The Sustainability of Local Community under the Globalization: The Case of Kao Yi Sarn, Samutsongkram, Thailand

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Abstract

The purpose of this article is to explain the factors that enable Kao Yee Sarn, a small local community in Samutsongkram province, maintain its identity as a ‘Thai community’ despite the strong influences of global change. The study uses the concept of EBS for the investigation of the interactions among places, user groups, socio-behavioral-cultural phenomena and time. Literature reviews, direct observations and interview were conducted. It was found that the balance of the dynamic interaction among environment, social economic culture and residences’ behaviors is the key factor that enables Kao Yee Sarn to maintain its identity.

1. Introduction

The architecture of Thailand has been influenced by western architecture since the King Rama the fifth or around 150 years ago. During the past 40 years under The National Economic and Social Plans architectural designs have been under the western influence. Communities were developed in housing
estate forms following western styles that did not take into account the people’s behavioral characteristics or the geographic nature of Thailand. In 2007 the Center for Architectural Environment Innovation, Chulalongkorn University was established to investigate and create architectural innovation that can integrate and balance globalization and localization. The identification of the Thai traditional housing community characteristics has been one of the goals. From surveys, the Kao Yi Sarn Community in Samutsongkram Province, has been able to significantly sustain typical Thai characteristics and it was thus selected as a case study. ‘Thai lifestyles community’ in this study represents community characteristics that can be adequately integrated into globalization and localization. The question of this paper is: why can the Kao Yi Sarn Community maintain its local characteristics at a time when Thailand has largely been affected by globalization.

2. Literature Review

2.1. The EBS Explanatory Theory

The EBS explanatory theory is a coherent set of explanations answering the why behind observable phenomena. It is an induction from particular observables that serves to give meaning to and explain the pattern of observables seen in the world that the scheme or system of ideas or statements must be in principle testable (Platt, 1964; Popper, 1965). EBS theory is used to investigate reciprocal interactions among places, user groups, socio-behavioral-cultural phenomena and time. (Garry T Moore, 2006).

Fig. 1 Gary T Moore’s EBS Theory. Source: Garry T Moore, 2006
2.2. Characteristics of ‘Thai lifestyles community’

Thai lifestyle housing communities represent residential communities comprising of houses and community components. In the former times, such settlements were called “Ban” (villages) consisting of groups of “Ruen” (houses) (Srisakara 2009: 48).

“Ruen” (Thai traditional houses) were constructed according to the local climate and geographical conditions, Thai traditional houses thus illustrate Thai people’s local wisdom. Besides, they also transmitted ideologies and beliefs that eventually became traditions, which include location selection, the direction selection for house setting, and other features. All these have been passed down for generations (Thai Social and Culture: 3). “Ruen” characters have been influenced by “Buddhism and superstitious beliefs, tropical geography, agricultural societies, nature and environment”, resulting in the capacity to respond to efficient utilization that emphasizes local comfort and simplicity, thus providing shelter from rain, strong sunshine, flooding, savage animals, while accepting winds and ventilating air stuffiness, welcoming natural enjoyment, and making use of local construction materials. Thai houses are not standing alone, but closely linked with local livelihoods from the levels of families, village communities and even urban communities. (Srisakara 2009:40).

“Ban” (Thai traditional villages) are small with a small number of occupants living in primary relationships, holding to their own traditions and cultures. (Thai Social and Culture: 2). Their houses and villages represent their invented culture (Thai Society and Cultures: 6), agricultural society, living together as groups with clan relationships and equity, sharing labor and resources in a self-sufficient and sustainable economy, with spiritual dimensions and beliefs in sacred powers, sins and merit making, mechanisms that keep controlling their living conditions in traditional frameworks transmitted from their forefathers over not less than three generations, a “cultural society” based on face to face relationships and acquaintances, having cultures in a “Ban” with the same name for their temple, not standing alone, but living together with other villages as part of a “cultural ecosystem” in natural geography and environment in which inhabitants live and share relations in terms of livelihoods recognized as “geo-cultures” (Srisakara 2010:11).

2.3. Thai community economy: Self-sufficiency Economy

The self-sufficiency economy has always been a feature of Thai community livelihoods with the production ideologies entirely different from those of the capitalist system (Aphichai 2007:11). Thai concepts and practices and village cultures have been observed with a holistic perspective highlighting inter-relationships amongst multi-faceted knowledge, such as technical knowledge, spiritual knowledge and ethics to help keep balance among people, people and their physical environment, and people and supernatural beings. All this knowledge has kept shaping and integrating production ideologies, procedures and relationships with the systems of human society and all things surrounding people into one body called “holistic manner”. In maintaining their livelihoods, men have to rely on the ecosystem, a lifestyle that is based on non-persecution or non-destruction of the various systems that nurture human lives (Aphichai 2007: 129).

Such is the community economy, taking into consideration its particular fundamentals and those of the community society. They are cultures specifically related to the economy linked with families, communities and their environment, combining and putting together lives, minds, society and environment in a balanced manner, thus resulting in the strengthened conditions and immunity for communities, families and society, making sure that the communities and the country can be safe from the fluctuating conditions or the instability of the macro-economic structures which are linked with the
world capitalist economy, ensuring that the community members can securely live with dignity and liberty (Aphichai 2007: 142).

3. Methodology

The study was conducted through research of documents, textbooks, and books related to Thai lifestyles in terms of Thai society culture, self-sufficiency economy, village and urban geo-cultures and Thai architecture and also research into documents related to the Kao Yi Sarn Community, field surveys of the community and the housing physical environment, interviews with questionnaires applied with resident respondents, and completing three theses in housing development sciences under this project: Clan Relationships, House Characteristics and Home Clustering (Laddawal 2010), House Repairs (Mukdaporn 2010) and Community Opportunities and Limitations in Housing Rehabilitation (Pongpitak 2010) in order to serve as a basis for more clearly analyzing and describing the identities and the sustainability of the Thai lifestyle housing community.

4. Results and Discussion

4.1. Places and environment of Kao Yi Sarn

4.1.1. Location

Kao Yi Sarn is an ancient community than 800 years old, located four kilometers from the Gulf of Thailand. In its periphery, there is a small-sized mountain singly standing (Valailak 2002:25). Kao Yi Sarn Community has a population of 300 families. It is surrounded by dug canals which used to be the main communication routes linking with the Mae Klong River, nearby Provinces, Bangkok and also foreign countries. Water in these canals is brackish and cannot be consumed.

Archaeological studies indicate that Kao Yi Sarn Village has been inhabited from the Ayutthaya Era or during the 19 – 20th Buddhist Centuries. It was assumed that “Yi Sarn” came from “Bar-zar”, a Persian word that means “Market”. That is, in the past Yi Sarn must have been a trade center situated on the merchandise transportation route between the capital, Petchburi, and foreign countries, a main factor that turned it into an important community, in spite of lack of potable water.

Fig. 2. Land use in Kao Yi Sarn Community. Source: Pongpitak Pattani, 2010
4.1.2. Kao Yi Sarn Community Compositions

The Kao Yi Sarn Community covers some 36.8 Ha, subdivided into private-used plots for housings, shops and charcoal kilns, accounting for 40% of the whole area, and, another 60%, public-used plots as the community temple, a multi-purpose ground, a school, a cemetery etc. The periphery of Kao Yi Sarn Village is mangrove forests which have been turned into mangrove plantations to supply raw material for charcoal production.

The main composition of Kao Yi Sarn Community includes:

- **Yi Sarn Mountain and Kao Yi Sarn Temple:** Yi Sarn Mountain, located in the middle of the community as the most significant component of this community. It was believed that this temple was built in the end of the Ayutthaya Era or in B.E. 2246 (Valailak 2002: 38), or around 300 years ago. The temple was built successively and with great splendor. Because of that, it was thus assumed that Kao Yi Sarn Temple and Community must have been very important in the distant past.

- **Grandpa Sriracha Shrine:** Grandpa Sriracha is regarded as the first community ancestor to whom a devotional shrine was erected in front of the community. He is revered as very sacred and powerful. Kao Yi Sarn villagers worship him highly as the village protector. (Valailak 2002: 108).

- **Kao Yi Sarn Village Museum, Multi-purpose Ground and the Community Center:** Situated at the front of the community, these structures include a Thai style Buddhist prayer building, built in 1996 with collaboration of Kao Yi Sarn villagers. The multi-purpose ground is used as the community center. It comprises a multi-purpose ground, an administrative organization office and a health center, food shops and groceries. These are places where community residents regularly come to meet and talk with one another and where the weekly fresh market plaza is regularly held.

- **Charcoal Kilns:** These are large, one-storey ground-based structures, made of wood, bamboo, and thatch. Inside each workshop there are large charcoal kilns, built with superb workmanship and thus regarded as a delicate architectural structure.

- **Housing Quarters and Settlements:** Housing quarters in Kao Yi Sarn Community are subdivided into 2 groups. The first, the old community, is found in the first settlement area of the community located behind the temple, in the western and the northern areas, next to Yi Sarn Canal. Here, groups of typical Thai traditional houses are densely built. The second, the new community, is located in front of Kao Yi Sarn Temple.

![Fig. 3. Housing quarters in Kao Yi Sarn Community. Source: Pongpitak Pattani, 2010](image-url)
• **House Categories:** Based on the survey results of 140 sampled houses in Kao Yi Sarn Community in 2009, the physical characteristics of houses can be subdivided into 4 categories:
  
  o **Thai traditional houses** built with a high level of construction expertise and with floors raised on high poles. Their roofs have high gables and Paan-lom (a decorative part of the gable). For big and rich families, more houses are added around the open-air terrace. The Thai traditional houses are suitable for areas with regular floods and a tropical climate as they can well ventilate the hot air and protect from rain. In addition, trees, planted as part of the houses, can help keep the interior temperature cool and comfortable. At present, these Thai traditional houses have become less and less used because the new generation tends to work elsewhere. This has resulted in inadequate care for most of traditional houses which have gradually become dilapidated and decayed.

  o **Vernacular houses** are built with simple workmanship. They provide evidence of local wisdom, making use of simple construction materials that can easily and locally be found. In most cases they are wooden, bamboo, roofed with thatch, zinc sheets or tiles. Their sizes are small since most of their residents have limited resources. The charms of this kind of house are the residents’ capacity to use the most economical construction materials built with shared labor. At present, most are decaying and in worse condition than those of the Thai traditional type because their construction materials are less durable.

  o **Adapted houses** have been adapted from both the Thai traditional and the vernacular styles, using modern construction materials and technology. Most are two-storey houses with the ground floor in a reinforced concrete structure with brick walls, while their upper level is wooden or pre-fabricated sheet walls. The adapted houses became popular at a time when traditional construction materials like wood became scarce and expensive and pre-fabricated construction materials became cheaper. This was also coupled with the social values and beliefs that modern construction materials could make houses more modernized and demonstrate their owners’ higher social status.

  o **Modern houses** are those wholly constructed with modern construction materials and which are similar to those in Bangkok’s developed housing projects. They are one-storey and two-storey structures with reinforced concrete. Their residents are better-off households but whose houses are not naturally airy and well-ventilated and, thus, need to have air-conditioners if affordable. In general, these houses are mostly in good condition as they are newly built, but they might not be harmonious with the other houses in the community.

4.1.3. **Housing Conditions**

In 82% of the surveyed houses the residents were the owners. Based on interviews of residents in 140 houses, it was found that 34% reported that their house had an age ranging from 30-50 years, 30% had new houses with an age range of 10-20 years, and 30% had houses with ages of more than 50 years. Among the latter, 20 Thai traditional houses (20%) were more than 100 years old. In terms of their physical condition, 44% were good, 31% medium and 19% dilapidated. Most of the decaying houses were of the vernacular and Thai traditional types, respectively (Pongpitak 2010:77).

4.2. **Community Residents’ Socio-economic-cultural Characteristics**

Many of the houses have 3-5 residents while 37% have more than 5 residents. This suggests that quite a few households are extended families. Notably, 13% have only one resident, reflecting a situation in which part of the labor force that works elsewhere, leaving their elderly relatives alone at home.
4.2.1. *Incomes, Savings and Debts*

From the surveys of 46 sample residents in the community, it was found that most of the households did not have regular incomes. When estimating their monthly household income, 39% had an income ranging from 5,000 – 10,000 baht, 24% had an income range of 10,000 – 20,000 baht, and 13% had monthly income less than 5,000 baht (Pongpitak 2010: 113). Of this number, 61% did not have any debt and had some savings; 22% had debt. The majority of those who had debt lived in vernacular houses (Pongpitak 2010: 114). Those who did not have any debt and had savings lived in the modern houses.

4.2.2. *Clan Relationships and houses set-ups*

From the surveys, it was found that, at present there are 13 clans in Kao Yi Sarn Community and each clan has 44-152 members. The old clans have lived in the community for five generations. (Laddawal 2010: 72). Based on the results of the study of four clans, it was found that the clans with a high degree of clan relationships had houses grouped in clusters and which were still in better condition than those with a low degree of clan relationships. (Laddawal 2010: 173).

![House groups with clan associations. Source: Laddawal Trakulram, 2010](image-url)
4.2.3. Charcoal Production

Charcoal production, the most important occupation for the Kao Yi Sarn Community, consists of two main processes, (1) Cultivating mangrove wood as the raw material and (2) Burning it into charcoal. This occupation was started 70 years ago or in 1937. During the first 30 years of operations the charcoal business, with links to Bangkok, was quite brisk. Charcoal kiln owners had lots of land plots with mangrove forests. At that time, the Kao Yi Sarn Community had 60 kilns. In 2002 the number of kilns was reduced to 20 and the charcoal production frequency decreased by one-third (Valailak 2002: 134).

It was also found that, at present, ten clans still had land to farm mangrove forests for charcoal production. Of this number, seven still had charcoal kilns, employing 74 families as charcoal kiln workers, farming mangrove forests, and applying resource-sharing and group-support traditions with their workers during the past 30 years (Valailak 2002:138). Charcoal production is seen as closely linked with their clan systems, their incomes and debt, housing conditions, as well as their traditions, culture and natural resources.

4.2.4. Cultural Assets

Apart from houses which are cultural assets with high value as previously mentioned, the Kao Yi Sarn Community still has other forms of cultural assets which include the following:

- **Artifacts**: Kao Yi Sarn Temple is beautifully built and highly valuable in terms of architectural arts as can be seen displayed in the main temple, ubosot, and the monks’ sermon hall. There are beautiful paintings and drawings on the back of the ubosot’s window panels, and sculptures on the triangular front under the temple roof and on the temple door arch. Apart from these, there are 410 ancient documents from the Ayutthaya Era in the museum (Valailak 2002: 38-44, 183, 191, 201, 212).

- **Local Wisdom**: The first and the most important example is ‘Lom Nam’ to carry fresh water from a canal and the Petchburi River, 50 kilometers away, for home consumption. The second is how they prepare and preserve various kinds of food and their knowledge about local medicinal herbs, 100 in number, easily found in the neighborhood. (Valailak 2002: 160).

- **Belief Systems and Rituals**: Harmonious Co-existence Principle: The Kao Yi Sarn Community has been integrating various beliefs such as Buddhism, Brahmanism, animism, beliefs in life after death and supernatural powers in the environment, such as soil, sky, rivers, mountains and trees, with a main belief in Grandpa Sriracha for whom there are special worshipping procedures organized every year (Valailak 2002: 106). These beliefs are their life-guiding principles and a mechanism that explains their geographic conditions and brotherhood relationships under the same ancestors and, most importantly, as tools for passing on social experience, shaping the people’s conduct patterns, and eliminating community conflicts or serving as the co-existence harmonizing principle (Valailak 2002:121).

5. Conclusion

5.1. Kao Yi Sarn Local Community under the Globalization

The globalization influence on the Yi Sarn community since the very first stages of its settlement turned it into a canal-based trade center for Siam’s capital as well as the world community. Later, when land and rail transport systems arrived, its trade center position diminished. In 1937 the people started to produce and send charcoal to Bangkok and abroad once again. In 1987, recognizing the global prawn field business, some local people sold a large portion of their mangrove forests and some turned their mangrove forests into prawn ponds. However, this economic venture was not successful. In recent decades, eco-cultural tourism has started to expand along with the completion of a modern provincial
road system in nearby areas, and this has brought other forms of aggressive, globalization influences into the area which challenges the sustainability of the traditional Thai lifestyle.

“This globalization is changing new generations of people into individuals who live without human mentality of the past, without social contacts, without relationships with clans, environment and supernatural beings, and, most importantly, without any conviction that they have to live with one another as social groups. All their geo-cultures, bio-cultures and cultural lives have been destroyed.” (Srisakara 2009:16)

5.2. Factors that enable Kao Yi Sarn Community to maintain its Identities despite global change influences

From the analyses, the following factors have enabled the Kao Yi Sarn Community to sustain its local identity up to the present:

- **Physical & Environment Identities**: This community’s identities are its houses, mountain temple other community components with their specific characteristics and high values, consistent with its own geo-cultural aspects as a community next to waterways situated amidst mangrove forests harmoniously and harming nothing or no one else. Besides, its difficult accessibility also plays an important role in supporting its present identity.

- **Occupational & Economic Identities**: The occupation to produce and export mangrove charcoal overseas has provided the community with sufficient income. This occupation acts as a social linkage for the community, and consumes natural resources in a rotational manner, resulting in the smooth inter-relationships amongst people, and people and the nature. In this way, the community residents are well interwoven, with common lifestyles and culture, bound together with their beliefs in supernatural beings ensuring their capacity to consistently maintain the physical environment as one identity.

- **Social and Cultural Identities**: Kinship, historical and cultural assets are all precious and valuable. The people have practical beliefs in a variety of local-wisdom practices that are merged into one identical whole. The clan relationship, continuously vitalized with the same charcoal-related occupation, engenders common inter-dependent life-sharing criteria and holds the community together, always reinforced with the principles of self-sufficiency economy.

- **Holistic Approach**: The holistic perspective production procedures are well-suited to the characteristics of traditional Thai village community cultures (Aphichai 2007: 129). They are sustainable with the support from production ideologies and relationships among villagers and their surroundings. This can be referred to as a “cultural society” that has cultural roots in “Ban” as a bio-culture in the natural geography and environment called “geo-cultures” (Srisakara 2009: 11). All these are factors that have helped the community sustain its localization amidst the globalization in a rather balanced manner.

5.3. Kao Yi Sarn Community and Its Future

Some recommendations for Kao Yi Sarn’s future are:

- **Sustainability through Charcoal-based Cultural Economy**: There is a high possibility that the Kao Yi Sarn Community can apply the cultural economy to sustain their livelihood. This is because the charcoal production, their main livelihood, binds the community’s socio-economic life with the outside world, as well as with its environment. To-date, the mangrove charcoals from Kao Yi Sarn Community have been well-accepted by the overseas market. The opportunity to produce and export
this charcoal, even with high value in the globalized world, is always possible with the store of knowledge existing in the community.

- **Sustainability with the Middle-Way Lifestyles and Economy at every level**: Based on the concept that integrates (1) **Sufficiency**: In adequate and reasonable consumption and production, (2) **Balance**: Holistic development ensures the balanced globalization-localization relationships. The balance between the economic sector and the human and social sector is regarded as securing a balanced production structure and resource consumption, (3) **Sustainability**: Continuously self-sufficient in every aspect, especially in terms of natural resources and environment, and (4) **People’s Quality**: People must possess various aspects of quality – spiritual, ethical, honesty, kindness, patience, intelligence. (Aphichai 2007:58). The people in Kao Yi Sarn Community do have the first three characteristics, but not the fourth, especially the young generation who leave for higher education or work. They should instead return, continue their residence and participation in the community rehabilitation. If not, the Kao Yi Sarn Community will lose its Thai traditional lifestyle.

- **The community environment sustainability**: Must stem from the community socio-economic-cultural forces which were summarized in the Community Network’s Force Synergy Fair to Sustain Thai Lifestyle applying EBS Theory as follows:

![Diagram](image-url)

**Fig. 5 Linking Development Activities Towards Own Self-Development. Source**: applied from EBS theory and CODI: Community Network’s Force Synergy Fair – December 15-17, 2002
The Kao Yi Sarn Community should focus more on self-dependency development, rehabilitating its formerly abundant cultural capital, be it data, knowledge, cultural and environment understanding, and integrate this with local organizations in formulating community action plans, participating in determining policies and laws likely to impact, and bearing in mind the need to work in partnership with other communities in building common learning processes.

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