DYNAMIC CHANGES OF PEASANT COMMUNITIES THROUGH SOCIAL CAPITAL IN THE MAE KLONG RIVER PLAINS, THAILAND

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ABSTRACT

Social capital is important to the well-being of peasant communities because it is a factor that strengthens and enables these communities to adapt to potential changes that may happen any time. The present study was based on a qualitative research design aimed at examining the effects of social capital on well-being through the dynamic changes of peasant communities in the Mae Klong River Plains. The study areas were the communities of Baan Khao Rab and Baan Nern Nhong Bua in Taopoon Subdistrict, Photharam District, Ratchaburi Province within the context of changes during a 56-year period (1961 to 2017). The sample was 65 respondents, including community leaders, farmers, public sector officers and private sector officers, all of who were selected by purposive sampling. Data were collected through empirical research, interviews and focus groups. The study was conducted from November 2016 to December 2017. Data were analyzed through content analysis. The study of social capital affect well-being consisted of four aspects: 1) natural and physical capital; 2) knowledge capital; 3) human capital and 4) relationship capital. As changes are becoming more dynamic, the peasant communities should adapt themselves more seriously and rely more on their available resources

Key words: adaptation, lifestyle, well-being

INTRODUCTION

The Mae Klong River Plains are an important agricultural area in Thailand, particularly in Ratchaburi Province. Consideration of this area reveals that farmers have been affected by changes through continuous development that has resulted in diminishing well-being in terms of lifestyle. According to statistics in 2011, agricultural households ranked tenth among the highest debt values in Thailand. Furthermore, the total rice farming area has reduced from 336,403 rai or 538,244,800 m² in 2010 to a total area of 329,200 rai or 526,700,000m² in 2014 (Office of Agricultural Economics, 2015). The efforts of the department responsible for solving the problems of the peasant communities are evident in the 12th Agricultural Development Plan (2017–2021). The first strategic plan gave importance to strengthening the peasants and agricultural institutions by making the aforementioned self-reliant, secure and proud of engagement in an agricultural career based on the principles of the Sufficiency Economy (Office of the National Economic and Social Development Board, 2015). One of the recommendations for solving the problems regarding the well-being of the peasants was to use social capital, which has been specified as a key basic factor in building strong communities with the ability for adaptation as a means of survival from the past to the present. Robert (1993) stated that social capital enables society to live together must be based on mutual trust, shared support and social networks. Social capital is always present in the dimensions of community resources, humanity, intellect, cognitive or body of knowledge in community lifestyle management, culture and tradition that make

people trust, help and show consideration for one another (Worawut 2005). Similarly, Naphaphorn and Pitsamai (2005) proposed that social capital promoted community strength, particularly when accompanied by knowledge capital, human capital and natural capital. These are developments based on community potential for making communities strong and self-reliant. This approach for peasant community development aimed at contentment and good welfare requires the use of social capital as the basis for development.

The study sought to study the effects of social capital on well-being through the dynamic changes of peasant communities in the Mae Klong River Plains by using the well-being concept of Buapun (2006), which states that well-being is a condition of human society for finding and achieving what is desired. The abovementioned factors were considered in combination with the basic necessities of life, physical and mental health, social relations and security in life and property and by using this trend of social capital based on western and Thai perspectives as the framework for studying the use of social capital in properly developing the well-being of peasant communities.

METHODOLOGY

Study sites. In this study, specific study areas were selected by using the following criteria: 1) a peasant community that has been settled for longer than 50 years and reflects the changes of more than one period of time; 2) a community that has traces of empirical evidence for the researcher to study and 3) willingness of the people in the community to cooperate with the researcher in conducting the study and ability to reach the coverage data based on the objectives. The selected areas were peasant communities at Moo 6, Baan Khao Rab and Moo 7, Baan Nern Nhong Bua Taopoon Sub-district, Photharam District, Ratchaburi Province, Thailand, as shown in Figure 1.

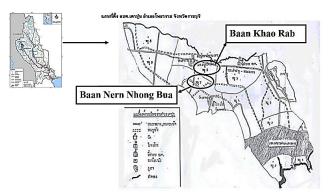


Fig. 1. Location map of sites studied in the Mae Klong River Plains Source: Report of Taoboon Subdistrict Administrative Organization

Scope of research. This research set the scope of time for studying the dynamic changes within a period of 56 years (1961–2017), which is the period of time in which Thailand has issued the 1st to 12th National Economic and Social Development Plans. The study also included a reflection of the effects of changes in social capital on well-being within the context of dynamic changes through the lifestyle and production processes of peasant communities in the Mae Klong River Plain region. Consideration was given to the following two aspects: physical aspects (physical area and national resources) and non-physical aspects (knowledge, human beings and personal relationships). Thus, more than one change could be reflected based on the principles of brief agricultural history studies.

Data collection. The present study was based on a qualitative research design in which data were collected by the following methods:

- 1) Empirical data analysis of studies from past to present such as reports, official government documents, community documents and community records related to the effects of social capital on the well-being and community lifestyle and production processes of peasants in the Mae Klong River Plain
- 2) Interviews with the following four groups of respondents: a) community leaders composed of sub-district headmen, village headmen, assistant village headmen, presidents of the sub-district administration organizations, members of sub-district administration organizations and abbots for a total of 11 persons; b) farmers composed of 11 senior farmers, 16 farmers with lifestyles and use of production processes based on the principles of capitalism and 11 alternative farmers; c) 13 public sector officers who were responsible for the implementation of policies regarding peasant community lifestyles and production processes and d) 3 representatives from the private sector, presidents of agricultural cooperatives, rice mill owners and agricultural equipment owners for a total of 65 persons. The research instrument was semi-structured interviews.
- 3) One-time focus groups were formed to summarize the effects of social capital on well-being and the dynamic changes of peasant communities, which were divided into the following three groups: a) 6 community leaders; b) 6 farmer representatives and c) 4 public sector officers for a total of 16 persons.

Data was analyzed through content analysis, topic classification, topic categorization by sorting and interpretation and creating an inductive summary, inspection of data by triangulation of different sources and different methods and data presentation by using lecture and tables.

RESULTS AND DISCUSSION

Demographic profile of interviewed respondents

The average age of the 65 respondents was 57.3 years with only 15 female respondents among them. The majority of the respondents completed primary school and 48 respondents were farmers. The average income was 13,192.3 baht per month and the average farm size was 9.14 rai. The majority of the farming households had 1-4 persons. (Table 1)

Table 1. Demographic profiles of interviewed respondents.

Characteristics	No.	%
Gender		<u> </u>
 Male 	50	76.9
 Female 	15	23.1
Age		
 Under 50 years 	18	27.7
• 50-59 years	23	35.4
• Over 50 years	24	36.9
Mean = 57.3 , Max= 93 , Min= 31		
Education		
 Primary School 	42	64.6
 Secondary School 	8	12.3
 Higher than Secondary School 	15	23.1
Occupation		
• Farmer	48	73.8
• Other (public sector officer/ private sector)	17	26.2
Monthly Income		
• 0-10,000 baht	38	58.5
 Over 10,000 baht 	27	41.5
Mean = 13,192.3, Max= 35,000, Min= 3,000		

Characteristics	No.	%
Farm Size	45	69.2
• 0-10 rai	20	30.8
• Over 10 rai		
Mean = 9.14 , Max= 85 , Min= 0		
Household Size		
• 1-4 person	43	62.2
• Over 4 persons	22	33.8
Max= 7, Min= 1		

Source: Field Interviews (2016-2017)

Effects of social capital on well-being of peasant communities in the Mae Klong River plains

According to studies conducted over the past 56 years (1961-2017), social capital effects the well-being of peasant communities in the Mae Klong River Plains in the following four aspects: a) Natural and physical capital are the topography and climate in the community that are suitable for rice cultivation, including fundamental structural development and modern technology supporting lifestyles and production processes (100%); b) Human capital refers to the human resources with knowledge, ability, capability and energy to adapt in order to survive amidst dynamic changes (87.7%); c) Knowledge capital is the body of knowledge accumulated and transferred within the community (Sornsiri, 2011). Body of knowledge is a new type of science that comes from outside the community that is important to the thinking and belief system in the self-adaptation of the peasant community (75.4%) and 4) Relationship capital is the relationship system inside and outside the community that affects the self-adaptation of peasant communities (61.1%). Table 2 summarizes the percentage of social capital effecting the well-being of peasant communities in the Mae Klong River Plain region.

Table 2. Percentage of social capital effecting the well-being of peasant communities in the Mae Klong River Plain region.

Social Capital Category	Number of	% Total of Respondents
	Respondents Who Agreed	
Natural and Physical Capital	65	100.0
Human Capital	57	87.7
Knowledge Capital	49	75.4
Relationship Capital	43	66.1

Source: Field Interviews (2016-2017)
*Respondents may have multiple answers.

3. Dynamic changes of peasant communities in the Mae Klong River Plains

The dynamic changes of peasant communities in the Mae Klong River Plains can be divided into the following three periods:

Natural period (1961–1985)

According to the findings, the conditions of Baan Khao Rab and Baan Nern Nhong Bua in the past were typically abundant in food sources as well as sources of learning or living. The availability of natural resources was the main foundation for the well-being of the communities, which reflected community lifestyles and self-reliance. The production process was characterized by sustainable production in response to the needs of people, families and communities. Rice planting was done once a year in accordance with the availability of water supply, which was only during the rainy season. The farmers grew local rice species that were photo period-sensitive varieties such as light yellow rice and Lueng Patew rice that utilized a farming area of 5 to 15 *rai* or 8,000 m² to 24,000m². Normally, the farmers used family members as laborers and gathered other laborers in the community who formed social relationships through helping one another. The farmers also used animal labor such as cattle.

Farming equipment was made by utilizing local knowledge and materials. Production output ranged from 30 *tang* to 60 *tang* per rai or 450 kg to 800 kg per 1,600 m², which was sufficient for consumption for the entire year and provided the farming families with seeds for farming during the next season. The farmers kept the rice in barns and sold the leftover rice to rice millers. The millers came and bought the rice seeds from the community. The money farmers earned from selling the rice seeds was used for hiring labor during periods when there were labor shortages. The rice seeds were also used to buy household necessities. Moreover, the farmers practiced integrated farming by planting many kinds of plants and trees for household consumption such as chilies, tomatoes, coconuts, tobacco and cotton along the boundaries of the farms. The farmers had a body of knowledge and local wisdom associated with nature transferred from generation-to-generation. Problems and conflicts were resolved in order to keep the peace in the community through compromise under the direction of village headmen and elders in the communities. It was unnecessary to report cases to the police or request help from the government due to the inconvenience of travel. Table 3 shows the transcribed verbal reflections from the respondents who agreed that social capital effected well-being during the natural period.

Table 3. Transcribed verbal reflections from respondents who agreed that social capital effected well-being during the natural period.

Type of capital	Transcribed verbal reflections from respondents
Natural and physical capital	(Community Leader) "In the past, the areas surrounding the
	community were abundant with bamboo and wildlife. The hills had
	good soil and carried a lot of water. They grew coconuts around that
	made it look like a coconut island. We also had banana trees, custard
	apples and vegetables. Around the hills was the marshlands where
	they liked to grow rice."
Human capital	(Community Leader) "Previously, if any issues arose, whether
	someone died or some people were fighting, we had to report it to the
	village headman who would handle the problem because it was too
	far away and inconvenient to go to the police station in the past."
Knowledge capital	(Farmer) "I think rice product output was not that much because we
	grew what we could. There were no techniques or tricks. We just
	followed what our ancestors did."
Relationship capital	(Farmer) "Most of the time, they helped one another work during
	harvest time. More than 100 people would help to harvest. This is
	true."

Source: Field Interviews (2016-2017).

Capitalism period (1986–2006)

According to the findings, Baan Khao Rab community and Baan Nern Nhong Bua community experienced immense changes arising from the implementation of government policies to build the following basic facilities and infrastructure in the southern region: health centers, schools, streets, electricity, water and, in particular, the construction of the Mae Klong Dam. Land reform and irrigation system network development were implemented, releasing water with full coverage for farmers on every farm by 1986. This resulted in changes in lifestyle and production processes by cultivating rice twice a year, which meant wet-season and dry-season rice cultivation by direct seeding on wet land. Farmers received instructions from the public sector. Production targets were changed from growing rice for personal use to growing rice for commercial use. Farmers had the opportunity to make the transition from rice monoculture to aggregate farming. The communities changed their method of growing local rice to planting rice based on market demands such as using varieties that were photoperiod-insensitive and disease-resistant with high productivity of 80 to 100 tang per rai, or 800 kg to 1,000 kg per 1,600 m². During this period, the farmers used modern technology to facilitate the production process by replacing human and animal labor with tractors and harvesters. Moreover,

fertilizers and chemicals were used to increase rice output. Consequently, the farmers had to prepare money to hire labor and buy high-capital production factors. Farmers who did not have enough money had to borrow acquaintances in the village or from a bank. This started the cycle of debt, which led to the loss of farmland to creditors when farmers were unable to pay off debts. Under the aforementioned conditions, the farmers who used to grow rice on personally owned land resorted to renting farmland from someone else to grow rice.

The body of knowledge was modified as farmers had to adapt to using modern technology through the public sector and the educational system in lieu of transferring knowledge within the household. Farmers gave importance to accumulating capital based on the principles of capitalism instead of the sufficient economy lifestyle. Consequently, people became more focused on personal interests rather than seeking mutual benefits, living a lifestyle that relied on outside factors to achieve a high standard of living under capitalism. Although the relationship system in terms of reliance on the family and neighbors was never completely gone, social capital was diminished. This could be observed among community members who continued to help one another in activities or ceremonies such as community development, schools and funerals. This included financial assistance when problems arose and sharing food in a family atmosphere without expecting any payment as shown in the comments from respondents in Table 4.

Table 4. Transcribed verbal reflections from respondents who agreed that social capital effected well-being during the capitalism period.

Type of Capital	Transcribed Verbal Reflections from Respondents
Natural and Physical Capital	(Farmer) "The change from growing rice once a year to twice a year
	began when the irrigation for farming was provided by land reform.
	Water was available all the time. The water in the farmland was the
	same for everyone and there were changes in lifestyle. Engagement
	in farming by using a cow became old fashioned; using a tractor was faster."
Human Capital	(Community Leader) "Expenses were higher for hiring labor,
-	fertilizers, medication and tuition fees. Everyone needed money;
	villagers had to be diligent. After harvesting, they would grow sugar
	cane, cultivate mushrooms, sew dolls or look for other employment.
	The young ones went to factories to work; otherwise, they would not
	have had enough money to survive."
Knowledge Capital	(Public Sector Officer) "The Department of Agriculture Extension
	asked farmers to produce a lot of rice under the principle of
	economics, because rice was in demand for export. After the
	revolution 40 years ago, the farmers began to change their own farms
	into the integrated agriculture we see at present"
Relationship Capital	(Farmer) "We always helped one another during funerals. As for
	social ceremonies, we helped one another as usual, no matter who
	had died or been born; they helped for 5 to 6 days."

Source: Field Interviews (2016-2017)

Alternative Period (2007–2017)

In the past, the period of capitalism effected farmers who had debt problems and lost farmlands. Moreover, the farmers were faced with the problem of a deteriorating environment. The soil was no longer fertile, and farmers had health problems from the use of fertilizers and chemicals. These provided the impetus for the farmers to start looking for solutions to problems with the help of the departments involved in agriculture and community development that promoted and provided information about the concept of sufficiency economy and safe agriculture through training. The

training focused on making the communities aware of the problems that had come into the communities that could be eliminated through the community leaders who had the potential to motivate farmers to participate in problem-solving that would raise awareness about existing problems. Farmers also recognized that monoculture was no longer sustainable. Looking back at the past, farmers further realized that previous generations of the communities had possessed self-reliance rather than dependence on other factors. The reminiscences of the past gave the group of community leaders the idea to "change by self-reliance as had been done in the past to reduce reliance on external factors. This was the concept used with the farmers. Thus, the various sources of original capital for the communities such as natural resources, ability of the people in the community, relationship system and local community knowledge are noticeable. These are strong capital factors of the communities that have long been overlooked." Therefore, the communities should set targets to live by the principles of a sufficient economy with self-reliance by turning back toward using original social capital as in the past for growing organic rice and engaging in natural integrated agriculture, which includes reducing the use of technology and chemicals. The above strategy will reduce production costs and expenses in buying rice and other foods for household consumption. The strategy will also add value to the community members' quality of life by enabling the farmers to produce food without chemicals for consumption within the communities. Moreover, the natural ecology of the community will be restored and the soil will have better quality, while natural resources such as fish, clams and crabs will return.

The communities adapted by grouping into many categories such as community enterprise groups, savings groups and rice grain producer groups. The aim was to create social groups to exchange and distribute products and balance consumption as shown by the comments of the respondents (Table 5).

Table 5. Transcribed verbal reflections from respondents who agreed that social capital effected well-being during the alternative period.

Type of Capital	Transcribed Verbal Reflections from Respondents
Natural and Physical Capital	(Community Leader) "Now we use a smart application from the
	Office of Agricultural Extension that uses satellites to inspect soil
	quality. If we can indicate the lot then we will know what kind of soil
	we have in our lot and what problems we have, so that we can fix
	them appropriately. And the application can compute the quantity of
	product per rai."
Knowledge Capital	(Farmer)" I stopped from the beginning of 2007. I joined the
	Institute of Sufficiency Economy, attended training held at the
	Natural Rice Farming Center and made sufficiency economy work."
Human Capital	(Public Sector Officer) "I have to admit that farmers at Baan Nern
	Nhong Bua are modern and updated with new technology. They like
	any new technology; they like to experiment, listen and study. They
	are in the same age group. The adults like to follow up. I think they
	are farmers with knowledge."
Relationship capital	(Community Leader) "My community has a beef cattle farmer
	group, a local chicken farmer group and a catfish farmer group.
	These are additional sources of food for the community. The
	department that comes to us is accessible, so we can cooperate."

Source: Field Interviews (2016-2017).

The effects of social capital on the well-being of peasant communities in the Mae Klong River Plains over a period of 56 years covered the following four aspects: 1) natural and physical capital that are the foundation of the lifestyles and production processes of peasant communities; 2) knowledge capital that is the body of knowledge used to survive and create well-being associated with changing

situations; 3) relationship capital in the form of families, neighbors and external sectors that motivate the community and 4) human capital with potential for self-adaptation. The aforementioned our aspects are consistent with the concept of Robert (1993) who stated that social capital making society capable of living must be based on mutual trust, shared support and social networks. Moreover, the above aspects are also in accordance with the study of Worawut (2005) which mentioned that internal factors such as social capital are important in developing the strength of the community as a means of survival. Worawut (2005) presented the social capital as a concept that consists of community dimensions, relationship dimensions, intelligence dimensions, body of knowledge dimensions and culturetraditional dimensions, which is also consistent with the study of James (1988) which indicated that the changes in social capital of peasant communities are a reflection of the importance given to solid social relationships involving bonding, expectations, trust, maintaining the same norms and values and social structures that are close to the community, group or network under an appropriate social structure. Similar findings were revealed by Sornsiri (2011) who stated that social capital affects the optimal wellbeing of the people, which is composed of social capital in compromise and social capital in cooperation. The study of Naphaphorn and Pitsamai (2005) proposed that social capital promoting community strength needed to be accompanied by knowledge capital, human capital and natural capital.

The analysis of dynamic changes of peasant communities in the Mae Klong River Plains, can be divided into the following periods: 1) natural period, 2) capitalism period and 3) alternative period. The above findings are in accordance with the study of agricultural societies in Southeast Asia by Jonathan (1997) where types of agricultural changes in Southeast Asia consisted of 1) subsistence agriculture; 2) semi-subsistence agriculture; 3) mixed activities of outside agriculture; 4) agricultural business; 5) part-time agriculture and 6) small-scale agriculture. The above findings also concur with those of the study of Santi (2007) who mentioned that changes in the agricultural system under the 1st to 9th National Economic and Social Development Plan can be divided into the following three periods: 1. subsistence agriculture, 2. commercial agriculture and 3. dualistic agriculture.

CONCLUSION AND RECOMMENDATIONS

The effects of social capital on the well-being of peasant communities in the Mae Klong River Plains over a period of 56 years (1961–2017) were composed of four aspects: natural and physical capital, human capital, knowledge capital and relationship capital. Peasant communities in the Mae Klong River Plains changed for survival within economic, social and political contexts. Obviously, the peasant communities can adapt themselves more effectively coping with the dynamic changes. The successful adaptation is a result of social capitals, driven by its own experiences, in terms of natural resources, lesson learned from capitalism and alternative.

The organization of local and national levels should apply the research findings in strategic and policy planning for the well-being of peasant communities in the Mae Klong River Plain, focused on social capital development in four aspects: natural and physical capital, knowledge capital, relationship capital and human capital. The local and public government organizations concerning natural resources and the agricultural office, should provide budget in observation, project and training knowledge to construct the emergencies on the essence of farming without chemical environment, natural resource reservation, soil, water for the peasant communities. The Ampoe Community Developmental Office and Ampoe Agricultural Office, should cooperate with the communities for training about the well-being of community development, by concentrating on leading social capital to community leaders and farmers creating communities and prototype leaders in development of well-being. Future studies should include the continuation of action research to search for new approaches in leading social capital to develop the well-being of peasant communities in the Mae Klong River Plain.

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