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# Reflections on learning experience for self-management: The concepts and practices of Sanam Chai Khet Organic Agricultural Group, Chachoengsao province, Thailand

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#### Abstract

This qualitative research examined the background and synthesized the concepts and practices of the Sanam Chai Khet Organic Agricultural Group, Chachoengsao province which have led to self-management. Data were collected from the analysis of documents and evidence, a survey of farmers' plots, participatory and non-participatory observation. in-depth interviews, and focus group discussion. The informants were randomly selected using purposive and snowball sampling methods and consisted of 45 leaders and farmers in the organic farmer group, community scholars, representatives of farmers in sustainable agriculture systems, independent organizations and government officials. Data were analyzed based on content analysis and verification of data used a triangulation technique. The results revealed that there were five main aspects driving the Sanam Chai Khet Organic Agricultural Group in the development of farmer potential in a group system with learning and participation based on community capital strengthening, leading to selfmanagement to create food security and exercising the principles of self-reliance, sufficiency, and organic agriculture to manage community resources that are reflected from practices. These aspects were: 1) management of the group system to create power and development, 2) learning to establish organic agricultural sources and ways of distributing safe food from the family to society, 3) creating a balance among life, nature, and the ecosystem, 4) maintaining the resources base and plants and inheriting local wisdom and culture, and 5) self-adaptation, protection of rights, and network creation for sustainable development.

Introduction

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Food security is an essential issue which impacts from the household to the world level (International Institute for Trade and Development, 2013). Thailand is a developing country according to the National Economic and Social Development Plan No. 12 (2017–2021) that promotes the

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spatial development and re-systemization of agricultural production to align with climate change and spatial potential by developing a sustainable agricultural system and strengthening the agricultural sector (Office of the National Economic and Social Development Board [NESDB], 2017). Production in organic agricultural systems is a way of sustaining food safety, plant diversity, and balance in the ecosystem that contribute to food security in society.

Chachoengsao province, Thailand drives sustainable agriculture which reflects the reality of on-going sustainable development by developing the potential of farmers, utilizing human and social capital to maintain resources base (Havanon & Ratanarojsakul, 2005), and employing a learning and collaboration process in creating balance for coexistence in society based on the principles of self-reliance (Sangkhep, 2012). The Sanam Chai Khet Organic Agricultural Group drives organic agriculture through a group system with community capital as a factor to strengthen the group and to expand safe food production based on international organic agricultural standard certification of Organic Agriculture Certification Thailand (ACT) and the International Federation of Organic Agriculture Movement (IFOAM), the organic agricultural standards of the European Union (EU), and the standards of the Canadian Organic Regime (COR). This study examined the background and synthesized the concepts and practices of the Sanam Chai Khet Organic Agricultural Group to investigate what drives the group to be strong in its unceasing efforts to create change and development leading to self-management. The obtained knowledge will be beneficial as a model of securing food in the community and society and creating guidelines for driving an organic agricultural group that are consistent with the local context and changing social and cultural trends.

#### Literature Review

Developing the nation using the principles of sustainable development from 1997 to the present emphasizes the "philosophy of sufficiency economy" and "participation" as guidelines to develop life quality and promote the agricultural sector to balance the ecosystem and food security. Farmers are learning from others' experience in resource management. The network system should be developed to connect sustainable agriculture with community economy system development (NESDB, 2017). An organic agriculture system consists of basic principles according to the guidelines of sustainable agriculture and focuses on creative farming to conserve and restore the farm ecosystem with awareness of health, ecology, fairness, and care (Seenieng, 2016). Expansion of economic development has been occurring in the eastern region of Thailand, including economic structural reform that exercises innovation and technology based on the agricultural sector and promotion of new agriculture focused on smart farmer development supporting farmers to be entrepreneurs and developing the Eastern Economic Corridor (The Secretariat of the House of Representatives, 2016).

Learning is the key to developing human resources, leading to behavioral development and change as a result of thinking, perceiving, and responding processes in the circumstances of the environment (Sigleman & Shaffer. 2003). Learning by farmers is deemed as adult learning consisting of the transition of thoughts, beliefs, and existence (Wongthongdee, 2013) appended with a selfreliance principle. Development of a "group system" through a "group process" reflects the relationship format of initiation, existence, and self-manageability and can be developed to "community organization" and "civil society" in the community and local area. Understanding the basis of the concepts, formats, and processes of the group contributes to analysis of the relation system, development, and implications regarding the negotiating power of the group (Puangngam, 2010). Development with "community capital" is the main capital of the community development process and is important to the selfmanagement of the local community. Therefore, managing community capital is at the centre of community management so that the participants operate activities and develop with confidence and identity. These concepts were applied by the researcher as guidelines for conducting the study to examine the background of the group and to synthesize the concepts and practices for selfmanagement of the Sanam Chai Khet Organic Agricultural Group.

#### Methods

This research was conducted using the qualitative method for investigating phenomena in an agricultural community. The areas and target group were selected using the purposive sampling method because the group identity of the self-development system was driven by a community organization in Chachoengsao province and the organic agricultural standards were at the international level of certification. Purposive and snowball sampling approaches of key informants were exercised to study the background of the organic agricultural group and to synthesize the concepts and practices of the group. The qualitative methods provided greater understanding from different perspectives of the investigated phenomena through interviews, focus groups, and observations from various sources. It strengthened the researcher's standpoint from various aspects. The methodology was conducted as follows.

(1) The background study of Sanam Chai Khet Organic Agricultural Group, Chachoengsao province was done by analyzing relevant documents and pieces of evidence, surveying plots of farmers, non-participatory observation, in-depth interviews, and focus group discussion with 45 key informants including organic agricultural leaders and members, community scholars, farmer representatives in sustainable agricultural systems, and government officials. Content analysis was applied and verified using a triangulation technique to provide confirmation of findings, more comprehensive data, increased validity, and enhanced understanding of the studied phenomena through methodological triangulation (interview, focus groups, observations) and triangulation of sources (documents, people, situations, places).

(2) The synthesis of concepts and practices of the Sanam Chai Khet Organic Agricultural Group, Chachoengsao province was done by examining documents and evidences from secondary data and collecting data from a plot survey, participatory and nonfarmers' participatory observation, in-depth interviews, and focus group discussion with 45 key informants including the members and families of the organic agricultural group, farmers and those who were involved in the administration system of the organic agricultural group, agents from independent organizations, and government officials. Data were analyzed by synthesizing the contents and interpreting them to find background meaning of empirical results; data were verified by representatives of the organic agricultural group.

#### **Results and Discussion**

Background of Sanam Chai Khet Organic Agricultural Group, Chachoengsao Province

Sanam Chai Khet district is located in southeastern Chachoengsao province and is surrounded by the natural ecosystem of east low forest and the Kwae Rabom-Siyad National Forest Reserves. The administrative district is divided into four sub-districts (Khu Yai Mee, Tha Kradan, Thung Phraya, Lad Krathing) and one municipality (Sanam Chai Khet) (Chachoengsao Provincial Office, 2017). Agriculture in the area includes monoculture for commercial purposes, mixed agriculture with chemicals as a production factor, and sustainable agriculture. Promoting Chachoengsao province as the "kitchen of safe food" through driving local policy is consistent with the national development policy which places emphasis on creating food security for people in society and a balanced local resource base. The Sanam Chai Khet Organic Agricultural Group (the Group) is the first and only agricultural group in Chachoengsao province that has been certified to the organic agricultural standard at a global level.

The Group was established in 2001 with a coordination center in village No. 6, Yangdaeng village, Khu Yai Mee subdistrict, Sanam Chai Khet district, Chachoengsao province. Currently, there are 400 registered members. Its target is to promote smallholder farmers to adapt their production processes and to turn to an organic agriculture system. The member base has expanded from the local community to nearby provinces in the eastern region including Chachoengsao, Prachinburi, Sakaew, and Nakhonnayok. Initially, it was promoting organic agriculture under the Kwaerabom-Siyad Rural Development Project and was a pilot project in the development of sustainable agriculture of smallholder farmers in the Chachoengsao ecological landscape. These projects cooperated with the Earth Net Foundation enabling the communities to learn and practice skills until they were able to manage the works and budget by themselves. This led to development as a "community organization" under the mechanism of an alternative agricultural network in Chachoengsao province connected with four regional alternative agricultural networks in driving sustainable agriculture to become national development policy.

An assembly of the Ban Yang Dang community in Khu Yai Mee sub-district, Sanam Chai Khet district was the start of development as group power under the name "the Sanam Chai Khet Organic Agricultural Group". The mission of this community coalition was to find a way to solve the debt problems and sanitary issues of smallholder farmers who were affected by monoculture relying on external production factors, and suffering from chemical toxicity. It was found that "farmer families did not consume food produced in the household although it was the food produced for people" reflecting the incompetence of self-reliance. Later, Mr. Kasem Phetnatee, an independent developer with experience in developing the community, pioneered this "red zone" and constructed a foundation of sustainable development in Ban Yang Dang which was far from civilization, had problems regarding life quality and household economy, and lacked a culture connecting people because it was a new community that has been established for only 30 years with a mixture of people from different origins. These developers identified the current problems of the community at that moment as follows:

"...students did not have lunch and they had to pick leucaena leaves and cashew fruits to consume. The condition of the school was bad due to shortages of buildings, teachers, and instructional equipment. Previously, when malaria spread, there was no cure and no hygienic conditions. It was hard to travel and the area was full of thieves...villagers did not understand their role...the work reflected inequality and non-transparent practice..." (Handee, personal interview, February 13, 2016)

Transmitting knowledge to the family stimulated self-learning and environmental learning through experience, with the conclusion that "problems need to be solved at cause; waiting for help only does not generate solutions. Self-reliance is mandatory... fairness cannot happen if we don't create it". Later, there was an application of the community economic concept for self-reliance so that people could live happily and sustainably.

The saving group is a foundation of developing knowledge and delivering assistance under the principle of "a strong group needs to help other groups". Developing roles for women (housewives) can make them a major power in constructing the model space for the "family forest and natural resource management in the community" so that they could be self-reliant in terms of food, conservation of local plant/herbs, and usage of herbs for basic treatment instead of medications by "consuming food (herbs) as medicine". Learning helped the community to highly value areas for family food production and to minimize the space for people in the community as it is a social problem that needs to be urgently solved. Later, the community extended knowledge and practices from the "family forest" divided as "sustainable top vegetable group" and "community industrial group". Learning experience transforms people

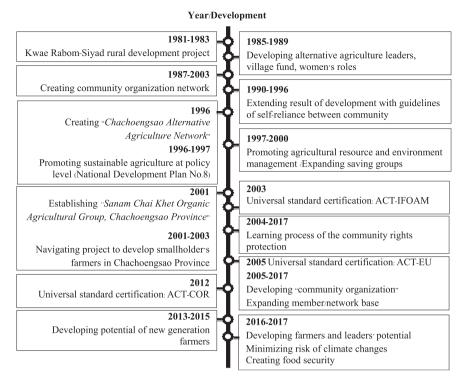


Figure 1 Development of Sanam Chai khet Organic Agricultural Group

from former generations and creates a new generation of people to be able to manage working and living, leading to that area becoming a sustainable agricultural learning center supporting the operations of the Chachoengsao alternative agricultural network.

The organic agricultural group developed from the root community capital as a vital component including resource wisdom, local scholars, developers, learning centers, beliefs, thoughts, and good relationships among the people in the community. The group focuses on producing organic food plants such as rice, local vegetables, herbs, and fruit and distributes them in a fair trading system through Green Net Cooperatives, green markets, entrepreneurs, a vegetable box member system, and a food carrier system (*Pookpintokao*). Production and management of products are under an intensive learning process and participation of farmers to develop quality in accordance with universal organic agricultural standards. Development of the organic agricultural group can be summarized as follows (Figure 1).

Concepts and Practices of Sanam Chai Khet Organic Agricultural Group: Learning for Self-management

The main concept of strengthening the Group is developing the potential of farmers in the group system through a learning and participation process leading to self-management. Such a concept has community capital as an important foundation to be linked to practices and becoming a guideline of the Group.

The guidelines of practice are based on community capital, sufficiency, learning, and participation which consist of:

## (1) Group system management: empowerment and development

The group process creates development of the person and group power to be responsible according to their roles (Chaiyaphan, 2006). Learning of the group arises through four aspects: 1) productivity of product, 2) group standard, 3) group member base, and 4) process of self-management. This leads to ability to develop as a strong community organization reflecting the importance of the group where members can jointly prove that "... No matter how smart, it cannot be done alone...". Working in a group system develops cooperation, leadership, and public consciousness in group members; the group also has negotiating power so that it can set a fair price when trading products among members and a fair distribution price for exported products under the concept of a "separate management production system-combined distribution system". The developing group system constructs relationships and reduces conflicts of opinions.

"...Group work enables us to know other's thoughts, express thoughts and opinions... I stopped being stressed by fluctuating prices because the prices are guaranteed by group purchases of all products..." (Homniam, Suprom, & Suriya, focus group discussion, November 19, 2016)

(2) Learning to create an organic agricultural source and transmit safe food from the family to society

Driving organic agriculture as a local agenda to become an "organic agricultural city" by expanding safe food production space starts from the family to community through a learning process to develop the potential of farmers based on five characteristics: 1) organic agricultural school as a learning centre applying an adult learning process, 2) research conducted by local farmers, 3) enhancement of organic agricultural standard knowledge, 4) organic agricultural learning development in the school system, and 5) transmission of knowledge to sub-group members.

#### (3) Creating balance of life, nature, and ecosystem

The farmers have a principle of "reducing exploitation, increasing generosity and taking care of life with life" and provide their living follow the basic Dharma as producers and consumers based on their ways of life and building of happiness in the family through safe food by reducing/ stopping the production factors that lessen the relationship of people in the family, leading to a healthy mind and reflecting practical intellectual development from inside (mind) humans. A one organic farmer stated:

"Organic farming depending on nature requires deep understanding of the word "nature", we should understand nature by avoiding exploitation and stop using chemical pesticide... nature will always balance itself" (Kumpa, personal interview, October 18, 2016) (4) Maintaining a base of resources, plants, and inheriting wisdom and culture

The group conserves local rice and vegetables, adjusts plant species to be suitable with the environment, by focusing on seasonal plants and having a campaign on consuming local vegetables and herbs which is "the coexistence of dining culture inheritance" starting from the family and transmitting it to people in society through healthcare alternatives with "consuming food as medicine". The consumption culture has been communicated through various channels. Learning in product management through a fair trading system aligns with the concept of Community Supported Agriculture (CSA) constructs good relationships between producers and consumers (Henderson & En, 2014) through a "vegetable box member system" transmitting knowledge and wisdom of consuming local vegetable and a "food carrier system (Pookpintokao)" through which farmers who produce organic rice will transmit the ways and wisdom of organic rice production and consumption to consumers.

(5) Adapting, protecting rights and continuing to expand the sustainable development network

The organic agricultural group develops cooperation and knowledge in members so they can be aware of and prepared for changes by exercising their alternative agricultural network structure and transmitting knowledge to descendants and new-generation farmers. Driving to be a

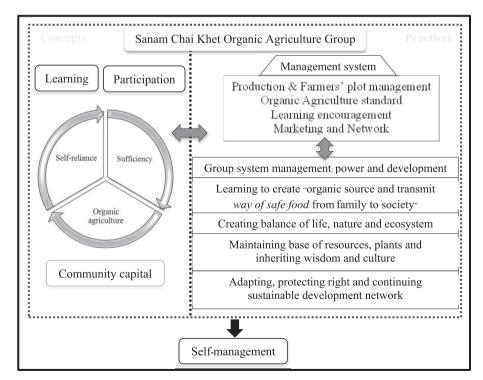


Figure 2 Concepts and practices of Sanam Chai Khet Organic Agricultural Group: Learning for self-management

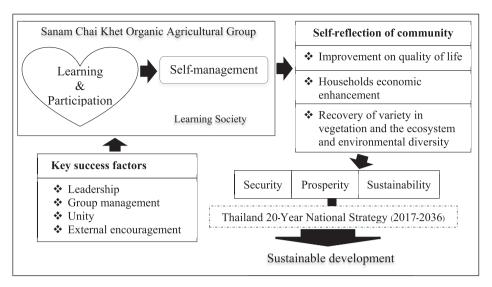


Figure 3 Model of conclusions: Reflections on learning experience

model organic agricultural community organization with a comprehensive group system requires the cooperation of members and relevant networks. The community organization is a key in driving and development collaboration will be enhanced if it is supported by the government regarding sustainable development (Jai-Aree, 2013). This reflects "organic-heart people" collaboratively creating fair agricultural ways by protecting their resource base and inheriting a sustainable local consumption culture (Boonchai, Setsiroj, & Lianchamroon, 2007).

The current study findings revealed that farmers exercise the learning and participation process as a driver of farmer and sustainable agricultural practice development in the organic agricultural system and this facilitates the development of the Group's concepts and practices (Figure 2), reflecting management and development of the Group in alignment with sustainable development goals (United Nations, 2017). It emphasizes the development of human resources with agreeable issues in terms of sustainable city and community development, sustainable consumption and production, good health creation, ecosystem conservation and utilization, and handling climate changes. The Organic Agricultural Development Strategy 2017–2021 (Office of Agricultural Economics, 2017) will focus on increasing space and the amount of organic agricultural production, especially so that standard certification will be widely accepted by domestic and international consumers and for development as a hub of organic agricultural product and services at the global level. It is clear that the ways of the Sanam Chai Khet Organic Agricultural Group are one of the models for driving farmers and consumers to enter a food security system. Nevertheless, constructing correct and up-to-date learning about organic agriculture for farmers will be a guideline for increasing participation and upgrading community management to create food security (Jai-Aree, Tanpichai, & Yingyoud, 2017) along with the implementation of knowledge, leading to instruction in a school system. The representatives from the organic agricultural community

will transmit knowledge and help expand the learning base to youths and the new generation of farmer to construct understanding and to secure food for the community and society in a sustainable way (Udomwech, Jai-Aree, & Srisuantang, 2016).

#### Conclusion

The study of the origins, concepts, and practices of the Sanam Chai Khet Organic Agricultural Group, Chachoengsao province reflected that learning and participation is the key to the Group developing the concepts and practices of an organic agricultural group in the form of a "learning society" with development of their intellectual capital and resource base through participation by the organic agricultural group members. They expressed their thoughts as "organic agriculture is not only the safe food production system for people but it is the space of passing spirits, concern, generosity, and trust and for communicating knowledge under a consumption culture through products and interactions". The key success factors of the group consisted of: 1) leadership, 2) group management, 3) unity, and 4) external encouragement. This is evidenced through the agricultural plots turning into a learning center that constructs good relationships among producers, consumers, and people in the organic agricultural society and in creating and inheriting a local consumption culture. Furthermore, learning in the civil sector to protect the community's rights will preserve the ecosystem and safe food production sources while encouraging the push for a sustainable development base locally and nationally. Learning in various dimensions reflects the accumulation of learning experience, selfanalysis, and circumstances to prove that "learning is the key to human resource development leading to adaptation of thinking and perceiving a process to initiate behavioral development change". The main self-reflections on how to become a self-managing community were: 1) improvement on quality of life, 2) household economic enhancement, and 3) recovery of variety in vegetation and the

ecosystem and environmental diversity which complied with the 20-Year National Strategy (2017–2036) to achieve the security, prosperity, and sustainability (Figure 3).

#### Recommendations

- (1) Develop the potential into a database system and communication for enhancing management and developing the knowledge and skill of farmers.
- (2) Clear zoning of organic agriculture with mechanism from government sectors emphasizing participation of the community and stakeholders to increase confidence in the safety of the ecosystem and food production source.
- (3) Future research should include studying the potential development of farmers to adopt organic agriculture in a group system to create organic agricultural entrepreneurs.

#### **Conflict of Interest**

There is no conflict of interest.

#### References

- Boonchai, K., Setsiroj, B., & Lianchamroon, W. (2007). Chapter 1: Concept of food resource base. In BIO Thai (Ed.), Concept and food resource base policy. Bangkok, Thailand: Pimdee Printing. [in Thai]
- Chachoengsao Provincial Office. (2017). *Chachoengsao history*. Retrieved from http://123.242.176.9/ccs/index.php.

- Chaiyaphan, K. (2006). *Group dynamics*. Bangkok, Thailand: O.S. Printing House. fin Thail
- Havanon, N., & Ratanarojsakul, P. (2005). Strengthening of social capital to build up a strong community. Bangkok, Thailand: Office of the National Economics and Social Development Board. [in Thai]
- Henderson, E., & En, V. R. (2014). CSA. Sharing the harvest: A citizen's guide to community supported agriculture (1st ed.). Bangkok, Thailand: Suan Nguen Mee Ma. Jin Thail
- International Institute for Trade and Development. (2013). *Thailand food and energy security*. Bangkok, Thailand: ID All Digital.
- Jai-Aree, A. (2013). Community rights: Constitutional rights for local natural resources and environment management. Nakhon Pathom, Thailand: Phetchkasem-Printing. [in Thai]
- Jai-Aree, A., Tanpichai, P., & Yingyoud, N. (2017). Guidelines to promote organic agriculture to food security and safety for community. Paper presented at Hong Kong International Conference on Social Sciences, Hong Kong
- Office of Agricultural Economics. (2017). *Thailand organic agriculture Strategy* (2017-2021). Retrieved from http://www.greenet.or.th/sites/default/files/1704%2004%strategy.pdf
- Office of the National Economic and Social Development Board. (2017). National economic and social development plan No.12 (2017-2021). Retrieved from www.nesdb.go.th/ewt\_dl\_link.php?nid=6422.
- Puangngam, K. (2010). Community and local self governance. Bangkok, Thailand: Borpit. [in Thai]
- Sangkhep, T. (2012). Self-reliance principle. Sustainable development. Bangkok, Thailand: V. Print (1991). [in Thai]
- Seenieng, P. (2016). *Organic agriculture*. Bangkok, Thailand: Odian Store. [in Thai]
- Sigleman, C. L., & Shaffer, D. R. (2003). *Life-span human development* (4th ed.). Pacific Grove, CA: Brooks/Core.
- The Secretariat of the House of Representatives. (2016). *Thailand 4.0*. Retrieved from http://parliament.go.th/library
- Udomwech, A., Jai-Aree, A., & Srisuantang, S. (2016, November). *Indigenous vegetables for food security in Sanamchaikhet organic agriculture community, Thailand.* Paper presented at ISSAAS 2016 International congress & General meeting on National and Global agricultural practices in Southeast Asia (Hanoi, Vietnam)
- United Nations. (2017). Sustainable development goals 17. Retrieved from https://sustainabledevelopment.un.org/sdgs.
- Wongthongdee, S. (2013). *Human resource development*. Bangkok, Thailand: V. Print (1991). [in Thai]