

Sustainable Engagement with Indigenous Settlements in Prohibited Areas: A Case Study of Karen Tribe Villagers in the Kaeng Krachan Forest Complex, Thailand

Terdsak Tachakitkachorn¹, Monsinee Attavanich², Chalumpon Thawanaphong¹, Piyathida Saikhun^{1*}, Tarnrawee Ngamsiriudom¹

¹ Architecture Design for Creative Community Research Unit, Faculty of Architecture, Chulalongkorn University, Thailand

² Faculty of Architecture, King Mongkut's Institute of Technology, Lad Krabang, Thailand

* Corresponding email: piyathida.tg@gmail.com

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ABSTRACT

The Cultural Housing Network Project is a collaboration project of the Department of National Parks, Pidthong Foundation, and Chulalongkorn University. It aims to initiate social engagement to solve conflicts between the Department of National Parks and indigenous Karen tribe villagers in Kaengkrachan prohibited area. A village working group for cultural promotion has been raised as a key success factor, in parallel with trial and error activities for natural and cultural tourism. These projects were engaged to restore village pride in their local wisdom and widen job opportunities for the next generation while facing restrictive regulations by the Department of National Parks and experiencing long-term distrust and conflict between both sides. Chulalongkorn University and Pidthong Foundation, as the academic and NGO sectors, have to retain their neutral stances by following a consensus roadmap of a sustainable engagement plan to counter any unexpected pressures from either side.

Keywords: Kaeng Krachan forest complex, national park, Karen tribe village, sustainable engagement, Karen house

INTRODUCTION

Sustainable Development has been promoted for several decades as an ideal concept for balancing management with socio-economic and environmental tasks. To accomplish this goal, multi-dimensional consideration is necessary through the proper initiation of the most significant key-success factor, followed by the next step of correlative key factors. However, on-site implementation has interfered with and distorted by unexpected factors, including emerging unplanned projects by the central government. The “Nawatwithi” project is just one of the Thai government’s many examples which are to support sustainable development but ultimately became terrible failures (Sankote & Kamnuansilpa, 2020).

Kaeng Krachan Forest Complex (KKFC) is not an exceptional case. There are conflicts between the Department of National Parks (DNP), as a part of the central government, and indigenous Karen tribe villagers. Support groups of conservative NGOs introduced various activities into the area both for natural resource protection and indigenous settlement welfare due to its significant role as the biggest well-preserved tropical jungle in the Indo-China region (Serirat & Popichit, 2014). The situation has escalated quickly during the last few years, after an attempt to nominate the whole Kaeng Krachan Forest Complex as a natural world heritage site. One of the central government’s projects is the “Cultural Housing Network” (CHN). It is a 2 years project (2018-2020) under collaboration by Chulalongkorn University (CU), Pidthong Foundation (PDF), and Department of National Parks. Indigenous Karen tribe villagers have high expectations for the project with its continual

movement driven by Chulalongkorn University and Pidthong Foundation since 2013.

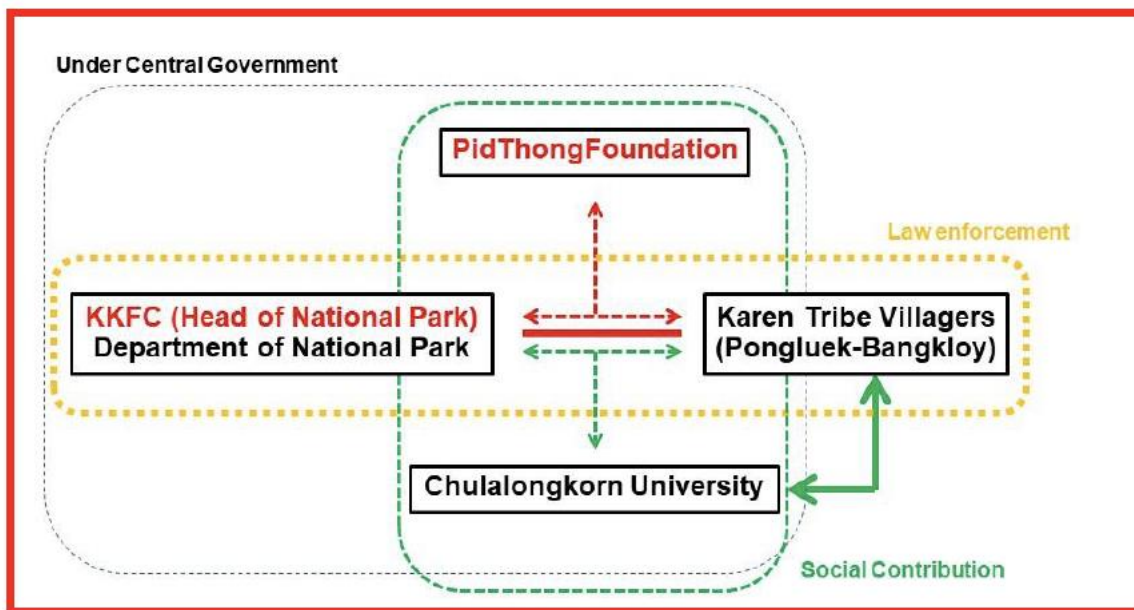
This study will show the project background and conceptual modeling (Pathumporn & Nakapaksin, 2015), implementation activities (Ozanne & Anderson, 2010), and the present situation of the whole eco-system of this project through participation action research done by the authors during 2018-2020 supported by Pidthong Foundation.

PROJECT BACKGROUND AND CONCEPTUAL MODELING

As with ASEAN Heritage Parks in 2011, Department of National Parks has been trying to have Kaeng Krachan Forest Complex designated as a natural world heritage site (The United Nations Educational, Scientific and Cultural Organization, 2011). Even though, a significant conflict between indigenous Karen tribe villagers and DNP has affected much to the designation by UNESCO. Since its declaration as a national park, many conflicts have taken place. While Department of National Parks alleged the Karen villagers of illegal immigration and forest encroachment, on the other hand, Karen tribe villagers alleged Department of National Parks of forced eviction and enforced disappearance. NGOs such as Pidthong Foundation, International Union for Conservation of Nature (IUCN), and Seub-Nakhasathien Foundation (SNF) have been invited by Department of National Parks for conflict resolution, through many engagements such as a survey to clarify the right of land use and the promotion of alternative agriculture to replace shifting cultivation (Figure 1).

Figure 1

Relationship between Department of National Parks, Chulalongkorn University, Pidthong Foundation, and Karen Tribe Villagers.



GENERAL BACKGROUND

Kaeng Krachan Forest Complex was declared as a national park in 1981. As the largest national park in Thailand, with an area of 2,914 km², locates in Phetchaburi and Prachuap Khiri Khan Provinces. It is a part of the Western Forest Complex covering 18,730 km² across 19 protected sites across Myanmar and Thailand boundaries (Figure 2). Being listed as an ASEAN Heritage Park in 2011, Department of National Parks has also been trying to have Kaeng Krachan Forest Complex designated as a natural world heritage site. Department of National Parks's attempt to be enlisted in the world heritage list has caused significant conflicts between them and the indigenous Karen tribe villagers, who originally lived their life in the whole complex before an announcement of the National Park. Department of National Parks claimed its right to enforce the law to protect the national limited resources then initiated enforcement of non-compromising countermeasures by the relocation of Karen people from the inner forest complex to their present location (Sukkasame, 2019). Thus, this instigated long-term negative consequences, including civil disobedience by the Karen people. The enforcement by government officers has led

to unnecessary casualties, which has violated human rights and negatively affected the designation by UNESCO (Morton & Baird, 2019). While Department of National Parks alleges the Karen tribe villagers of illegal immigration and forest encroachment, on the other hand, Karen tribe villagers alleged Department of National Parks of forced eviction and disappearance. NGOs such as Pidthong Foundation, International Union for Conservation of Nature (IUCN), and Seub Nakhasathien Foundation (SNF) have been invited by Department of National Parks for conflict resolution. The trio of organisations are considered experts in the promotion of grass-root community living standards. They base their resolution on three philosophies: (1) understanding, (2) connecting, and (3) development.

Pidthong Foundation was introduced to Pongluek and Bangkloy villages to resolve any misunderstanding between the government agency and the Karen people (Sthapitanonda, 2018). With a piecemeal approach, Pidthong Foundation continued its development framework from the Pidthong Lang Phra Project, which is a royal family initiative. It has been in operation since 2008 and focusses on community development based on knowledge principles by adjusting the weight of each subject according to

geography, society, and problem conditions in each area. The project emphasizes on community development based on the principles of knowledge in six dimensions: soil, water, agriculture, renewable energy, forest, and environment. Pidthong Foundation has gradually regained trust from Karen people and bridged cooperation from both sides through supporting their agricultural and related skills learning and profession by integrating their original wisdom and lifestyle with applicable modern knowledge. The foundation also used surveys to collect and clarify data about the right of land use and the promotion of alternative agriculture instead of shifting cultivation.

Since 2014, Pidthong Foundation invited the Division of Student Affairs of Chulalongkorn University and its academic partner institutes with the main purpose of encouraging students from multi-faculties to participate in the collaborative Karen tribe village revitalizing activities in Pong-luek and Bangkloy village (PBV), located in the centre of Kaeng Krachan Forest Complex (Figure 2, 3). A range of activities was included such as technology-based (modernized farming and irrigation system enhancement) and soft skills (language improvement for students in the village elementary school). Among these mentioned activities, the Chulalongkorn University team was responsible for three lecturers, one from Faculty of Science; in charge of modernizing agriculture promotion, one from the Faculty of Fine Arts; in charge of rediscovering cultural promotion, and one from the Faculty of Architecture; in charge of redesigning traditional construction. The team had re-evaluated the overall results of previous activities and found that these could not lead to real problem solving for both parties. Many factors have complicated the situation of the area such as the problems in the border of Thailand and Myanmar, which is notorious for human and drug trafficking. It would help the Department of National Parks more if the Karen village is still there to become a watchdog for any misconduct. Moreover, accessibility to town, restrictions to natural resource usage, vernacular dwellings, cultural landscape of the villages, and a rapid spread of industrialized material application radically changed the village to a typical modernized landscape. Those complex and emerging problems have driven Pidthong Foundation to find other expertise alliances.

Thus, as one of the options, the Cultural House Project, under years of site survey and research, has been initiated by Chulalongkorn University in collaboration with Pidthong Foundation and Department of National Parks, to promote bamboo usage instead of industrialized material. This would support job opportunities for Karen people in the village, together with revitalizing the vernacular cultural landscape as the fundamental living wellness.

Karen tribe villagers in Pong-luek and Bangkloy village, and Department of National Parks were cooperatively in charge of Kaeng Krachan Forest Complex preservation. Typical problem solving of utilizing only manpower and a budget for total enhancement, without proper key-success factors, could not relieve the following problems. From the villager's side: (1) suspicion and distrust of the central government, (2) insecurity from a life without a stable income, and (3) a loss of local wisdom. From Department of National Parks' side: (1) illegal deforestation, (2) human and drug trafficking, and (3) less opportunity for world heritage site designation. After a long discussion between Department of National Parks, Pidthong Foundation, and Chulalongkorn University team, "Jungle-loves-villagers-loving-Jungle" or "Cultural Housing Network Project" (CHN) was created with 2-years of funding by Pidthong Foundation, under special permission from Department of National Parks to test and evaluate.

CULTURAL HOUSING NETWORK MODEL AND IMPLEMENTATION

Cultural Housing Network has two main objectives: (1) Revitalizing the Karen tribe villager's pride in their local wisdom, and (2) Regenerating group occupation in the village. This is implemented through the three following stages:

- 1) Resource input from outside of the national park to avoid breaking the regulations of Department of National Parks, including long-life cycle treatment bamboo and a new method to use less rattan in construction.

2) Pre-establishing of a village working group for cultural promotion and pre-marketing of redesigned village products.

3) Socio-economic evaluation and a proposal to Department of National Parks for continual permission to expand the Cultural Housing Network period.

Cultural Housing Network has conducted five activities: (1) Reconstructing the original and adaptive redesign vernacular buildings to support programs including spaces to provide local wisdom and information, multi-purpose utility space for craftsmen and artists, local wisdom learning practice and performance space, cultural tourism supportive house repairing, a cultural tourism supportive bathroom, and a flea market

area. (2) Rediscovering original music and re-interpret adaptive music and dance performance to support programs including a cultural exchange with other indigenous communities, cultural inspiration for VIP guests and tourists, and training for young villagers. (3) Promoting handicrafts production including reviving original bamboo handicrafts and cloth weaving with both original and modernized designs. (4) Promoting self-sustained small irrigation and organic agricultural production including a small-scale reservoir system, a small-scale mechanical water mill, and substituting rice planting with alternative planting. (5) Promoting qualifying natural and cultural tourism including cultural and natural trip planning, and a familiarization trip test and evaluation. The Cultural Housing Network model can be offered as a model, as shown in Figure 4.

Figure 2

Kaengkrachan Forest Complex as a part of the Western Forest Complex and the location of Pongluek-Bangkloy Karen tribe village.



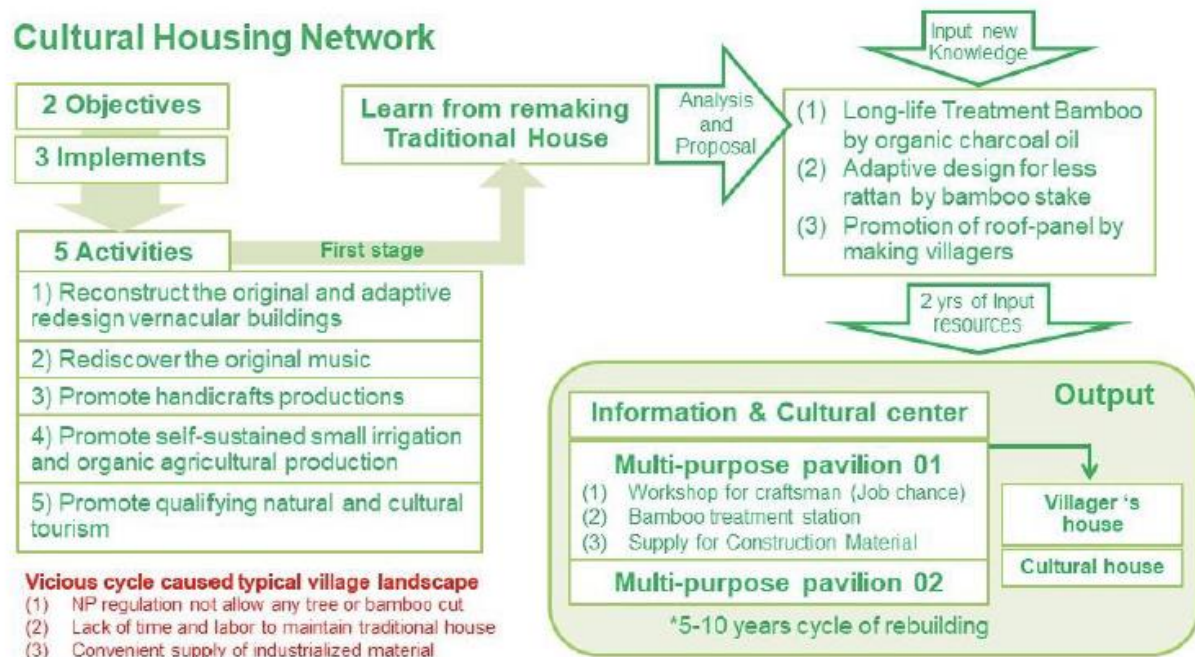
Figure 3

The Pongluek-Bangkloy Karen tribe village in Kaeng Krachan Forest Complex



Figure 4

Cultural Housing Network Model.



The reconstruction of vernacular buildings using a long-life treatment bamboo was first engaged while indigenous music and dance training was also gradually promoted. Bamboo is considered the main key success factor for the first stage. Bamboo's life cycle can be extended from 3-4 years to 9-10 years using organic treatment and adaptive redesign construction such as using less rattan by replacing it with bamboo stakes. These improvements were absolutely accepted in meetings with the villagers. (Figure 5). A group of carpenters has planned to prepare a bamboo plantation on land with rights for multi-utilizing over the next 4-5 years. The plan consists of house repairing, handicrafts, and bamboo rafting for tourists. The village engagement activities were conducted with skillful craftsmen, hard-workers, and unemployed staff without agriculture-land rights. Without construction skills, some villagers provided support by weaving weed panels for roofs. During the second stage, when all building construction was finished at the beginning of 2019, this group of carpenters continued their work with bamboo furniture

making. Chulalongkorn University set a plan to have volunteer students participate (Figure 6) in building construction, thatch-panel making, and a bamboo furniture design workshop. Students also conducted a marketing survey identifying hotels or companies that need good design bamboo furniture and other products made in the village. The students came up with the image and map for cultural tourism, as seen in Figures 7-9. For the third stage, this group of carpenters will apply for permission from Department of National Parks to have bamboo cut from the land. Generally, income from any natural resource in Kaeng Krachan Forest Complex is prohibited but it could be released if that income belongs to the permitted villagers who could clarify the whole process of production. From the self-direct marketing of the village products to product delivery to end consumers, many jobs will be created. It will yield villagers another income source. This right will enable them to produce good design furniture and create a new source of income rather than depending solely on tourism in the village.

Figure 5

Meeting for consensus on cultural housing network project, and some activities already run by villagers



Note. This figure shows the meeting for consensus on cultural housing network project, and some activities already run by villagers. From *The final report of model of local vernacular home improvement for cultural Stay: A case study of Karen tribe village in Pongluek-Bangkloy, Kaengkrachan forest complex, Thailand* (p. 30), by T. Tachakitkachorn and J. Suwannakorn. Copyright 2020 by Terdsak Tachakitkachorn.

Figure 6

Research with trial and error of an architectural part workshop, since 2013



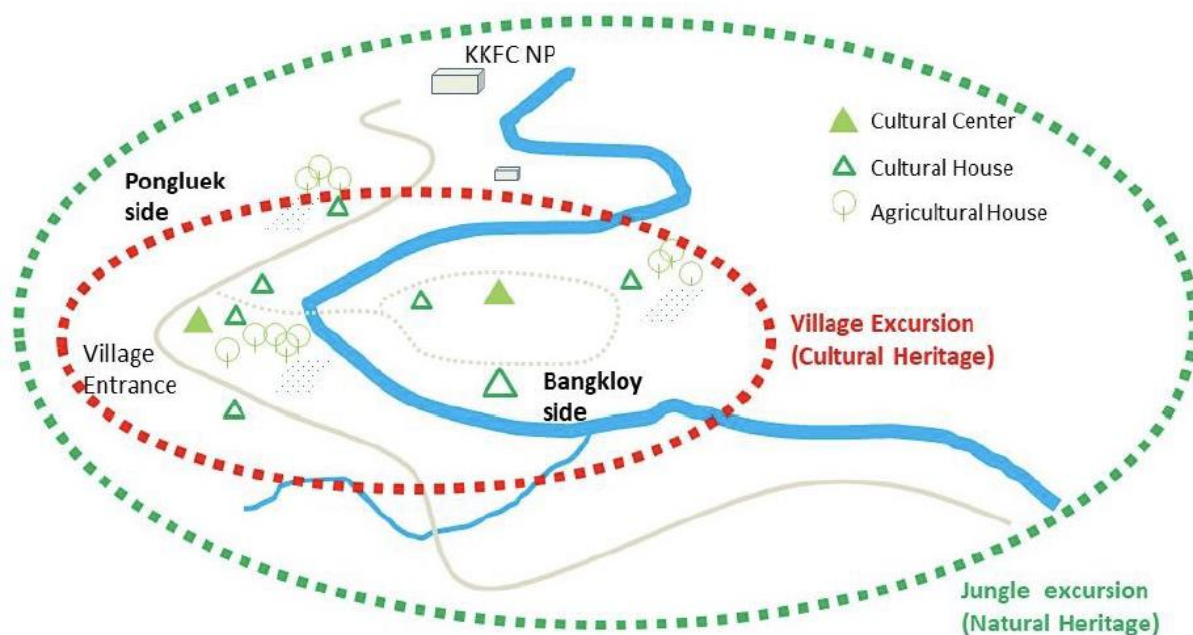
Figure 7

Some images of a supportive space for village engagement activities from a cultural housing network project.



Figure 8

The Map of Pong-luek and Bang Kloy Village



Note. This figure shows the Map of Pong-luek and Bang Kloy Village. From “Prototype of long-life treatment bamboo for adaptive vernacular Karen tribe house in Pongluek-Bangkloy Kaengkrachan Petchaburi,” by T. Tachakitkachorn, 2018, *ASA Journal* issue 02, p. 5. Copyright 2018 by Terdsak Tachakitkachorn.

Figure 9

The Cultural Map of Pong-luek and Bang Kloy Village



Note. The Cultural Map of Pong-luek and Bang Kloy Village has been prepared to support tourism route activities within the community. From “Prototype of long-life treatment bamboo for adaptive vernacular Karen tribe house in Pongluek-Bangkloy Kaengkrachan Petchaburi,” by T. Tachakitkachorn, 2018, *ASA Journal issue 02*, p. 5. Copyright 2018 by Terdsak Tachakitkachorn.

BAMBOO IN THE CONSTRUCTION OF KAREN HOUSES

Bamboo is the main construction material found in the community areas of Pong Luek - Bang Kloy. There are 3 types of bamboo: Sang-Nuan bamboo (*Dendrocalamus membranaceus* Munro), Nam Bamboo (*Bambusa Bambos*), and Srisuk Bamboo (*Bambusa blumeana* Schult). The length of bamboo is usually 7-8 metres. This village uses a bamboo's cutting system that chooses to cut some bamboo from a clump and leaves some parts to grow for faster clump rotation. In the past, villagers were able to cut the bamboo in the forest areas with lots of bamboo. Nowadays, under the regulations of Kaeng Krachan Department of National Parks, the villagers can only cut bamboo from the community forest and have to buy bamboo from other villagers. After the bamboo is cut from the forest, it is transported by a tow truck, tailgated to the construction site (Figure 10). This limitation of

bamboo cutting has increased the development's costs and resulted in transportation delays. In this project, villagers also help to preserve bamboo by experimenting with wood vinegar through a process of soaking the bamboo before construction or spraying the bamboo after construction is completed. The substance is made by mixing the wood vinegar with clean water in a ratio of 1: 300 (Udnoonsombat, 2018, pp. 50-52) (Figure 11). One type of traditional Karen house, which has an area of 82 sq.m., needs to have a lot of bamboo in each part of the construction such as column, roof structure, floor structure, wall structure, and others built-in parts of the house such as stairs, doors, and shelves. In total, there is a need for around 350-400 units of bamboo for one house (Udnoonsombat, 2018, pp. 93-97). In this research, the introduction of the modern construction process for bamboo usage enhancement could be described in the following (Figure 12, 13) (Tachakitkachorn & Suwannakorn, 2020, pp. 27, 44, 135).

(1) Instead of barefooting, which may cause faster damage to the surface of the column at the

soil surface level, cement was cast into the lower part of the column. (2) Bamboo stakes, in various scales from chopstick-size to bolt-size, could replace original rattan-jointing. For this new construction element, an electric drill was introduced for hole-drilling through the main structural members. (3) Bamboo tile-paneling, in

combination with a plastic sheet, could replace original palm-roofing. This could retain the scenic view of the village's natural roof surfaces of bamboo panels. These newly introduced construction methods could be applied to the original houses, due to the familiar handling of bamboo by villagers.

Figure 10

The process of cutting and transporting bamboo in this site



Note. This figure shows the process of cutting and transporting bamboo in this site. From Krabūankān kōsāng rūan pakākē 'ayō bēp dangdēm kōranī surksā khōngkān bān watthanatham bān pōng lurk - bāng klōi 'amphōe kāeng kračhān čhangwat Phetchaburī [Construction method of traditional Karen house. A case study of cultural house Bannpongluet-Bangkloy village, Kaeng Krachan district, Phetchaburi province], pp. 123, 129, by P. Udnoonsombat, 2018, Master's thesis, Chulalongkorn University, <http://cuir.car.chula.ac.th/handle/123456789/63258>. Copyright 2018 by Chulalongkorn University.

Figure 11

The bamboo preservation process



Note. The bamboo preservation process From *The final report of model of local vernacular home improvement for cultural Stay: A case study of Karen tribe village in Pongluet-Bangkloy, Kaengkrachan forest complex, Thailand* (p. 26), by T. Tachakitkachorn and J. Suwannakorn. Copyright 2020 by Terdsak Tachakitkachorn.

Figure 12

The newly introduced construction method for Karen houses



Note. This figure shows the newly introduced construction method for Karen houses. From *The final report of model of local vernacular home improvement for cultural Stay: A case study of Karen tribe village in Pongluek-Bangkloy, Kaengkrachan forest complex, Thailand* (pp. 27, 44, 145), by T. Tachakitkachorn and J. Suwannakorn. Copyright 2020 by Terdsak Tachakitkachorn.

Figure 13

The newly introduced construction method for Karen houses



Note. This figure shows the newly introduced construction method for Karen houses. From *The final report of model of local vernacular home improvement for cultural Stay: A case study of Karen tribe village in Pongluek-Bangkloy, Kaengkrachan forest complex, Thailand* (pp. 27, 44, 145), by T. Tachakitkachorn and J. Suwannakorn. Copyright 2020 by Terdsak Tachakitkachorn.

PRESENT SITUATION

Village engagement, with the collaboration of Chulalongkorn University, Pidthong Foundation, and Department of National Parks, has proceeded after a 4-year trial and error. It was planned to counter disturbance on any unexpected factors, but not from an emerging incident by a partner in the collaboration.

Department of National Parks represents the central government as the total Kaeng Krachan Forest Complex management. It has an obligation to support any projects by other organizations from the central government even though other projects may affect collaborative planning. Sudden approval of the social engagement budget in May 2018, under the supervision of the Community Development Department (CDD), without a professional village engagement plan greatly impacted Kaeng

Krachan Forest Complex. Community Development Department, with full permission from Department of National Parks, only took advisory information from a local tourism enterprise before announcing its special Pong-luek-and-Bangkloy-village 3-month tourism promotion without any outreach to the Chulalongkorn University team and Pidthong Foundation, or consideration from Cultural Housing Network. The “Nawatwithi” was the project from Community Development Department which was initiated by the office of the prime minister, as a tool to stimulate the economy with 3,273 local municipalities for tourism. It was launched simultaneously at the last 2019 fiscal year, for an unclear Key Performance Indicator (KPI) expectation with a few months for implementation. Thus, there was not enough time for proper planning, and without considering any collaboration with on-site operating teams, the final result was severely criticized. This includes the establishment of information panels without ecological concerns, unprofessional design for village landmark construction, and a rushed training program of villagers for tourism services. Moreover, Department of National Parks suddenly planned to shift tourist destinations from a nearby national park spot to Pong-luek and Bangkloy village, which has more than 10 times lesser carrying capacity. This Community Development Department rapid project aimed for political support of the present military government before the general election. It caused other kinds of conflicts between the Karen tribe villagers and the Cultural Housing Network team members themselves. Cultural Housing Network and “Nawatwithi” are moving on a parallel route for “seem-to-be-the-same” village engagement. While the first one is aiming for sustainable engagement with long-term test and evaluation before a final decision, the second one is aiming for a quantitative outcome with short-term execution without any consensus by all the stakeholders. Without any hesitation, the Chulalongkorn University team and Pidthong Foundation affirm their position to support and follow a sustainable way, even though this may temporarily impact the relationship with Department of National Parks.

CONCLUSIONS

1. Under the strict regulation of Department of National Parks, all stakeholders such as the Department of National Parks, the academic sector, and non-profit organization should work together to ensure engagement of the bamboo usage in the village, thus relieving constraints on housing construction using natural materials in order to maintain the cultural landscape of the Karen village. Promoting bamboo planting on proper land owned by villagers, under the supervision of the foundation, could solve material supply shortages for housing construction. Meanwhile, the reintroduction of construction know-how, under the supervision of the academic sector and the senior carpenters of the village, could provide for an adaptation of the new methodology into traditional skills and an opportunity to preserve, maintain, and build more after the end of this project with their own know-how. For both solutions, without a doubt, the Department of National Parks could support village activities.

2. Holistic planning, based on considering the mechanism of village contextual morphology in both tangible and intangible factors, requires a large effort but it is the key success factor for sustainable engagement. Finally, all factors have to complete the cycle of engagement. An ecosystem of sustainable engagement could be interrupted at any stage, and any counter measurement would not function without any movement or decision by villagers themselves. Under any circumstances, within their intertwining position between central government and villagers; academic and NGO sectors should retain their intention to follow up on a proper plan, with consensus by villagers, for sustainable engagement.

3. However, improvement and development of cultural villages in a nominated natural world heritage site, under the conditions of various relevant organizations with the local architectural knowledge of Karen people should be adopted in which the research team has studied and recorded (Unakul, 2019). This will correspond to the context of the area and local construction materials that can be substituted, such as bamboo and the skills of local technicians and workers. That will make this development system sustainable and the village can operate on its

own and rely on the work of the chief technician in the village to control and supervise in order to allow the overall picture of the village to grow in a systematic manner and continue to blend with nature and culture under the work of consultation from the Pidthong Foundation, Chulalongkorn University, and the Department of National Parks that carried out this project at the same time.

Similar to many indigenous settlements in the National Park of Thailand, Pong-luek and Bangkloy village is not facing only inflexible law enforcement to protect natural resources, it is also inevitably under pressure to change the original cultural landscape from internal factors, such as the prohibition of using natural materials, and external factors, such as new construction methods by the usage of industrialized materials (Morton & Baird, 2019). To live sustainably in the national park, Karen people need all kinds of support from outsiders to understand their culture and social background and to bridge cooperation between the government sector and Karen people and overcome past conflicts. Pidthong Foundation could take this position with its working philosophy considering the piecemeal approach. Occasionally, Pidthong Foundation could originate the opportunity to seek collaboration from other alliances with specific expertise to solve a specific problem such as an institute with a multi-tasking team like Chulalongkorn University. However, it is also a very delicate issue concerning community revitalization. Any case of emerging intervention without a piecemeal approach, such as the Community Development Project would ruin the whole structure of sustainable development.

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