

KM for Solving Economic Problem and Poverty in Community: a Case from Thailand

Usa Sutthisakorn, Samchai Jirapatarasil

Abstract—This paper aims to present knowledge management for solving economic problem and poverty in Thai community. A community in Thailand is studied as a case study for master plan or social and economic plan which derived from the research people conducted by themselves in their community.

The result shows that community uses knowledge management in recording income and expense, analyzing their consumption, and then systematic planning of the production, distribution and consumption in the community. Besides, community enterprises, that people create as the by-products of master plan, can facilitate diverse economic activities which are able to reduce economic problem and poverty.

The knowledge that people gain from solving their problem through building community enterprises are both tacit and explicit knowledge. Four styles of knowledge conversion: socialization, externalization, combination and internalization, are used. Besides, knowledge sharing inside the organization, between organizations and its environment are found.

Keywords—knowledge management, community enterprise, Thailand.

I. INTRODUCTION

KNOWLEDGE management is a dynamic process through the interactions between explicit knowledge and tacit knowledge. The interaction between these two types of knowledge are called “knowledge conversion” of which there are four modes of knowledge conversion: socialization (from tacit knowledge to tacit knowledge), externalization (from tacit knowledge to explicit knowledge), combination (from explicit knowledge to explicit knowledge), and internalization (from explicit knowledge to tacit knowledge) [1].

Knowledge created through the SECI process can trigger a new spiral of knowledge management, expanding horizontally and vertically across organizations. Organizational knowledge management is a dynamic and never-ending process that upgrades itself continuously [2]. Knowledge is transferred beyond organizational boundaries; the interactive spiral process takes place both intra- and inter-organizationally [3][4].

U. Sutthisakorn is with Fundamental Studies Department, University of the Thai Chamber of Commerce, Thailand and also now a Ph.D candidate in Integrated Science Program, College of Interdisciplinary Studies, Thammasat University, 10200 Thailand. (e-mail: jumping100@hotmail.com).

S. Jirapatarasil is with Industrial Engineering Department, North Chiang-Mai University, Chiang-Mai, 50230 Thailand (e-mail: samchai@northcm.ac.th).

By this way, “knowledge management” emphasizes interaction between people. The principle can explain knowledge management in many levels, from interpersonal, in community, through inter-communities, where knowledge will be developed through “community of interaction”.

Poverty condition is still an important problem of Thailand. Although the government had launched the National Economic and Social Development Plans for the past 40 years. There are 7.9 million ultra poors, whose poverty transmitted from generation to generation. Particularly, after the economic crisis of 1993, the number of the poor has been increased to 22.3% [5].

For Prawes Wasi [6], he assumes that, in the past, we solved poverty without concerning to intellectual dimension and human potential, which are the instinctive abilities of human beings. Particularly, among the poors, there are learning process and knowledge management of the community for solving economic problem through self-reliance, with integral and sustainable way.

The research on people’s knowledge management by Rattana Tosakun [7] on the role of local wisdom in community’s knowledge management, found that sources of local knowledge in sufficiency economy production are from accumulation of old wisdom and new technology suitable to them. Thus, local wisdom is dynamically interacted with advance knowledge.

Kotchakorn Chinawong [8] reported the clearance of the people’s debt in Sam Kha sub-district, Mae Tha district, Lampang province, found that people have knowledge management stressing on tacit knowledge through (1) organizing savings group, (2) research process by accounting their income and expenses, (3) study tour in other communities, (4) training to raise consciousness for simple life, to decrease luxurious things, to increase knowledge needed for self-reliance in production.

From principles and the studies concerning local people’s knowledge management, we can see that knowledge management can develop people’s way of life. Thus, knowledge management is necessary, particularly at present, which has interaction and articulation between local and advance knowledge, including tacit and explicit knowledge. Therefore, this paper would like to investigate the way people create knowledge management for solving their economic problem and poverty in community.

II. METHODOLOGY

A. Method of study

A community case study of Wang-Ang sub-district, Nakon Si Thammarat province, in the south of Thailand, concerning the master plan people created to solve their economic problem in their community.

B. Method of community master planning

Community members will set their master plan together. It is the economic and social development plan of people in the community. This offers the opportunity for people to learn to be researcher, to plan for themselves which based on their need, cultural roots, economic and social capital, and their principle of self-reliance to further sustainable development [9]. Meanwhile the community workers or outsiders will have the new role of "facilitator" who offers facilities, to coordinate or catalyst for new knowledge that comes from learning process through the people research and their networks.

Actually, community master plan concerns with every dimension of problem in the community; which needs full participation and social networks of people in the community, including from outside the community, if there is any requirement.

The outstanding by-product of the community master plan is Community Enterprise which people generate when they discover their real "capital". It is the new management to add economic value in their community and it is the beginning stage to self-reliance.

The process used for gathering and analyzing data takes about 5-6 months. All data needed for collection are;

1. The background of the community such as history, map, number of member, education, occupation and etc.
2. Household information such as member of family, income, expense, debt. These data are collected in each household and also in village and sub-district levels.
3. Data on community potentiality which composed of the people with wisdoms in the community, natural resources, products of the community, people organization and indigenous knowledge, etc.
4. Problems in the community and people's ideas about the ways to solve these problems.
5. Data on the management of the community.

III. RESULTS

Knowledge management in community begins from collecting data on their consumption and analyzing their debt from household recording. These will make them knowing about their income and expense, which will lead to the ways to solve or decreasing their debt, planning for production, distribution and balancing the market inside and outside community: what they should produce for consumption in community or what they should produce for sale outside the

community.

From the community's household recording, the debt of all 2,110 households in the community is 69,443,320 baht, with the expense on food consumption 69.01 million baht per year. They try to decrease the expense by self-production replacing buying from outside the community.

From data on their consumption, the community paid yearly on rice 13.48 million baht, pork 10.51 million baht, fish 8.40 million baht, chicken 5.12 million baht, beef 4.25 million baht, fish sauce 2.14 million baht, and drinking water 3.43 million baht. To save the expense, which is also to increase the income, the community decides to build their community enterprises together, such as fish farm, pig farm, cow farm and rice farm. Some kinds of community enterprise that the community can not achieve, or has no potential to manage, they will buy from other community's enterprises nearby. These will decrease a lot of expense. Besides, income from the community enterprises will circulate within the community.

Furthermore, the community has to pay for chemical fertilizer 12.97 million baht per year. So, they decide to build community enterprise for natural fertilizer, too.

At last they set 4 strategic plans for holistic management of the community, which are (1) strategy for self-reliance, (2) strategy for capital management and welfare, (3) strategy for natural resource management and production management, (4) strategy for administrative management. From the strategy for self-reliance, there are two important plans: food production for self-reliance, and production of daily-use products. In food production for self-reliance, includes 6 community enterprises;

TABLE I
 STRATEGIC PLAN FOR HOLISTIC MANAGEMENT OF WANG-ANG COMMUNITY

Strategy	Plan	Project of community enterprises
Self-reliance	1. food production for self-reliance	1. fish 2. pork 3. cow 4. rice farms 5. drinking water 6. ingredients for making a curry
	2. production of daily-use products	1.household products (soap, detergent, shampoo) 2. natural fertilizer 3.handicrafts
Capital management and welfare	1. community capital management	1. village bank 2. production supporting fund 3.sub-district
	2. management for welfare and well-beings	1. health fund 2. educational fund 3. funeral fund 4. welfare fund 5. local medicine 6. sport ground
Natural resource management and production management	1. production and processing management	1. rubber factory 2. community market 3. community trading store 4. herbal products plant 5. rice seeds fund 6. central fruit market 7. eco-tourism
	2. natural resource development	1. comprehensive fish farming 2.oil palm plants 3. out-of-season fruit management
Administrative management	1.Administrative management	1. learning center 2. community agricultural academic center 3. fruit farming school 4. community information center

fish farm, pig farm, cow farm, rice farm, drinking water factory and production of ingredients for making curry. In production of daily-use products, there are 3 kinds of community enterprises: household products (soap, detergent, shampoo, etc.), natural fertilizer, and handicrafts.

Strategy for capital management and welfare includes two plans: (1) community capital management, and (2) management for welfare and well-beings. The first plan has 3 projects: (1) village bank, (2) production supporting fund, and (3) sub-district fund. The second plan includes 6 projects: (1) health fund, (2) educational fund, (3) funeral fund, (4) community welfare fund, (5) local medicine fund, and (6) sport ground.

Strategy for natural resource management and production management includes two plans: (1) production and processing management, and (2) natural resource development. The first plan includes (1) rubber factory, (2) community market, (3) community trading store, (4) herbal products project, (5) community rice seeds fund, (6) central fruit market, and (7) eco-tourism project; whereas the second plan includes (1) comprehensive fish farming, (2) oil palm plant, (3) out-of-season fruit management.

Strategy for administrative management includes: (1) learning center, (2) community agricultural academic center, (3) fruit farming school, (4) community information center.

In conclusion, the knowledge that people gain from solving their problem through building community enterprises are both tacit and explicit knowledge. Four styles of knowledge conversion: socialization, externalization, combination and internalization are used in the process.

IV. DISCUSSION

The knowledge that people gain from building community enterprises are both tacit knowledge and explicit knowledge. Furthermore, 4 styles of knowledge management in community enterprise are: socialization, externalization, combination and internalization, as follows;

1. Socialization is the process of converting new tacit knowledge through shared experiences in community, such as practicing for natural fertilizer, local rice farming and etc.
2. Externalization. Community articulates tacit knowledge into explicit knowledge and then translates the tacit knowledge into understandable forms through dialogue and reflection in community meetings and social network meeting.
3. Combination. Explicit knowledge from inside or outside the organization is collected, combined, edited or processed to form new knowledge. This new explicit knowledge is then disseminated among members of the organization. Then, explicit knowledge can be exchanged through community meeting, or documentary meetings and data analyzing and etc.
4. Internalization is the process of embodying explicit

knowledge into tacit knowledge by documentary study, or story telling from other community success or experiences, and then applying to community enterprise.

Thus, the knowledge management in community enterprise is created and expanded through interaction of people within community and inter-community. Knowledge sharing which is the exchange or transfer process of facts, opinions, ideas, principles, and models within and between organizations [10] are found. These will enhance the capacity of the people in local community to develop themselves and their organizations, expanding the spiral of knowledge through life long learning.

REFERENCES

- [1] H. Takeuchi, and I. Nonaka, *Hitotsubashi on knowledge management*. Singapore: Wiley, 2004, pp. 3-4; pp. 8-10, pp. 96-101.
- [2] I. Nonaka, "A dynamic theory of organizational knowledge creation," *Organizational Science*, vol. 5, 1994, pp. 14-37.
- [3] I. Nonaka, R. Toyama, and N. Konno, "SECI, ba and leadership: A unified model of dynamic knowledge creation," *Long Range Planning*, 33, 2000, pp. 5-34.
- [4] I. Nonaka and H. Takeuchi, *The knowledge creating company: How Japanese companies create the dynamics of innovation*. New York: New York University press, 1995.
- [5] M. Krongkaew, "Kan Phatthana Chonnabot doi kan Khajat Panha Khwam Yakjon (Rural Development by Poverty Eradication)." in L. Chulasai and M. Santikan (eds.), *Settakit Thai Adit lae Anakhot (Thai Economic: Past and Future)*. Bangkok: Chulalongkorn University Press, 2003, pp. 1-13.
- [6] P. Wasi, "Ngan Wijay Thongthin Pharakit Ku Chat (Local research and the Mission of Recovering the Nation)." in K. Chinawong (ed.), *Riangroy Thoy Khwamkit Ngan Wijay phuea Thongthin nai Phalawat Sangkhom Thai (Organizing Thoughts: Local Development Research in the Dynamic of Thai Society)*, Chiang Mai: Thailand Research Fund, 2004, pp. 8-34.
- [7] R. Tosakun, *Wisdom for Knowledge Management in Community*. Khon Kaen: Khon Kaen Press, 2005.
- [8] K. Chinawong (ed.), *Riangroy Thoy Khwamkit Ngan Wijay phuea Thongthin nai Phalawat Sangkhom Thai (Organizing Thoughts: Local Development Research in the Dynamic of Thai Society)*, Chiang Mai: Thailand Research Fund, 2004.
- [9] S. Phongphit, *Withi Khit Withi Tham Phaen Chiwit Setthakit Chumchon (Method of Thinking and Doing: Master Plan of Community Economic)*. Bangkok: Wisdom Press, 2003.
- [10] G. Szulanski, "Exploring internal stickiness: Impediments to the transfer of best practice within the firm". *Strategic Management Journal*, 17, 1996, pp.27-43.