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Hospitality: Interact with the land

Rethinking and Designing Cultivation Landscape of the Royal Project Development Centers in Chiang Mai

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Introduction

Initiated in 1969, the Royal Project was founded and aspired to transform the mountainous landscape of the Northern Thailand from illicit opium cultivation to lucrative western crops by the initiation of His Majesty King Bhumibol of Thailand. Half century later, the Royal Project Foundation (established in 1992) became successful in eliminating drug narcotic farming and reducing deforestation from the Northern region of Thailand thus introducing green produces of western exotic fruits, flowers and vegetables into Thai market. Despite its successful story and stable business in agricultural products, without the proper plans, its 38 agricultural development centers have grown physically without clear direction. Its agro-industrial production facilities thus have created unfit visual effects to this charming view of hilly landscape of Chiang Mai's mountain range while most of the centers' neighboring land became popular for the resort development of sightseeing and recreational activities and agro-tourism businesses. This landscape transformation was a result of the growing new wave of tourism business such as eco-tourism and agro-tourism while most of the Royal Project centers are focusing on developing agricultural technology to cope with competitive fresh produce market. Consequently rising number of responsible visitors are in search of unique pristine natural setting with knowledge of preserving ecological system but these Royal Project centers only provide them unorganized plots of farmland and unfit structures of warehouses, packaging buildings and greenhouses.

Due to its aims to subdue the cultivation of drug narcotic, the Royal Project Foundation has drawn supports widely from both private organizations and public agencies to help its 38 agricultural development centers. Along with several agricultural universities and departments in the Ministry of Agriculture and Co-operative, King Mongkut's University of Technology Thonburi (KMUTT) has been an active key partner with the Royal Project Foundation for providing and updating technology that help increasing the quantity and quality of produces in its 38 centers throughout Chiang Mai Province and its neighboring region. With the university's principle of "Learning by Doing," KMUTT's School of Architecture and Design started the process of rethinking and redesigning master plans of 38 Royal Project Centers for supporting agro-tourism activities and HM the king's principle of self sufficient development as one of 9 optional studios offering to 4th year Vertical Architectural Design class in the 1st semester of 2007.

This is the new approach in the curriculum of the school of architecture that allows undergraduate students select the 9 different approaches for design. This design studio aims to illustrate the new pedagogy in architectural design challenging students how to incorporate both natural and cultural aspects of local environment into their architectural and landscape design. Moreover, the paper provides and examines the 4 master plans of the Royal Project Center at Teentok in 2007 to Pang Ung Royal Project Centers at the present time.

Rethinking the local and natural aspects of the site

From the 38 sites of Royal Project Development Centers, the first studio project started at Teentok in first semester of 2007 followed by Huayluek, Khunwang Mon-Ngor and Pang-Oung. These 5 Royal Project Centers are the popular sites for tourists or are in very unique natural setting. These centers are in different local contexts although they are located within Chiang Mai province. First center of this studio is Teentok (Figure 1 map with 38 Royal Project centers) which is very close to the city of Chiang Mai and not in very high altitude. It is on the route to Chaesorn National Park in Lampang Province and only half an hour from the city of Chiang Mai. Second is Royal Project Center at Huayluek which is in Chiang Dao half way to famous Doi Ang Khang Peak where tourists rally to see the morning sea of fog in the winter period and the western style flower garden of the late princess mother. Third, fourth and fifth centers that we design are the series of the Royal Project Centers around Doi Inthanon Mountain Peak, namely Khunwang, Mon-Ngor and Pang-Ung.

Royal Project Foundation's Public Relation and Tourism Section also suggested the framework for this new tourism development as followed;

1. The new tourism facilities must not create environmental degradation to the site and its vicinity.
2. The operation for tourism must be conducted with the most efficient consumption of energy and natural resources.
3. The new recreational activities should improve the quality of life for local community economically without abandoning their both cultivation and everyday life activities for tourist service jobs.
4. The physical appearance of this new development must be in harmony with local landscape and scenery of the center and its natural environment.

Bear these social obligations in mind, this studio emphasized on the survey of local village around the royal project site at the beginning of the design process. Therefore, site survey for the center was set to focus in 3 main characters as followed;

1. Landscape scenery
2. Vernacular architecture
3. Cultural activities
4. On-Site contexts (Accessibility, Topography, Landform, Wind, and other natural uniqueness)

The survey of the community is for not only the analysis of the site but also the inspiration for design and planning. As of the first project, the Royal Project Center at Teentok is located in the Mae Takhrui National Park which is dominated by hilly teak forest and the center supported local farmers to grow Arabica coffee under the shade of Teak woods at the height of around 700 meter from sea level. Other unique plants that found in the site are peach, Chinese sweet gum and *Prunus cerasoides* which are colorful in the winter.

The local ethnic group around the center is Tai Yai and Tai Lue. Therefore, their unique local architecture is distinctive from the traditional and mainstream Lanna Thai architecture. Moreover, most of the houses here reflect their natural environment with very unique materials. The light brown gravels from the stream that runs through the village of Baan Mae Kampong nearby were used at the ground wall and columns with wood and bamboo for upper structures. Although the main street of the village is such a small road, it comprises of colorful plants alongside bamboo fence creating distinctive landscape scenery. The villagers' main agricultural activities such as making chewy tea leaf (Mieng), cultivating coffee and other everyday-life activities generate lively atmosphere in this village. As a result, the survey of the village became the design inspiration for this project to develop main facilities for agro-tourism from main street landscape to tourist information center and resort units. The site atmosphere became the priority for architectural design thus merging modern living preference to local materials and character.

The second project was the Royal Project Center at Huayluek which is located alongside the major highway up north to Fang District and Chiang Rai. The location of Huayluek is at the halfway from the city of Chiang Mai to Fang District and Doi Ang Khang Mountain Peak. Its site advantage is its high possibility for commercial and service activities as a rest area for highway travelers. In contrast to the atmosphere of Teentok, the communities around Huayluek are northern Thai and Hmong villages with fresh market along the road. Hmong had been moved here and already transformed by the present of the highway. The ethnic Hmong village has very different architectural arrangement from other hill tribes and urban Lanna Thais. Hmong house is usually one-storey house on ground as its Chinese origin with bamboo wall. The fireplace is at the center of the house.

The location of Hmong village usually is the flatland on top of the hill creating atmosphere of a small plaza in rainforest. However, for this community, Hmong unique architectural features and space in this village was wiped out by the modern materials that come with the highway economic opportunities. Therefore, the master plan and architectural design for this center focus on the visibility gaining attention from the highway and explore the atmosphere of the reservoir of the center instead. The mainstream traditional Lanna Thai architecture was reconsidered as the recognition for the tourists from the city of Chiang Mai. This is similar situation to Khunwang which is the center within Hmong village of Baan Khunwang. However, the first priority for planning and architectural design of this site is to protect building from

strong wind due to the site's steep slope and location at the endpoint of the mountain range. Not only blending in character of Hmong, the design is obligated to reduce the wind load to the building. The design of the new clubhouse and resort units employs not only local materials of clay wall but also smooth circular plan to equally distribute the wind load.

The last two projects of Mon-Ngor and Pang-Ung are the situations that design framework echo both Hmong and Karen vernacular architecture. Mon-Ngor Village is at Tambon Sob Guy, Mae Taeng District near Huayluek RP Center. The center basically is on the land of partial steep slope and flatland. The main structure of central office and meeting facilities are on the land. The minor buildings such as the resort units, staff houses, and restaurant are designated in the area of the cliff or periphery of the center therefore the design with guideline of the Karen's stilt house that is open plan for ground floor is more suitable for the steep topography. Since the steep topography is visible in the area, it is crucial that the structures facing the road on the cliff must be compatible with and not distinctive from vernacular architecture in the vicinity of the site.

Conclusion

To pursue economic development on pristine natural environment is important but to preserve local character and atmosphere including vernacular architecture and indigenous social life while taking financial advantage is more crucial. There were several factors within the site context that could influence the design of architectures and every site has different composition of these factors. In first example of Teentok, the local preferences of Tai Lue culture could influence the design while in Huayluek and Khunwang, the context of the site for instance, the impacts of highway (Huayluek) and strong wind (Khunwang) is more crucial and shape the unique design of each site. The last two examples depict the local Karen and Hmong vernacular preferences that were employed within the same sites but different landform. We can observe that if the contexts of the site are not strong, the vernacular architecture could be applied to the design framework. The more understanding of the site contexts would generate the greater distinction in design.

References

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