



## The Study of Mangrove Village and Community, Case Study: Salakkok Mangrove Community, Trad

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### Abstract

“Salakkok Mangrove Community” is a community located on a large mangrove forest in Amphur Koh Chang, Trad Province, whom received the “Green Globe Award” in 2010 for its successful implementation of integrating between its traditional way of life with its eco-tourism concept. By which, the establishment of a group for local conservative and tour guides prompted the community members to have participation in the administrative and the development planning process. The direction of this community development was profoundly aimed to becoming a pioneer community, focusing on a “community-based tourism” by implementing mainly the conservation of its original way of life, natural resources, and peacefulness. Whereas, the improvement of its physical environment had not been adequately adopted in parallel. Through this study, there are three main objectives: (1) to understand the “Salakkok” unique original way of life and the change of its inhabitants and its physical conditions emerging from socio-economics; (2) to understand what are the key factors of conformity between community’s evolution for eco-tourism and its built environments; and (3) to propose guidelines to help improve the physical environment for this community.

This research was conducted by collecting qualitative data using means of on-site survey and interviews of a target population. Subsequently, the results from the survey and analysis of the community’s physical conditions revealed as follow: The apparent strengths of the community were first, setting up an “association for conservation and local guides” to manage tourist activities; and second, forming a “business unit for the community” to be involved in the community’s development policy and administration. However, in terms of the physical and built environment, many establishments, public areas, and private properties were in a declined condition and lacked development direction.

The improvement for “Salakkok” Mangrove Community’s built environment were finally suggested in two proposals including: (1) To conduct architectural programming based on the context, ways of living, limitations, built environments, and economic and social conditions of the village; (2) To propose site planning an architectural design approaches for the improvement of the village’s built environments to increase the value to the community, regarding the concept of community-based tourism.

**Keywords:** *Community-based Tourism (CBT), mangrove forest, site planning*

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### 1. Introduction

Located in Ko Chang Tai Sub-district in the east of Ko Chang Island, Trad Province, Salak Khok Village is situated on a flat plane surrounded by hills and mountains. Most of the areas are comprise of rubber tree plantations and fruit orchards such as coconut. The village is featured by a canal flowing from a nearby mountain through to the Salak Khok Bay, and surrounded by the northern high mountains as well as 266.87 acres of mangrove forests (See Figure 1). While in the past, this village was capacious, but has since became more crowded as the population grew with settlers, both Thai and Cambodian, migrating from Ko Kong Province during the Cambodian Civil War. Thereafter, this village has become a fishermen community in the coastal area, as it is bisected by a canal leading to the sea. Along the canal, bisecting southwestern high mountains and northeastern Salak Khok Bay, are where the villager houses located.



**Figure 1** A Map of Land Use in Salak Kok Community and Physical Surrounding (Karawan-Sumranjai, 2018)

Since the tourism boom in 2005, Ko Chang Island has become a popular tourism hotspot, leading to a massive influx of tourists. To meet the changing tourism demands, the “Salak Khok Local Tourism Club” was established to promote local economy and monitor negative effects on the environment and local lifestyle caused by the tourists. In 2010, the successful development of the local tourism of the village brought immense reputation, thus the village was granted “Green Globe Award” by Green Globe Institute, Petroleum Authority of Thailand (PTT). In addition, for further advancement of the local tourism, Ko Chang Tai Subdistrict Administrative Organization has launched six strategic policies as follows:

1) Infrastructure Development

This policy emphasizes maintenance as well as the construction of roads and buildings, urban planning management, and the improvement of utility systems to meet the public needs and demands.

2) Improvement of Living Quality

This policy emphasizes improvement of the living quality of people in the managed area and the promotion of sports and cultural education.

3) Economic Development

This policy emphasizes promotion of employment and job creation according to the principle of creative economy, the development of local products, and the maintenance of resources.

4) Good Governance and Public Participation

This policy emphasizes application of “the principle of good governance and public participation,” upon the improvement of the administration of Ko Chang Tai Subdistrict Administrative Organization and the encouragement of public involvement in activities.

5) Management and Preservation of Environmental Resources

This policy emphasizes promotion of environmental preservation and environmental recovery, the improvement of waste and hazardous waste management, and the promotion of alternative energies usage, to raise the public awareness of environmental protection.

6) Tourism Promotion

This policy emphasizes promotion and the development of sustainable tourism as well as ecotourism in the community through campaigns aimed to improve people’s knowledge and understanding of ecotourism.

Community-based tourism is as an effective tool for community management and development, in which people in the community are encouraged to participate and be involved in the management of their tourism aspects — i.e., natural resources, local culture, etc., — so that the community can become the capital for tourism-related businesses (Putjorn, 2013).



The six policies designed by Ko Chang Tai Subdistrict Administrative Organization reflect its attempt to respond to ecotourism industry needs and demands. In this case, a study of urban planning and physical features of the community can lead to the solution for its problems, the optimization of the tourism infrastructure to meet the local ways of life, and the creation of architectural forms that would promote the community's image and improve the villagers' living quality.

## 2. Objectives of the Study

1. To conduct an architectural programming based on the context, ways of living, limitations, physical characteristics, and economic and social conditions of the village, by investigating the correspondence between the villages' site planning, built environments, and management of the community-based tourism.
2. To propose site planning an architectural design approaches for the improvement of the village's built environments, thus increasing the value to the community with regard to the concept of community-based tourism.

## 3. Research Instruments and Methodology

This interdisciplinary research was aimed to maintain social, economic, and physical balance. With which, the researcher, along with the village representatives, set up a development goal, where urban planning theories were applied, for the population of 484 villagers from 187 families.

### 1. Primary Data

The primary data were obtained from analyzing the village's context and limitations conducted through field research for instance, photos of the interior and exterior design of the surveyed houses, the plan drawings and community maps, interviews with villagers to study the relationship of their in-house activities coincidingly with the interior and exterior utility space, the village's local architecture, and the study of local identity and uniqueness based on the context.

### 2. Secondary data

The secondary data included online and electronic data, as well as data concerning strategic policies and area-based development from related organizations, to analysis factors which have a significant effect on the changes in the community's context. The data were applied to determine the scope and goals for the community-based development.

### 3. Data Collection and Analysis

- 3.1 Researching online information related to the village.
- 3.2 Collecting primary data and planning field research.
- 3.3 Conducting field research, interviewing village leaders and representatives, studying physical information — i.e. local architecture, community plans, etc., — and other related data.
- 3.4 Analyzing data and determining appropriate developmental approaches.

As defined by 2016 ASEAN Community-Based Tourism Standard,— community-based tourism is a tourism activity owned by a community and managed or coordinated at the community level. This form of tourism can contribute to the well-being of the community through supporting sustainable livelihoods and protecting the community's valued socio-cultural traditions, natural, and cultural resources.

Manirochana (2017) viewed community-based tourism as a tool for the development of the community and the people living in there, for it can help improve the living quality and promote growth in the local economy. Moreover, it is a tool for the dissemination and maintenance of cultural knowledge and wisdom. This tourism form contributes to an interchange of knowledge and ideas between the tourist site owners or those living in the community and the tourists. Community-based tourism can raise tourists' awareness of the value of the community by making them engage in the tourism activities, in which they can



interact with people in the community, natural attractions and resources, culture, traditions, and local lifestyle.

CBT Principles based on the above definition, CBT must:

1. Involve and empower community to ensure ownership and transparent management,
2. Establish partnerships with relevant stakeholders,
3. Gain recognized standing with relevant authorities,
4. Improve social well-being and maintenance of human dignity,
5. Include a fair and transparent benefit sharing mechanism,
6. Enhance linkages to local and regional economies,
7. Respect local culture and tradition,
8. Contribute to natural resource conservation,
9. Improve the quality of visitor experiences by strengthening meaningful host and guest

interaction, and

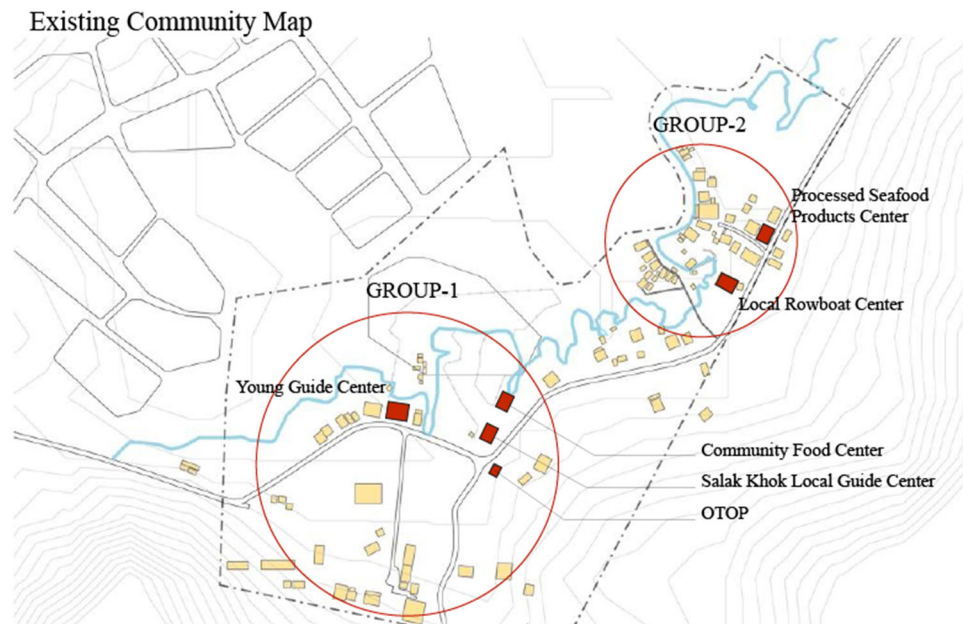
10. Work towards financial self-sufficiency.
- (ASEAN Community Based Tourism Standard, 2016)

#### 4. Results

##### 4.1 Lifestyles, Development, and Limitations of the Community

In terms of strengths, it was found that Salak Khok was abundant with natural resources, especially with mangrove forests and seas, thus leading to the possibility in the development of community-based eco-tourism in the form of sightseeing tour by boat. Furthermore, with the collaboration from the community, the policy development could potentially propel smoothly.

Nevertheless, a cluster of activity groups in Salak Khok could be deemed one of its weaknesses. Generally, the activity groups in Salak Khok could be classified into two bands, disconnected to one another (See Figure 2). The majority of the activities densely clustered in the community area are causing several problems, such as having difficult access to the community, narrow and dilapidated streets, insufficient recreational communal areas, as well as inadequate parking space and boat boarding spots. Such problems are stemmed from the local people's lack of understanding in land management, leading to a failure in an established identity, as well as, reflecting people's low quality of life.



**Figure 2** The existing community map and two activity groups were not connected in terms of tourism activities sequence.

#### 4.2 The correspondence and development guideline

According to the study of the correspondence, the villages' site planning, built environments, and management of community-based tourism, were not consistent. From the results presented in 4.1, two major problems could be identified:

4.2.1 There were no clear indications of the site plan to help tourists navigate along better routes and in the right sequence as planned by the community. Therefore, the new site plan arrangement was proposed in respond to the tourism activities and with the tourist needs. Moreover, creating a travel plan can help tourists be engaged in the community's ways of life. First, the plan should start from the mangrove forest trekking, then after the tourists would be able to various lifestyles of the community by choosing one out of the three choices:

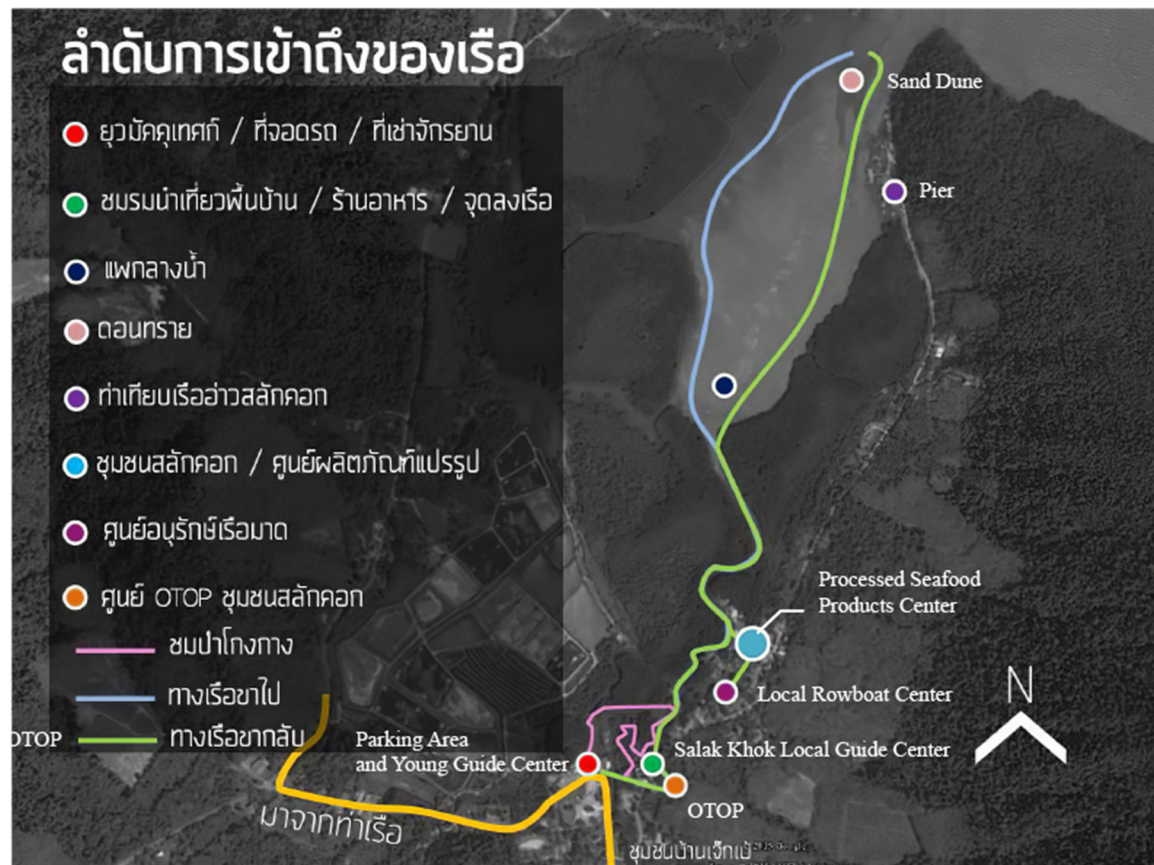
##### 4.2.1.1 Walking tour

Tourists are able to appreciate the lifestyles and join numerous activities of the villagers by visiting them on foot.

##### 4.2.1.2 Boat tour

Tourists could go on a tour by a local row boat or a kayak. There, they could visit three interesting places, including the floating rafts, sand dunes which are visible during the low tide, and Salak Khok pier which is the residential place of fishermen. From the pier, the boat would take the tourists on the same route back to Salak Khok community, where they could experience the local ways of life and visit other appealing spots, including the processed seafood product center, the local rowboat center, and OTOP shops before traveling back. Figure 3 shows the boat-sightseeing routes.

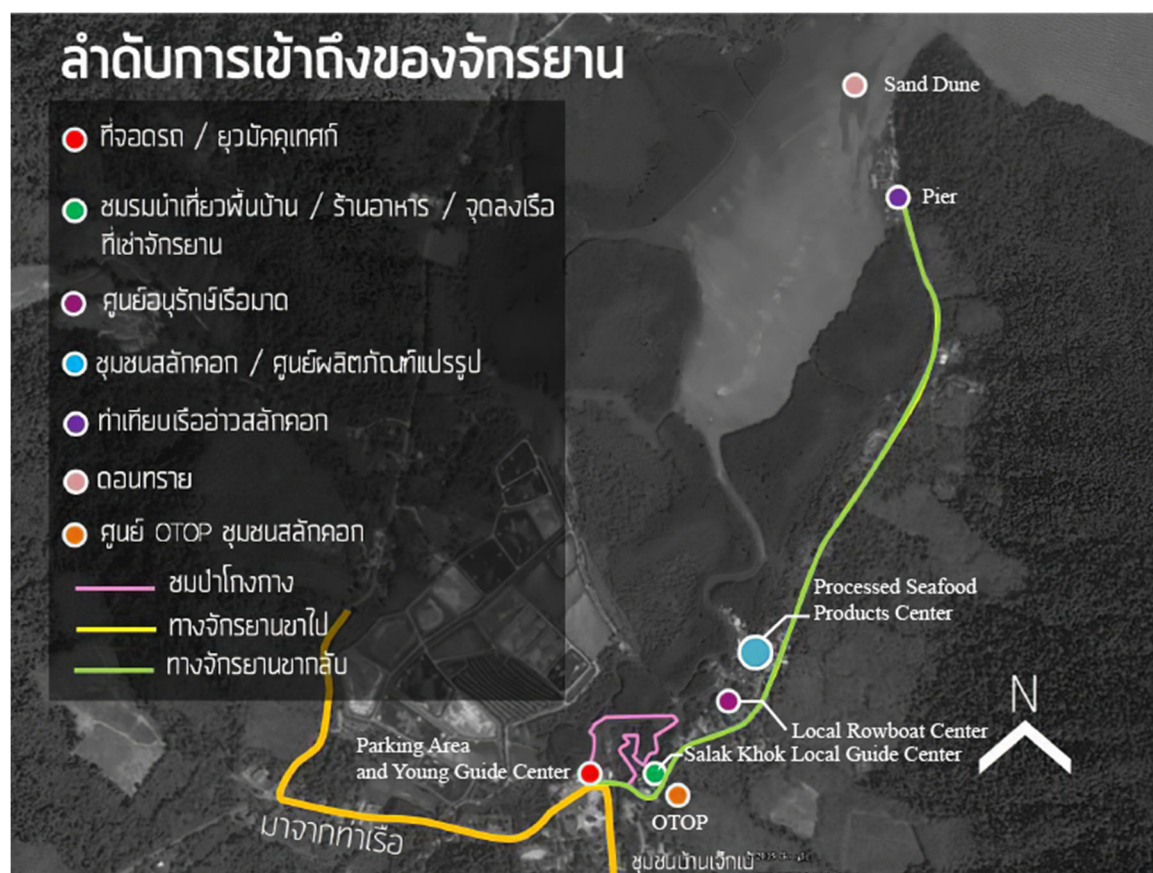




**Figure 3** Boat-sightseeing routes and places to visit arranged in order

#### 4.2.1.3 Bike tour

By riding their own bikes or renting one from a bike rental shop available in the village, tourists could visit the fisherman's village at the Salak Khok pier, the processed seafood products center, the local rowboat center, and OTOP shops. Figure 4 show the bike routes.



**Figure 4** Bike routes and places to visit arranged in order

#### 4.2.2. Renovating old buildings and built environments

Many of the existing built environment in this community should be developed, such as the roads, piers, and buildings. Almost all of them were in dilapidated conditions. Consequently, by improving the environment, there might potentially be an increase in the tourist numbers visiting this community.

The materials used in the renovation should be durable, readily available, and cheap. To which, the study recommended artificial wood instead of natural wood. Apart from its better durability, it could be painted with natural wood colors that harmonize together with the surrounding wooden houses in the village. Drawings in Figure 5 and 6 shows the design guideline for the renovation of the old buildings.





Figure 5 Guideline for the renovation of Salak Khok Local Guide Center

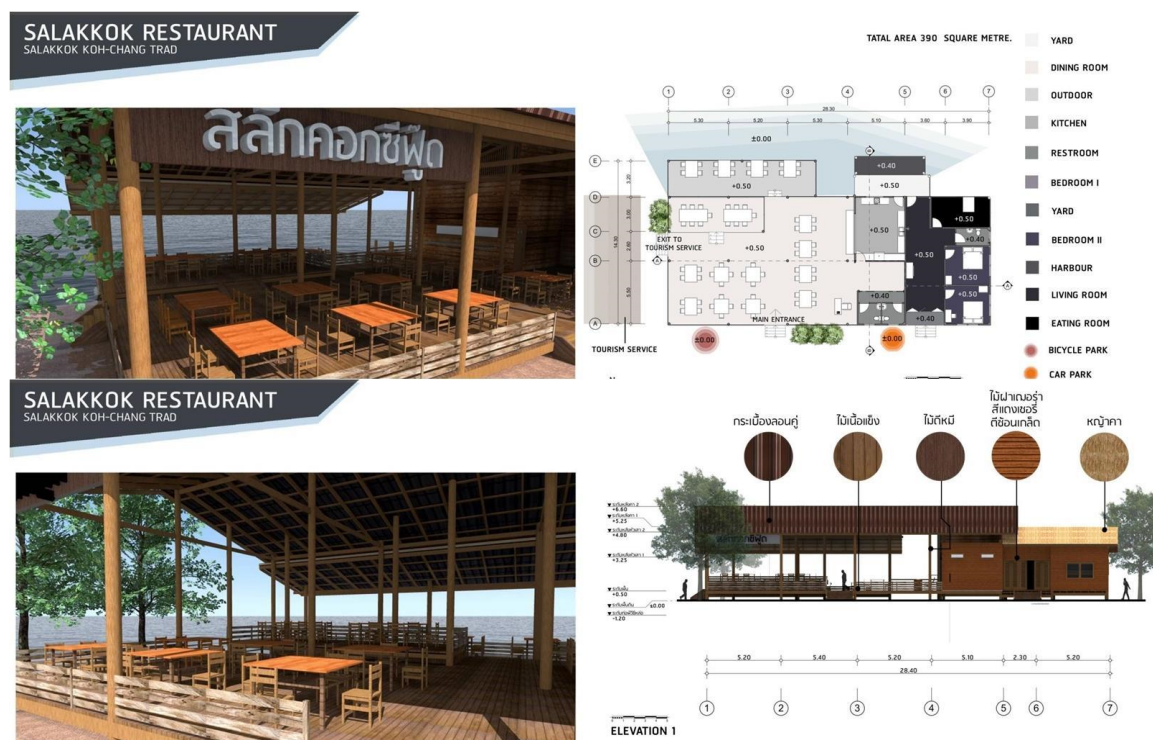


Figure 6 The design of the community food center

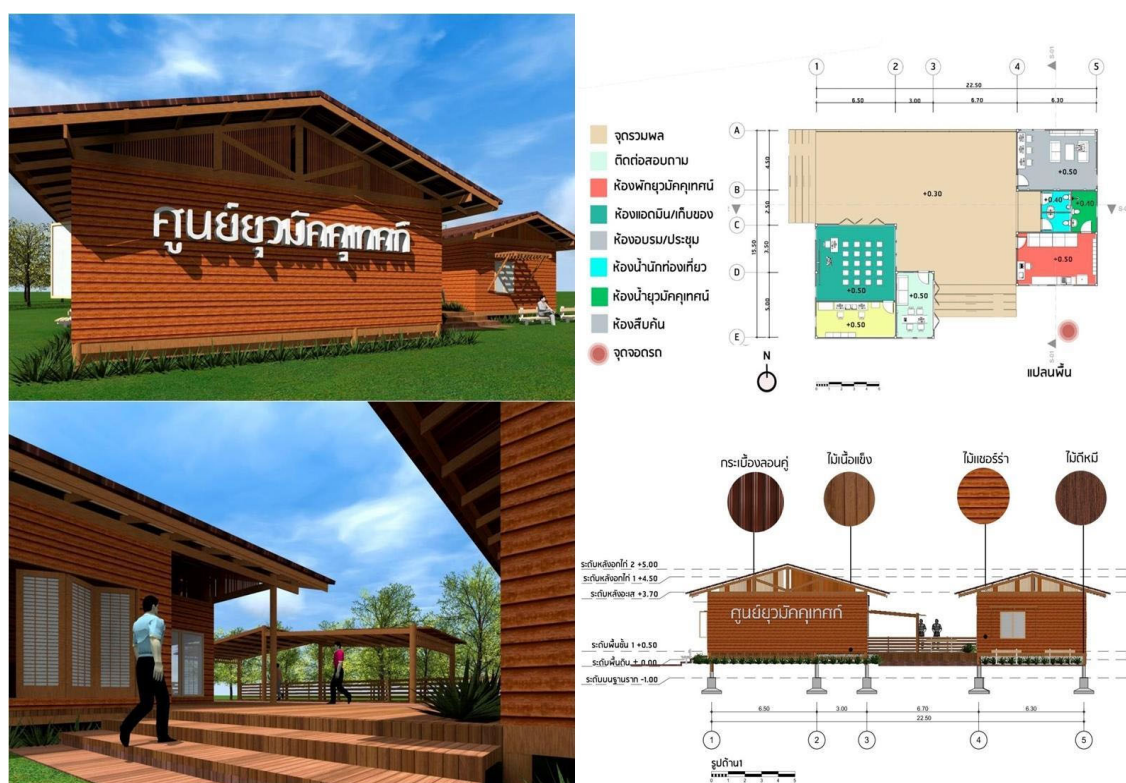
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#### 4.2.3. Establishing ‘Young Guide Center Building’

The center would provide useful information to tourists. Therefore, it should be located at the entrance to the village so that it would be easily accessed by tourists. Figure 7 show the design guideline of ‘Young Local Guide Center’



**Figure 7** The design of ‘Young Local Guide Center’

## 5. Discussions

Generally, cultural and economic development could have an effect on a community to some certain extent. Nevertheless, Salak Khok is an established community adaptive to changes. The community itself has been constantly developed, yet the nature and the local ways of life has still been preserved. ‘Peace’ was founded to be a unique characteristic of the community and had been considered the key concept in which all development plans revolved around. Furthermore, the physical characteristics of the community were a key factor that would attract tourists. If tourism was improved, the economy and quality of life of the locals would be better as well.

### 5.1 Built Environments

5.1.1 For a community without its own cultural root, the establishment of identity would be difficult. Therefore, in order to establish the physical identity, an in-depth analysis of the local ways of life must be conducted in order to create an appropriate framework used in the design of physical identity.

5.1.2 The progress and success in the renovation of the community area depended greatly on the realization and awareness of the local people. In addition, the public awareness towards the well-being of the community would lead to the success in the community renovation and a positive image of the community.



## 5.2 Natural resources

The community is abundant with tourism resources, whereby could create various tourist activities that could meet with their needs. Thus, the tourist spending longer days in the community would subsequently bring in more income to the people.

## 6. Conclusion

This research is a field study, with which the data were collected by means of interviewing and were analyzed using the concept of community-based tourism (CBT). In general, the problems in the community were not caused by the policy or the administration, but by the built environments of the Salak Khok area which were not able to support the rapid expansion of tourism activities. This study, therefore, proposed developmental approaches with an emphasis on the improvement of Salak Khok community's built environments. The recommendations were as follows:

6.1 Technology and modern devices should be taken into consideration and implemented in the community.

6.2 Time periods and tourist seasons should be further considered or studied.

## 7. Acknowledgement

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