

Cultural Ethnoecology in Petchburi Basin

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Abstract

This research paper focuses on the interrelation of ecology, way of life of various ethnic groups, and dwellings of the people in Petchburi Basin especially on the lower part of the Petchburi River in the area of Tayang, Banlad, Muang and Banlaem Districts. With diversity of topography and natural resources especially the transformation of water from fresh water to brackish and to salt water in combination with diversity of ethnic groups besides the Siam Thai, it was found that generally the transformation of water and topography are the most important features for selecting settlement place of various ethnic groups in Petchburi. Every ethnic group still settles harmoniously with the Thai, both socially and physically. The differentiation of settlement selection on various contexts has created local wisdoms which were gradually transformed to be each ethnic group's identity. Very tight involvement between ecological system, topography, social condition of the community and the way of life creates community ecosystem which causes the creation of local wisdom.

Keywords : cultural ethnoecology, community ecosystem, local wisdom, identity, way of life

บทคัดย่อ

บทความวิจัยนี้เน้นให้เห็นความสัมพันธ์อันแนบแน่นของระบบนิเวศและวิถีชีวิตของกลุ่มชาติพันธุ์หลากหลายในพื้นที่ลุ่มน้ำเพชรบุรีตอนล่าง ในเขตของอำเภอยางาย อำเภอบ้านลาด อำเภอเมืองเพชรบุรี และอำเภอบ้านแหลม เพื่อศึกษาถึงความผสมผสานในความหลากหลายของภูมิลักษณะและทรัพยากรชีวภาพ โดยเฉพาะอย่างยิ่งความแปรเปลี่ยนของคุณสมบัติของน้ำในแม่น้ำเพชรบุรีที่มีทั้งน้ำจืด น้ำกร่อย และน้ำเค็ม และความหลากหลายของกลุ่มชาติพันธุ์ในลุ่มน้ำเพชรบุรี การศึกษานี้ได้พบว่า ความแปรเปลี่ยนของคุณสมบัติของน้ำในแม่น้ำเพชรบุรี และระบบนิเวศเป็นปัจจัยหลักในการเลือกที่ตั้งถิ่นฐานตามลักษณะเฉพาะของแต่ละกลุ่มชาติพันธุ์ในพื้นที่ลุ่มน้ำเพชรบุรี แต่ยังคงมีปฏิสัมพันธ์กับชุมชนไทยดั้งเดิมทั้งในเชิงกายภาพและสังคม การเลือกที่ตั้งถิ่นฐานของแต่ละกลุ่มชาติพันธุ์ในบริบทที่ต่างกันบนฐานของทรัพยากรธรรมชาติในระบบนิเวศก่อให้เกิดภูมิปัญญาของแต่ละกลุ่มซึ่งค่อยๆ แปรเปลี่ยนเป็นเอกลักษณ์เฉพาะกลุ่ม ความสัมพันธ์อันแนบแน่นของวิถีชีวิตของแต่ละชุมชนต่อระบบนิเวศได้ก่อให้เกิดระบบนิเวศชุมชนและภูมิปัญญาพื้นถิ่น

คำสำคัญ : นิเวศวิทยาวัฒนธรรม ระบบนิเวศชุมชน ภูมิปัญญาพื้นถิ่น เอกลักษณ์ วิถีชีวิต

Definition :

- Ethnic** - a member of minority ethnic group who retains its customs, language or social views
- Ecology** - a branch of science concerned with the relationships between organisms and their environment
- ethnoecology** - an anthropological view which emphasize their interest to the interrelation of man and environment
- cultural ecology** - the usage of culture as the mean for the adaptability of man and his environment
- cultural ethnoecology** - the insertion of cultural dimensions in between the involvement of man and his environment

This paper is a part of the Research Program “The Study for Conservation and Development of the Built Environment in Petchburi Basin” which contains five research projects in relation to built environment. Those are urban and rural community, urban architecture, vernacular architecture, vernacular sheds for agricultural needs and cultural landscape. This research stressed on the perspective of built environment on the lower terrain of Petchburi Basin around the area of Tayang, Banlad, Muang and Banlaem Districts, and potential for conservation and development emphasizing on the quality of living historic city and cultural landscape of Petchburi. By the way of research process, it was found that for seeking the degree of involvement between natural and built environment, we should clearly understand the interrelation of human's way of living, ecology and culture as a holistic study.

Cultural Ethnoecology

Ethnoecology is the anthropological view which emphasizes their interest on the interrelation of man and environment, (Yos Santasombat: 2004) and in between the involvement of man and environment, the built environment would gradually be inserted with local wisdom. Nevertheless, we can say that cultural dimension has been put in between the involvement of man and environment, and thus has established the importance of cultural ethnoecology.

Yos Santasombat (2004) mentioned about the dissertation of Harold Conklin (1954) titled “The Relation of the Nanunuo Culture of Plant World” that there were diversity of learning concept on ethnoecology with different titles, such as ethnoscience, ethnobotany, cultural ecology, and traditional ecological knowledge. Every title emphasized the involvement of man and his environment. Similarly, Anan Kanjanaphan (2000) said that community ecosystem was the combination of society or community and natural resources. Society or community has transformed natural resources to be human ways of living and created the balance condition between community or society and natural resource system. For instance, the farmers in the Central Basin of Nakornchaisri or Damneonsaduak had changed

flooding land to be the orchard mound surrounded with a canal system, or the life style of seaside fishery community which used to earn their dwellings with the seaside resources. The life style has been transferred to be their community's identity, such as the sliding board for the ask shell and worm shell collecting on the mud beach of Ban Bangkusai Community, Ban Laem District.

Srisak Vallipodom (2001) explained his cultural concept in "Thai Culture and Society Development" that the local people had adapted themselves to the diversity of local environment and created different cultures and life styles for various contexts. A local culture does not belong to an individual community but has a sense of combination and involvement between several communities within a family group system.

Also, Chattip Natrsupa (2001) suggested his learning concept for community economic which used the community culture as the mean for creating "cultural economic" which were differentiated by the context of culture and natural environment.

With very good impression to those valuable documents, many questions about community ecosystem and cultural ethnoecology were raised for the area of Petchburi Basin: The private water resource of Petchburi, the cultural and living historic city with very high quality of cultural landscape.

- What is the most important factor for selecting a place for settlement of various ethnic groups?
- Can various ethnic groups in Petchburi be harmonious to others and Thai people?
- How the natural resource in various contexts influenced the local wisdom of the ethnic groups?
- How can local wisdom be the mean of balancing between man and his environment?

The Petchburi River, approximately 190 km. long, crawls from district to district of Petchburi, passing diverse topography from high mountain with thick forest to a bracken and seaside land. Petchburi Basin comprises highly biological diversity and water with various conditions, from fresh water to brackish water and lastly transformed to salt water, while the Petchburi River runs through Banlaem District and goes to the Gulf of Thailand.

With biological diversity of natural resources, Petchburi also faced the ethnic diversity of people along Petchburi Basin. Those various ethnics selected place for settlement from the aspects of natural resources and their culture. Besides the Siam Thai, there are the Karen, Lao, Mon, Muslim and Chinese. The Lao ethnics can be classified to Lao Puan, Lao Song and Lao Vieng. The settlements of those ethnics have their own cluster but scattered between the Thai ethnics, so all of them face similar topographical and climatological conditions with the usage of similar natural resources. That is the reason why their cultures can be easily transformed from one to another; however, within these transformation, their special identities involving with their living and environment still strongly remain. According to the field survey around the area of the Lower Petchburi Basin in 2007, it is found that the Lao, Mon Muslim and Chinese ethnics still strongly retain their customs and social views. Only their languages are gradually fading away. In accordance with the definition of “ethnic”, this should be the answer why, besides the Karen ethnics in Upper Petchburi Basin, the Lao, Mon, Muslim and Chinese in Lower Petchburi Basin around Tayang, Banlad, Muang and Banlaem Districts can still clearly be identified as ethnic groups.

The Physical Identity of The Petchburi River

The Petchburi River originates from Tanaosri Mountain, with the combination of many creeks and streams such as Bangkloy River, Bangyaimook Creek, Takelpoh Creek and Maepradone Creek joining together with Petchburi River before reaching Kangkrajan Dam in Kangkrajan District. The whole Petchburi River can be divided into three sections, the Upper Petchburi Basin in Kangkrajan District which ended after Kangkrajan Dam, the Central

SMUTHSONGKRAM P.

RACHABURI P.

KAO YOI D.

NONGYAPLON D.

BANLAEM D.

MUANGPETBURI D.

BANLAD D.

TAYANG D.

KANGKRAJAN DAM

R. PETCH BURI

KANGKRAJAN D.

R. PETCH BURI

CHA-UM D.

GULF OF THAILAND

R. PRANBURI

MYANMAR

PRAJUUPKIRIKAN P.

N.

1. UPPER PETCHBURI RIVER BASIN
2. MIDDLE PETCHBURI RIVER BASIN
3. LOWER PETCHBURI RIVER BASIN

Source : Department of Environmental Quality Promotion 2003 : 40

The physical conditions of natural environment along the Petchburi Basin contain 3 conditions : high mountain and sloping terrain on the west, flat terrain on the central basin, and seaside land on the east.

Next to Myanmar, bounded with the Tanaosri Mountain Range which is sloping from west to eastside, Tanaosri Mountain Range, with lots of peak over 1,000 metres high, lies upon several provinces of the western region especially Petchburi where the Petchburi River were originated. The west side which is located on Kangkrajana District, is filled with the virgin forest, the thick forest with various kinds of wild animals and very few inhabitants. Most of people

settling down in this area are the Karen who are quite familiar with living in the high and thick forest for such a long time. Their life style tightly bounds with forest, mountain, water and soil. They truly believe that man, animals, forest, mountains, water and soil are always tied to the same cycle of nature which they have always respected.

The Flat Terrain of Petchburi Basin

Along 190 km. of the Petchburi River, the flat terrain of Petchburi Basin spreads over Tayang District, Banlad District and Muang District which are the most important areas for Petchburi economy. With fertile land for agriculture and high density inhabitants, most of agricultural products of Petchburi come from these areas. The products include lemon, banana, mangosteen, coconut, palmyra palm fruit, mango and rose apple, the most famous fruit of Petchburi. A lot of rose apple orchards are located along both banks of the Petchburi River in Tayang, Banlad and Muang Districts where we can notify the special identity that expressed the local wisdom. Every rose apple orchard has to build a bamboo structure and ladder around every rose apple trees for taking care of the fruits and also for picking up high quality rose apples with the least rot. The special character of rose apple orchards will be gracefully displayed on the scene along both sides of the river banks.

Figure 2 The flat terrain on Petchburi Basin

Source : Department of Environmental Quality Promotion 2003:46

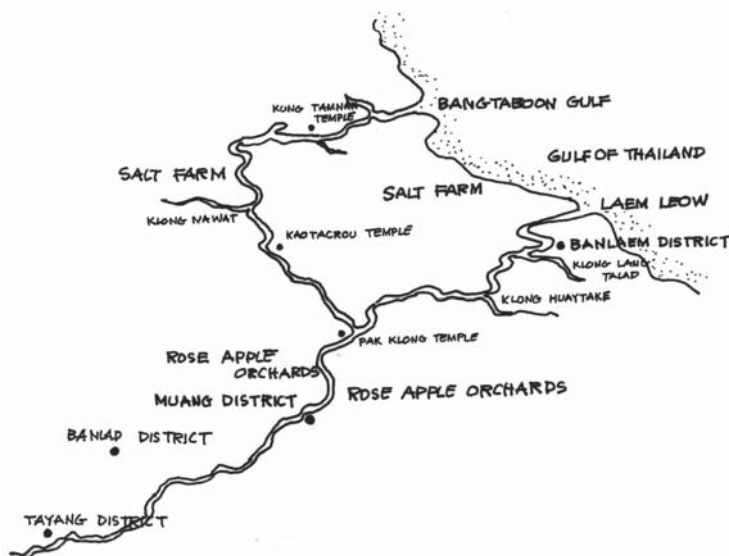




Figure 3 The atmosphere of the rose apple orchards

Besides the rose apple orchards, apart from the main river, in adjacent to the network of canals and natural streams which are situated next to the Petchburi River, a large area of lemon fields is proudly located. Lemon fields require less water than the rose apple orchards so most of them can step aside the main river. With special topographical base, lots of flat lands apart from main river and natural streams in Tayang District can be assisted by clusters of natural ponds for feeding the agricultural fields.



Figure 4 Lemon field at Tayang District

Figure 5 Banana field at Banlad District



Figure 6 Mixed field at Banlad District



Seaside Land on The East

The piling up of silt from the Petchburi River and the Mae-Klong River creates the growth of land from Bangtaboon Bay to Laempakbier, Banlaem District at the seaside land on the east of Petchburi Basin. The land, with occasional flooding and being fertilized with natural resources and mangrove forest, is the most important place for natural nursing of ark shells and worm shells which are very important for Petchburi economic and also for tourism promotion.

The physical condition of the seaside is the silt shore which is the biggest place for the ark shell and worm shell natural nursing. In addition with local wisdom, the sliding board on mud shore for collecting ark shells and worm shells of the local Chinese ethnic people seems to be the charming identity of the area. Plenty of shell collectors with their sliding boards at the shore is a very pleasant scene for the viewers. With their sliding techniques on board, they can easily pick up the shells, and, with their control speed experience, only the big shell can be picked up leaving the young ones to grow. This technique has been carried on from generations and, consequently, become their community's identity.



Figure 7 Ark shell and worm shell sliding board at Bangkusai, Banlaem District

Apart from the sea shore in Banlaem District where many saline canals pass through its flat terrain, salt farm is the most popular occupation of the local people. The areas of salt farm spread widely over Bangkunsai, Bangkaew, Laenpakhier and Bangtaboon Sub-district, Banlaem District. With very beautiful scene of salt farms as the foreground and mountain ranges as the background in combination with various kinds of sea birds, this area can easily be promoted for tourism.



Figure 8 The atmosphere of salt farm at Ban Laem



Figure 9 Earth mound for sea water control

Salt farm process is different from other agricultural process. Local people who work in salt farms are workers, not the owners. At the present, salt farm techniques and process have been changed with more machines and less workers used; so, salt farm workers have to seek for their part-time jobs such as raising ducks, hen, pigs and making dry fishes.

Figure 10 Salt barn and its details



Besides fishery, ark shell collecting and salt farms which directly use the natural sources that can be reimbursed by nature are the most popular occupations for the local Chinese ethnics. In the area of seaside land on the Lower Petchburi Basin, there are lots of fish and shrimp farms as well as fish sauce and shrimp paste factories. The shrimp paste from Bangtaboon and Bangkunsai, Banlaem District is the best shrimp paste in the western region.



Figure 11 Fishing village at Banlaem



Figure 12 Shrimp paste process

The Ethnic Groups and Settlement in Relation to The Petchburi River

Emphasizing on the diversity of topography in relation to the Petchburi River which contains high mountains with thick forest on the west, flat terrain along the river and seaside land on the east, and on the diversity of water from fresh to brackish water which transforms to salt water while running down to the Gulf of Thailand, we can notice that the topography and natural resources on the west side and east side are not familiar with Siam Thai people who have settled down in this area for such a long time. In reality, there are various ethnic groups settling down in Petchburi from generation to generation--some settled long time ago, some newly migrated for more fertile lands and some migrated for escaping from wars. Each ethnic group selected their settlement from their familiarity to the context, culture and way of living. For example, the Chinese ethnics chose their settlement on the sea side land with the occupation of fishery and ark shell collectors. The Karen who migrated from Myanmar preferred the high mountain and thick forest on the west which was quite similar to their ancestor's settlement in the past. The Thai with their experience in wet rice fields and fruit orchards always have their priority for settlement in the flat terrain along the water resource.

When only the Lower Petchburi Basin which comprises four districts, Tayang, Banlad, Muang and Banlaem, is considered, the majority of flat terrain on Tayang, Banlad and Muang Districts was occupied by the Siam Thai ethnics. Other ethnic groups scattered around the area (Ornsiri Panin 2004:17-18). Those ethnic groups are as follow :

The Karen

The Karen in Petchburi who migrated from Tawai City in Myanmar can be classified into two groups, Red Karen and White Karen (Rachanee Aimaruji 2003:32). Now the White Karen scatter around the high mountain on the west side while the Red Karen prefer the flat land near the water way. The White Karen and Red Karen have totally different ways of living. The Red Karen have lots of experience in fishery and crops, while the White Karen spend their lives with forest, water, mountain and soil with swidden cultivation farming process. They believe that man, animals, forest, water, mountain and soil are always in the same cycle of environment.

Lao

Lao Vieng and Lao Puan migrated to Thailand in the reign of King Rama the 3rd. Lao Vieng came from Vien Tiane but Lao Puan came from Chieng Kwang and Puan. With similarity in religions, believes and languages with Thai's, Lao Vieng and Lao Puan in Petehburi seem to degenerate to Thai ethnics.

Lao Song or Black Tai

Lao Song or Black Tai originally lived in Dien Bien Phu, the northwest of Vietnam, or Sipsongjutai in the ancient time, and migrated to Thailand in the reign of King Rama the 3rd. At first, Lao Song settled down in Tayang District but at the present they scatter to Muang and Kaoyoi Districts. Lao Song is the only Lao ethnics who can proudly conserve their identity of living and houses. Even if they face global changes, they can still conserve their cultural root. Lao Song preferred settling down on flat terrain with mountains as the background which is quite similar to the context in Dien Bien Phu. They also prefer the adjacent water way to the main river which gives them the same atmosphere as their original land.

Mon

Several times, several groups of Mon migrated to Thailand after the war. Mon are the expert in art and culture but not in fighting. After being defeated, they migrated to and settled down in Thailand, especially in the Western Region. Most of them stay in Ban Laem District, harmoniously live with Thai people, and have similar occupations as Thai's.

The Muslim

The Muslim warmly clustered their people around Muang District and Ban Laem District. Their community's identity is the graceful mosque of every Muslim community. The muslim community cluster themselves with the family group system which lies closely and harmoniously to Thai community. Very often we can find Muslim mosque being closely located to Thai temple. Similarly to Thai, the Muslim selected their settlement with prior decision of water for their agricultural occupation. So, the physical condition and village atmosphere appear similar to Thai's but their customs and social views are still strongly retained.

The Chinese

The Chinese ethnics in the past, or Chinese-Thai at the present, migrated from mainland China such a long time ago for the convenience of trading and communication since water was always the first priority decision for settlement. In Petchburi, besides local shop houses and markets on the river banks of every district, the Chinese also prefer involving in the fishery atmosphere at the seaside in the east part of Banlaem District. With experience of fishery and the usage of various kinds of boat, especially the seagoing junk, the Chinese inherited their seaside fishery techniques from generation to generation. Besides the direct products from natural resource, the Chinese ethnics in Banlaem also play a great role with fishery by-products such as fish sauce and shrimp paste from their home factories. With the Chinese ethnics' influence on fishery commercial and trade, now Ban Laem and Bangkunsai are well known with the best quality of fishery products in Petchburi.

Besides fishery and fishery by-products, the Chinese ethnics in Banlaem are also the expert in ark shell collecting with local sliding board on mud shore. This technique has been transformed to be their well-known community's identity.

From the explanation of the ethnic groups above, it is clear that every ethnic group in the Lower Petchburi Basin has the involvement of the way of living and environment with the insertion of their culture in between. The most interesting group is the Chinese ethnics in Banlaem and Bangkunsai, Banlaem District who still retain their customs, local wisdom and social views. Their community has transformed natural resources to be their way of living and created the balance condition between community and natural resource system which has been transferred to be their community's identity in assisting with their local wisdom.

Conclusion

From the study which focuses on the interrelations of the way of life, ecology, dwellings and believes of the Thai and various ethnic groups in the Lower Petchburi Basin, it was found that generally :

1. The natural resources of Petchburi Basin, including topographical and biological diversity and the transformation of water from fresh water to brackish water and salt water, are the most important factors for the selection of place for settlement of various ethnic groups in Petchburi.

2. Although clustering of the settlements of Lao, Mon Muslim or Chinese are still located harmoniously with Thai both physically and socially, the selection of settlements among topographical and biological diversity depends on their ways of living and cultures which are still strongly retained.

3. The differentiation of settlement selection on various contexts have created local wisdoms which were gradually transformed to be each ethnic group's identity, such as the sliding board on the mud shore for the ark shell and worm shell collecting of the Chinese ethnics at Ban Laem; or the bamboo ladders for the rose apple orchards of the local Thai along the Petchburi River banks. These local wisdoms are valuable for dwellings and can be further modified for new wisdoms in the future. (Ornsiri Panin 2004:83)

4. Very tight involvement between ecological system, topography, social condition of the community, and the way of living creates the community ecosystem (Anan Kanjanaphan 2000:39) which means that we should have a holistic study on every concerned issue. Sometimes, the community social system had changed the natural resource base to be the way of living or had created special identity for dwellings which consequently caused the creation of the local wisdom.

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