



The Sustainable Development of Banpupaksai Village, Petchaboon

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Abstract

Banphupaksai village is one of the best case studies for sustainable development prototype. The village has many interesting things to offer, namely, its long history, simple way of life, local culture, architecture, and handicraft products that seem like this village is developing in the proper way. Yet, there are still more improvements needed for the village infrastructure and facilities in order to make it a fully sustainable developed community. A finding includes recommendations for sustainable development strategies and developed village masterplan of this village. Moreover, SWOT Analysis of the village, which results ending up on working toward ecotourism. With this concept, gained from analyzing on-site data collection, the sustainable development strategies have highlighted natural resources and nature conservation, the village economics, and social issues to make the village develop into the right direction. In terms of implementation, the initial masterplan has been presented with a full explanation. This research concluded that recommendations for sustainable development strategies take into consideration the village economic, social, and environment issues so as to make the village develop in to the right direction. However, this study may be appropriate for this village only and still needs further studies in details before setting up the masterplan of the real project. By offering ecotourism services, villagers can spend money on developing their houses infrastructure, landscape, and environment as well as promoting their products and services. It threats and weak points can also be overcome.

Keywords: Sustainable, village development, sustainable case study, Banphipaksai, sufficiently economy, village masterplan

1. Introduction

Banphupaksai village is one of the villages in Thailand with a long history. In 1798, the first 5 families from Luangprabang, Laos migrated to this area and built this village because it is plentiful. Moreover, there it is named “Phupaksai” mean the hill covered with local wild vegetables called “Sai”. The village is located 12 kilometer north of Lomkao district, Petchaboon. From then on, Banphupaksai has developed its own traditions, culture and way of life. One of the things well known is “Ban-Sao-Yong-Hin” meaning a “house sit on a stone” (Figure 1). This kind of construction was developed to protect the house from earthquakes and insects (Narasuan Institute for Community Empowerment; NICE, 2018). Nowadays, most villagers earn their living on working in the agriculture field and doing some handicrafts such as weaving and basketry just like what their ancestors did in the old days.



Figure 1 Ban- sao- yong-hin



In 2000, the village fund had been established to help develop people's living quality and environment, following sustainable community development theory. Thus this theory is to be adopted as the main development strategy for this village. The three keys of this theory were published by the Kena Institute Asia (2018) on the website are:

1. Focus on community development that people can rely on themselves.
2. Work in response to the environment that is a unique of each community.
3. Apply successful /effective development methods to solve major problems of the community, especially the ones related to economic development education and health.

From this theory, Banpupaksai village has launched many projects that make villagers support themselves such as organic farming, local weavers grouping and home-grown vegetables planting, etc. The development projects not only benefit villagers but also help transfer knowledge and the way of life to the younger generations of the village. In addition, the young will have a better sustainable quality of life.

Although this village seems to have been developed into the right direction, the village environment needs to be focused on in order to provide spaces and areas to support activities and the way of life on economics, education and health provided for villagers.

2. Objectives

1. To investigate sustainable strategy for the village by studying village existing facility, infrastructure and villagers requirements
2. To develop village masterplan by followings the suggestions of sustainable strategy in the first objective

3. Materials and Methods

1. Data collection: existing land used, infrastructure and facility of the village will be surveyed and 20 villagers will be interviewed to find current activities, identify the characteristics of the local building and local materials of the village
2. Analysis: the data collected in 1 will be analyzed, using SWOT analysis as a tool to illustrate the developing areas of the village needed to be considered.
3. Synthesis: after data analysis, recommendations for sustainable development strategies to be used for this village will be synthesized by following policy of Community Development Department, Ministry of Interior and presented on initial village masterplan to suit this particular village.
4. Conclusion: the sustainable development strategies will be concluded to help reach the goal of sustainable development.

4. Results and Discussion

4.1 Existing land use survey and people activities

In Banphupaksai, there is Nam Phung canal running along the village. Therefore, plants can grow quite well here. Since there is only one access to the village from the highway number 203, which is a six meter wide concrete road, this village is rather isolated and yet electricity and water supply are provided by the government. In this village, there are 116 houses, built mostly with modern industry materials. There are only 7 houses built in traditional style. (Ban Sao Yong hin) There are only 2 places available to do public activities in this village, Banpot YodFah Wanaram temples and Phu Pak Sai School. Besides, the scenery and landscape of the village look like there is a lack of good maintenance (Figure3).



Figure 2 Access of Banphupaksai village and village boundary



Figure 3 Existing buildings and village atmosphere

In terms of social conditions of this village, the way of life of people in this village is quite simple and harmonious with the nature. Most of them work in farming such as glow rice, corn and tobacco etc. Moreover, vegetables were planted in their house area to feed themselves and exchange with neighbors. Furthermore, one of the most interesting part-time jobs of the people in this village is traditional weaving. The Hand-woven fabric of this village is one of the OTOP products that can be used to earn passive income. However, there is not a proper shop of handmade fabric in this village (Figure 4). Moreover, from interviewing, most of the participants said that they want to make their products better and sell them widespread but it is quite difficult in terms of marketing and advertising.



Figure 4 the way of life of Banphupaksai village

4.2 SWOT Analysis



From the data collected on site, SWOT Analysis was applied to illustrate the village strengths, weaknesses, opportunities and threats.

Table 1 SWOT analysis of Banphupaksai village

Strengths	Weakness
<ul style="list-style-type: none"> - having long and fascinating history. - having own culture and traditions. - Having a unique style of the house - having simple way of life and living in harmony with nature and supporting one another. 	<ul style="list-style-type: none"> - Degradation of the scenery and environment. - The village spaces have not be been used effectively. - having no health center - lacking waste management
Opportunities	Threats
<ul style="list-style-type: none"> - people living outside may get interested in the village history and way of life. - having resources that can be developed to be tourist attractions. - being able to make more income from selling products and giving services to tourists. 	<ul style="list-style-type: none"> - lacking public relations and advertising. - having no supports, especially from the government, regarding renovation of places or providing places to do activities in the village.

From Table 1, most of weaknesses and treats are the problem about the environment and economy of the village. However, this village has opportunities to gain more money for the village and use it to develop their village such as development of the village environment, some facilities make the strengths of the village become a valuable heritage for younger generations and also people outside of the village who are interested. From this point, one of the possible directions of this village in terms of sustainable development is ecotourism because this can be gain more income for the village whereas the village keeps their culture, knowledge and tradition and use it as a magnet for village visitor.

4.3 Recommendations for sustainable development of Banphupaksai village

From the previous data analysis, ecotourism has become one of the best solutions that can be solved for village weaknesses and treads. On the other hand, the sustainable point of view also needs to focus in order to reach goals of sustainable development. Normally, sustainability means the balancing of economy, social and environment (Lydgate and Amos, 2018) as can be seen in Figure 5.

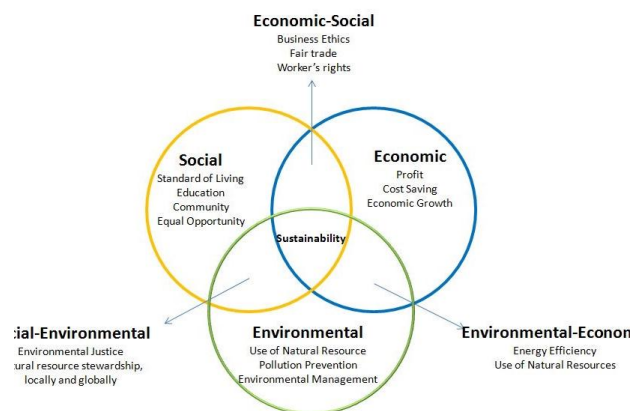


Figure 5 Three spheres of sustainability (Lydgate and Amos, 2018)

In Thailand, the strategic development plan published by Community Development Department, Ministry of Interior states that the three goals of sustainable community development are:



1. Improvement of quality of life of people in the community by gaining economic growth that does not destroy community natural resources and is self- supported.
2. Producing and consuming products that are environmental friendly.
3. Having people participate in the development plan to help one another in the community, following the philosophy of sufficiency economy (Community Development Department, 2017).

In comparison, the first goal of Thai policy mentions the economy is one of the sustainable factors that Lydgate and Amos show in figure 5. Moreover, this goal also includes environmental factors that mean the first goal of this policy is the intersection between the economy and the environment as can be seen in figure 5. The second goal, mentions about the environment intersects with society and becomes a natural resource consuming issue. The last goal for sustainable community development is that society follows the philosophy of sufficiency economy that means it already covers all of the sustainable factors in Figure 5. From this reason, the goals of sustainable community development by the Community Development Department of Thailand also uses the same sustainable factors as Lydgate and Amos in order to develop communities in Thailand.

From this sustainable factors, Banhupaksai village already follows the philosophy of sufficiency economy that means they are quite strong in terms of society and the way of life that preserves the environment. However, economic issues of this village need to be improved in terms of balancing sustainable factors. Thus, the development strategies applied for this village together with suggested development direction and sustainable goals will be highlighted as follows:

1. Conservation issues: in order to preserve attractions for tourists, and preserve local wisdoms, for younger generations:
 - Encourage building local traditional style houses
 - Preserve the local way of life and traditions
2. Economic issues: services giving for tourists are one of the best ways to increase villagers' income. Besides having better economic condition, villagers can support themselves and also:
 - Ecotourism can be promoted
 - Proper shops for hand woven fabric can be built.
 - The village agricultural products centers can be built
 - Tourist information center can be built
 - Some of the houses can be renovated and used as tourist accommodation
3. Quality of life issues: The improvement of infrastructure, public areas, village landscape, and education system, is the key to a better living quality of people in the village.
 - Improving walkways along the roads.
 - Building centers for people to exchange local wisdoms, knowledge, experiences.
 - Building first aid or healthcare centers
 - Improving the scenery of the village
4. Environment issues: in terms of nature and natural resources preservation management:
 - Promoting organic farming systems.
 - Establishing trash banks to manage waste and keep the village clean
 - Building water weirs to a age water supply, especially in the dry season
 - Using safe / harmless materials such as natural materials or environmental friendly materials



4.4 Applying to the village masterplan

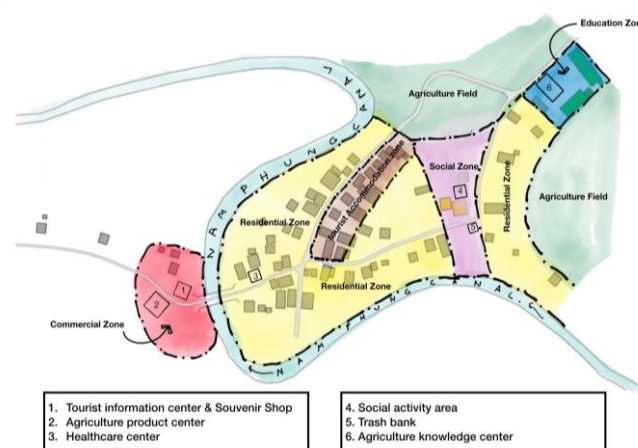


Figure 6 Recommended master plan for Banphupaksai development

The master plan (Figure 6) recommended for the development of this village and the sustainable development strategies use the same zoning. This is good for the villagers because they are familiar with the zoning. The first zone, which is in the front of the village, is going to be used as the commercial zone, which is the best area to build a tourist information center, visitor parking and agricultural products center. This is because it is the main access to the village. The kind of activities going on here are quite public, thus, the Nam Phung canal can be the natural buffer, keeping away busy activities and situations in the village.

On the other side of the canal, a healthcare center should be built to serve people in the residential areas. Besides, a healthcare center it also needs convenient transportation because if there is an emergency case, the patient needs to be sent to a more efficient place quickly. From this point of view, the location of a healthcare center should be close to the main road of the village, as the bridge to gain access to the highway easily.(figure6)

Considering tourists accommodation zone, it should be located in an attractive area. There is also a road crowded with houses and buildings as illustrated in figure 6. Among these buildings, there are also many traditional houses called "Ban Sao Yong Hin". Moreover, many houses in this zone can be expanded and developed for use as a tourist accommodation.

In addition, the Banpot YodFah Wanaram Temple is the place used for conducting the village activities. Thus, this area should be re-designed to be appropriate for doing such activities such as exchanging experiences and local wisdoms. (figure 6)

The last zone is the education zone which is located near Phupaksai School. The fiction of this area is to give agricultural knowledge. Therefore, an agriculture knowledge center should be built here. Local agricultural knowledge and way of life can be transferred from generation to generation or for youngsters studying at Phupaksai School.

Considering infrastructure, there is a need to improve the scenery and landscape of the village such as the sides of the roads and the canal. Not only the atmosphere of the village, but also its cleanliness that needs to be maintained. In addition, water management, concerning water supply, especially, in the dry season needs further research study.

These recommendations may help to develop the village to gain sustainable development and overcome its weaknesses and threats making it stronger.



5. Conclusion

In conclusion, Banphupaksai village is one of the richest villages, considering natural resources, culture, traditions and particular local knowledge. When the village has more money, it can improve the infrastructure, facilities, making the villagers have a better life quality. To achieve this, the village needs to prepare services for tourists. For example, setting up tourist information centers, tourist accommodations and souvenir shops, an agriculture products shops. Although people in this village have strong social relationships, they still need more space or area to village social activities, especially the place where they can exchange their ideas, knowledge, and experiences. The young generations should understand the local way of life and be aware of the environment protection. So, the village knowledge center may become one of the best ways to transfer the valuable information and knowledge to new generations. In terms of the environment, the sufficiency economy philosophy is the best solution in order to live with nature doing organic farming, having good waste and water management. Villagers need to be concerned about the natural resources. They should try to use organic materials and sustainable (durable.) materials to operate the community consumption.

From all of these recommended development strategies, the village will be helped to achieve the goals of sustainable development which is balancing economic, social, and environment. However, the initial master plan recommended in this research is just suitable for Banphupaksai village only. Other communities may have to make another consideration because of having different factors and conditions. Moreover, this research still needs further studies in details for each place before recommending the master plan for the real project

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