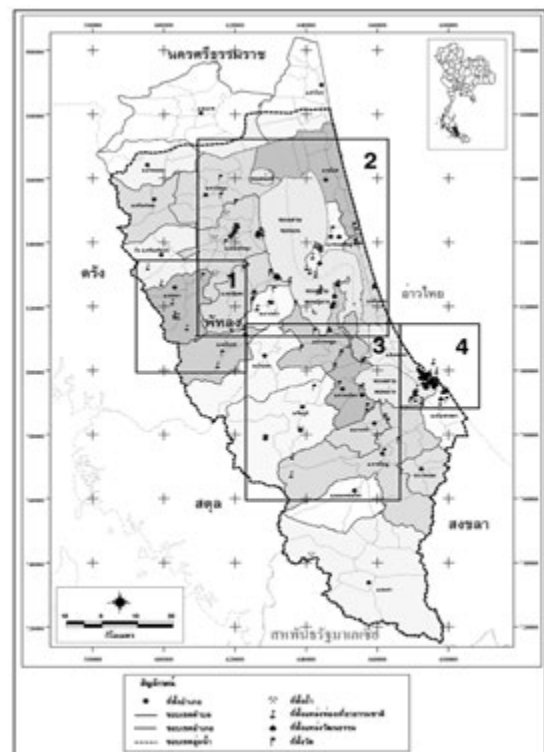


Figure 1 Tourism sites around Songkhla Lake Basin, Thailand.

Sampling

During this study, 212 tourism sites in SLB were surveyed using GIS technique. They are categorized as natural tourism resources, historical and cultural tourism resources according to their intrinsic characteristics and locations.

Analysis

Analyses were carried out in this study to assess risk of impact arisen from, tourism resources in SLB. Tourism resources of interest include: mountains, waterfalls, beaches, wetlands and islands in SLB. The results classified tourism resources, according to levels of their risks of impact.

Scope of This Study

Area: tourism resources of interest include: mountains, waterfalls, beaches, wetlands and islands in SLB.

Time: studying during March 2009 - February 2010

Content: tourism sites focusing with exposure of hazard from direct and indirect factors and its adaptation.

4. Results

Situation of tourism sites

The results classified tourism resources, according to levels of their risks of impact, as follows:

(1) High Potential - High Risk Group: Two sites have been identified. These are Wat Suwan Kiri and Wat Pa Kho.

(2) High Potential - Medium Risk Group: Three sites have been identified. These are: Wat Machimawas Worawiharn, Wat Kok Samankoon and Wat Kien Bang Kaew

(3) Medium Potential - High Risk Group: Three sites have been identified. These are: Wat Laem Jaag, Wat Soong Ko Yai and Wat Jedi Ngam.

(4) Medium Potential - Medium Risk Group: Seven sites have been identified. These are: Wat Tai Yo,

Wat Ja Ting Pra, Wat Klong Plei, Wat Khao Changloon, Wat Kuan Prong, Wat Pa Lilai and Wat Wang.

Natural resources and environment in SLB are in fair conditions to be developed and promoted as destination tourism management in the Basin, provided that they are well managed within a sustainability framework. Tourism resources in SLB can be divided into 2 main categories: 212 sites in total with 79 ecotourism and 133 historical-cultural tourism. Issues which need attention are: 1) direct factors such as exposure to hazards from tourists, 2) indirect factors such as climate change, economic crisis etc. are identified.

Impacts and Adaptation at Tourism Destinations in SLB.

There are four broad categories of climate change impacts that will affect tourism destinations as such SLB, their competitiveness and sustainability.

1. Direct climatic impacts: Climate is a principal resource for tourism, as it codetermines the suitability of locations for a wide range of tourist activities. Thus, changes in the length and quality of climate-dependent tourism seasons could have considerable implications for competitive relationships between destinations and therefore the profitability of tourism enterprises.

2. Indirect environmental change impacts:

Changes in water availability, biodiversity loss, reduced landscape aesthetic, altered agricultural production increased natural hazards, coastal erosion and inundation, damage to infrastructure and the increasing incidence of vector-borne diseases will all impact tourism to varying degrees.

3. Impacts of mitigation policies on tourist mobility: National or international mitigation policies - that are policies that seek to reduce GHG emissions - are likely to have an impact on tourist flows. They will lead to an increase in transport costs and may foster environmental attitudes that lead tourists to change their travel.

4. Indirect societal change impacts: Climate change is thought to pose a risk to future economic growth and to the political stability of some nations. Climate change associated security risks have been identified in a number of regions where tourism is highly important to local/national economies.

According to this study, the most at-risk tourism destinations for SLB could be categorized into four groups according to levels of their risks of impacts as mentioned. Hence, their destination vulnerability can be divided into 2 main categories as; 1) destination vulnerability hotspots: climate change will generate both negative and positive impacts in the tourism sector and these impacts will vary substantially by market segment and geographic region. 2) destination level adaptation: it is essential to emphasize that regardless of the nature and magnitude of climate change impacts, all tourism businesses and destinations will need to adapt to climate change in order to minimize associated risks and capitalize upon new opportunities, in an economically, socially and environmentally sustainable manner.

Green Destination Tourism Management as a Strategy Plan.

Despite the launch of the SLB Development Master Plan into implementation there were still alive of problem. This master plan was undertaken by the Ministry of Natural Resources and Environment. This planning study consisted of 5 strategies with 57 project ideas. The related strategy with tourism was the 4th strategy namely, restoration and conservation of arts and culture, historical and archeological sites, tourism sites and local wisdom, consisting of 4 measures including; 1) Restoration and conservation of arts and culture, tradition and local wisdom; 2) Restoration and conservation and utilization of historical and archeological sites, and tourism sites; 3) Development of network for learning and exchanging information about arts and culture,

historical and archeological sites and local wisdom; and 4) Promotion of sustainable tourism, in line with potentials of the sites, with careful consideration on communities benefits. However, understanding governance and institutional dimensions that affect access and use of information, inclusive and coordinated planning processes, and ability to be responsive and flexible to climate impacts are necessary for green destination tourism management. The strategies should consists of following; 1) maximize the benefit of tourism for the local society, 2) maximize the satisfaction of customers/tourists, 3) sustain local resources in the long term, and 4) maximize the profitability to tourism enterprises.

5. Conclusion

Climate, the natural environment, and personal safety are three primary factors in destination choice, and global climate change is anticipated to have significant impacts on all three of these factors at the regional level. As such, natural resources and environment in SLB are in fair conditions to be developed and promoted as destination tourism management with 212 sites in total with 79 ecotourism and 133 historical-cultural tourism sites. Impacts and its adaptation at tourism destinations as SLB include direct climatic impacts, indirect environmental change impacts, impacts of mitigation policies on tourist mobility and indirect societal change impacts. Hence, their destination vulnerability can be divided into two main categories as; destination vulnerability hotspots and destination level adaptation.

However, all tourism businesses and destinations will need to adapt to climate change in order to minimize associated risks and capitalize upon new opportunities, in an economically, socially and environmentally sustainable manner. Furthermore, a green destination tourism management should be implemented by understanding governance and institutional dimensions that affect access and use

of information, inclusive and coordinated planning processes, and ability to be responsive and flexible to climate impacts are necessary. Meanwhile, a study should be conducted to identify most appropriate adaptation measure for possible risks and precaution which should be taken; preparation should then proceed accordingly. Much more needs to be done to incorporate adaptation into future impact assessments in the tourism sector given its high adaptive capacity.

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