

Developing a Knowledge Management Model for Self-Reliant Communities

Chalard Chantarasombat and Boonchom Srisa-ard
Faculty of Education, Mahasarakham University, Kantharawichai District,
Mahasarakham 44150, Thailand

Abstract: The goal of this study is the development of a Knowledge Management (KM) model for self-reliant communities in Northeast Thailand. The areas and focus groups included private and government organizations in the village of Ban Nam Kiang and Ban Lao Rat Phatthana located in the District of Wapi Pathum in the Province of Mahasarakham. The developed community organization KM model consisted of community preparation, building motivations, awareness, participation, visions, making plans/developing team potentials, implementing/plans in practice, work development and summary evaluation. Every organization group generated community knowledge managers and there were KM operations comprising of building, classifying, storing, implementing, sharing and evaluating knowledge. The focus groups showed their satisfaction with work operation as a whole at a high level and success factors of KM of the community organizations included enthusiasm about learning, leadership of the researcher and participants, participatory work climate, action learning and work mechanisms or community organization KM centers. The developed KM model was found to be successful and able to create expected outcomes because the model included the conceptual framework from analyzing and synthesizing concepts and research results of qualified individuals at an international level both in the part of KM and the part of techniques of development. KM centers are drivers of groups to meet and share learning of each village and to operate work to achieve established visions, missions, goals and purposes. Each center administrative committee followed up the progress in work development through the real monthly meeting forum and the realistic forum.

Key words: Knowledge model, knowledge management, self-reliant communities, Northeast Thailand, Mahasarakham

INTRODUCTION

Rapid changes in society, economy and technology are current trends of the modern world. Global competition utilizes knowledge and modern societies must incorporate knowledge with other factors such as funds, labor, natural resources and raw materials to increase added values to intellectual property. Fundamental and practical knowledge are applied to create goods, services and project developments. The development of innovative knowledge impacts directly on competitiveness and promote the strength of communities, organizations and institutions. Knowledge is a very important element and basis for national development (Patthamasiriwat, 2005). Modern economic system gives importance to the exchange and development of knowledge towards new innovations by applying advance technologies. The development of social economics changes the ratio between internal and external knowledge base level in a person. It is an essence and need to change tacit

knowledge into explicit knowledge. This concept therefore requires that all organizations in Thailand, private and government to acknowledge the importance of Knowledge Management or KM. Knowledge Management (KM) is the process with continuous cycles originating job development, human development and organization development by having knowledge. KM processes are very important instruments for national development. One of the most important factors in knowledge management is the KM process (Wichianpanya, 2005). Therefore, Thai society should support and promote knowledge producers and users to create added value and competitiveness with the social goal of having a Thai society that is rich in value, pleasing, peaceful, just and support each other.

The purpose of this research include: to develop a KM model for self-reliant communities, to examine satisfaction of the self reliant communities with KM operation and to examine the factors of success in KM of self-reliant communities.

MATERIALS AND METHODS

The study was divided into 3 phases: document analysis of related literature and determine the conceptual framework which include: research into the theories and concepts of knowledge and KM, studied concepts involving development of models and research related to development of models and research into the conceptual framework in terms of the scope of important activities of the organizations in KM, KM cycle and factors affecting KM.

Selection of focused research areas which include villages and self-reliant communities.

Two villages in the focus areas include the village of Ban Nam Kiang and Ban Lao Rat Phatthana. The following requirements were considered in the selection of these villages.

In the case of the village of Ban Nam Kiang, Sub-District of Na Kha, District of Wapi Pathum in the Province of Mahasarakham. It was a village with various community organization groups and continuous development activities but KM had not yet been implemented together with work development.

In the case of the village of Ban Lao Rat Phatthana, Sub-District of Pracha Phatthana, District of Wapi Pathum in the Province of Mahasarakham. It was a village with various community organization groups had activities under development and KM had not yet been implemented together with work development.

Eight community organization groups: agricultural cooperative group, mulberry and silk raising group, bio-fertilizer group, thai traditional massage group, toxic-free rice production group, herbal thai noodles group, cultural conservation group and savings group.

The requirements for selecting these organizations include establishment, size of the organization and activity types. Establishment included two types, established by the state and established by the community. Size of the organizations included large, medium and small organizations. Activity types of the groups varied which included cooperative groups, occupation groups and local wisdom groups.

RESULTS

Developing the KM model: Development of the KM model was performed in two stages. Constructed tentative model of KM for self-reliant communities based on the research conceptual framework in terms of the scope of major activities for KM according to the concepts of Nonaka and Takeuchi, Vicharn Panich and Wiig's KM process for developing tentative KM model for self-reliant

communities. The tentative KM model was submitted to 5 experts for consideration of appropriateness, feasibility in practice, congruence with KM plans and group development plans. Tested the tentative KM model for self-reliant communities and improved it.

After discussing and summarizing KM outcomes, all the community organizations continued with KM which were in their interest and desired to develop their work by beginning from activity 11: clearly summarizing and reviewing activity plans for KM development. This allowed easy operation of KM in community organizations together with activities for group development. They upgraded the body of knowledge and KM in the issues they were interested in, based on potentials of their own organizations, except activities 16-18 which were the part of the KM center at the village level and had to operate continuously to create continuity (Fig. 1).

Testing the developed KM model for self-reliant communities with community organization groups:

All the organizations could create community knowledge managers in these 4 groups: facilitators, group work performers, record keepers and coordinators. Learning was created together with performance and knowledge obtained from problems, raising questions and solving problems by actual practices until the appropriate body of knowledge occurred. The learning process occurred consisting of building, classifying, storing, implementing, sharing and evaluating knowledge. The 2-4 sets of knowledge were obtained through the KM process of each group. There occurred KM centers to be drivers of the group to meet and share learning in each village. There were web sites of KM centers in the Internet system as sources of disseminating KM outcomes and as sources of the sharing of learning.

Satisfaction: The community organization groups were satisfied with KM operation for self-reliant communities as a whole at a high level. When classified according to the village level, the following were found: The self-reliant community village of Ban Nam Kiang and every group had satisfaction with KM operation at a medium level and the self-reliant community village of Ban Lao Rat Phatthana and every group had satisfaction with KM operation at a high level. The self-reliant communities had satisfaction with KM as a whole at a high level. When classified into each village, it was found that 3 community organization groups at Ban Nam Kiang had satisfaction with KM operation at a high level and 1 group at a medium level because the community leaders who were KM center heads had not yet realized the importance of

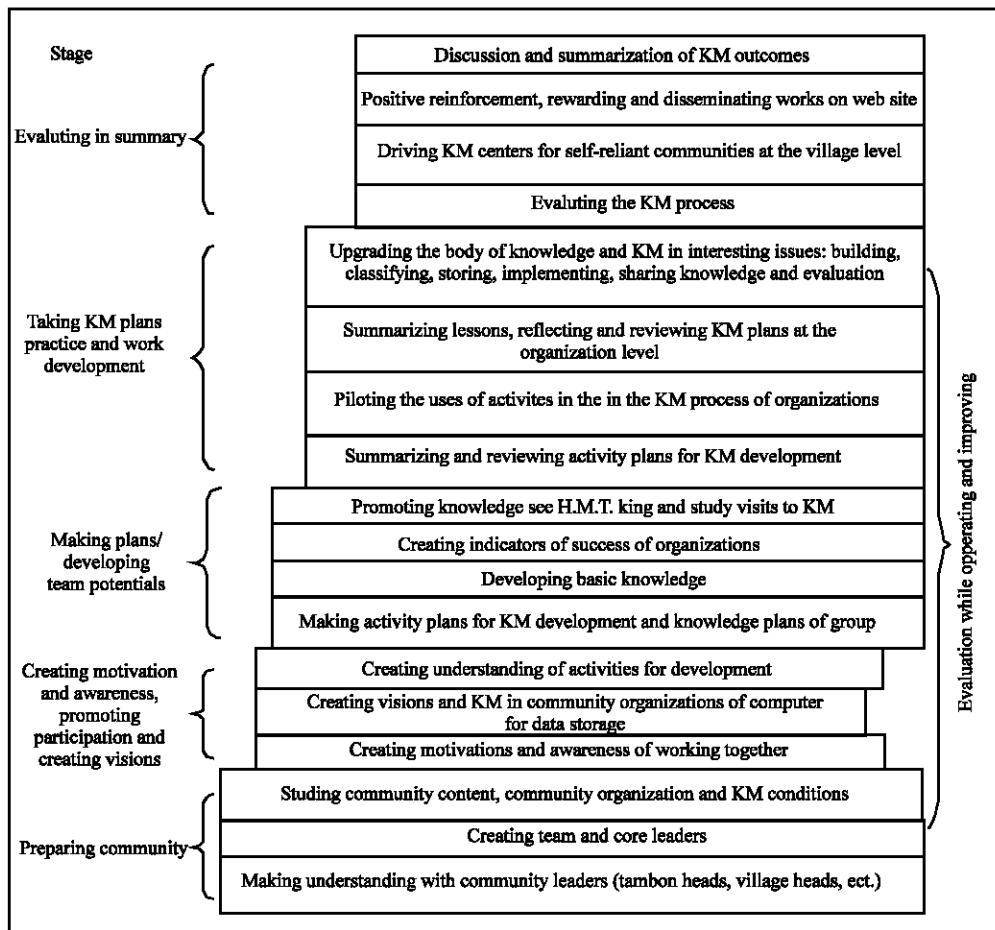


Fig. 1: Knowledge management model for self-reliant communities

group formation and participatory work performance and because they did not participate in activities continuously. However, at Ban Lao Rat Phatthana, all the community organization groups had satisfaction with KM operation at a high level because the community leaders were interested in and had participatory administration, distributed work for all members to do according to the functional roles of KM centers, leading to operation to achieve the goals, visions and missions. The assessment of KM framework utilizes the three criteria's as guidelines to establish a basis for assessing the value and evaluation (Vital, 2005).

For the leaders in KM for self-reliant communities when this research was conducted during the last phase, participants intended to work for the public to create success according to their functional roles, expressed their sense of belonging to activities and plans/work and sought more cooperation from individuals and organizations both in and outside their communities. Providing opportunities for participation from the beginning. Organizational leaders have prestige and high

influences on the organization. Therefore, if the leader built understanding and cooperatively determined assumptions on participating together, it would affect working together, satisfaction with working and having good work climate and would push work to be successful.

Success factors:

- Leadership of the researcher as the participant, learner, instructor, manager and reinforcement
- Opportunities for participants to have participation from the beginning including: thinking together, planning together, action together, research together, thinking together and being responsible for conducting research together could be a significant factor of being network owners; being members with initiation, visions, participatory working and better management than at present. This factor created continuity and commitment to perform work by self initiative and reliability within their organizational body of knowledge and more self-reliance could occur

- Learning by practicing, improving and developing work, raising new questions and implementing in practices to achieve the goals could be caused by Participatory Action Research (PAR), which could create interactions with one another in their own group and other groups in the village
- People and self-reliant communities were enthusiastic to learn. For work performance in their own groups and sharing learning at the group, village and cross-village levels, they tried to use tacit knowledge through practice and testing until they were confident. There were summaries of lessons and record keeping as explicit documents. Then the meaningful body of knowledge of the community organizations occurred
- There were supporting mechanisms of KM centers of community organizations, in partnership with Sub-District Administrative Organizations. These Sub-District organizations allotted budgets to support activities based on the plans/projects and their representatives participated in the research as participants

For the results of testing the KM model for self-reliant communities, this model was found to be successful and able to create expected outcomes. This was because in developing the model the researcher used the conceptual framework from analyzing and synthesizing concepts and research results of qualified individuals at an international level both in the part of KM and the part of techniques of development. Integration into techniques of development included, The use of principles of working of H.M. the King of Thailand involving self-reliance, participation and knowing, love and unity. These were community preparation, after-action recording, queries and knowledge sharing both on real forum and realistic forum. There were also mechanisms supporting KM: village KM centers as centers for operational sources and as websites, causing integrated KM for self-reliant communities.

Every organization had 4 groups of knowledge managers, facilitators, practitioners, note takers and network managers. Building the managerial team began mainly from individuals (Nonaka and Takeuchi, 1995). Members of each organization understood their own functions in KM. The real knowledge manager was the practitioner, the medium-level administrators were interpreters who recorded and documented knowledge. The group of knowledge managers determined goals, created the climate to help in sharing knowledge and extracted knowledge to create values (Panich, 2005).

There occurred learning together with practices. Sources of knowledge were problems, queries, problem solving by real practices until the proper body of knowledge emerged. KM based on these issues consisted of building, classifying, storing, implementing and sharing knowledge and evaluation. The principles of working of H.M. King Bhumibol Adulyadej considers that for knowing, love and unity, people and the groups of people must know first before beginning to do anything: factors, problems and how to solve those problems. We must have love to act in solving those problems. Also, we must have unity in practice. We should always remember that nobody can work alone. We must work collaboratively and spiritedly as an organization or staff to have power to solve problems successfully. An individual's learning is not sufficient to make a task successful because others individuals, organizations and institutes are involved and only learning together in practice will bring success by gathering sets of knowledge of each group of organizations. After-Action Recording (AAR) is regarded as important learning in extraction of proper knowledge and findings of individuals or organizations (Plainoi, 2003). KM success that is derived from observations generated through a elongated study of KM in an engineering organization and KM success factors which were modified by the application of these observations and success factors in various projects (Murray and Lorne, 2006).

CONCLUSION

Learning by practicing is a way of life. Experience in the new body of knowledge emerges which can applied in practical situations. There occurred connection and relationships between individuals and groups of organizations. Integrated KM and participatory research emerged. Building knowledge in accordance with Thai society promoted self-reliance, developed learning innovations toward which they had aptitudes and could build the body of knowledge for solving problems and living joyfully in society. The common awareness of working for the common good in both benefits and losses as arisen to the public caused volunteer groups to participate in working for the public and the network of community organizations (Thinnalak, 2006). Community organizations must be: Ready to adopt the new body of knowledge and techniques and methods of working together with the community, use the participatory action research process in working together with the community, spend more time working in the work area, must accept all the mistakes in community development operation in the

past and must be ready to open to receive recommendation from field research team parties for improvement, reduce obstinacy in the organization and agency. Use the principles of integrated work and must mainly realize community benefits and participate more in learning about the project operation together with research team parties (Chantarasombat, 2004).

KM centers followed up the progress of self-reliant communities to create continuity and relationships among each another. There were web sites and utilization of the Internet system as sources of seeing knowledge and disseminating KM works and as sources of storing various kinds of knowledge and sharing knowledge of community people. KM centers are drivers of groups to meet and exchange knowledge of each village and operation to achieve established visions, missions, goals and purposes. Each center's administrative committee followed up the progress in work development through monthly meeting forums. Web sites act as sources of disseminating KM works and as sources of storing knowledge and sharing learning. KM must rely on utilization of information technology and communication to support instruments or technology to use in KM. The framework of assessing Knowledge Management System (KMS) success models uses three criteria: how well the model fits actual KMS success factors, the degree to which the model has a theoretical foundation and if the model can be used for both types of KMS (Murray and Lorne, 2005).

SUGGESTIONS AND RECOMMENDATIONS

To obtain full benefits, it is necessary to operate all the 5 stages and 18 major activities. Self-reliant communities who already have KM operation can begin from Activity 11. KM operation of organizations may begin with activities for group development which are not quite difficult, or may upgrade the body of knowledge. Activities 16-18 are a part which KM centers at the village level have to operate thoroughly to create continuity. The team of participants regarded as actual knowledge managers including facilitators, group practitioners, note takers and coordinators should make preparations in academic format: participatory planning, community master plans, learning together with practices in utilizing the Internet. The KM centers are the mechanisms driving the team of participants to share knowledge, with summaries and records of follow-up activities from real and support and promote self-reliant communities to use community plans for determining the direction of community development. There must be follow-up, evaluation and success measurements.

Learning processes should be examined together with practices of self-reliant communities. There should be more summaries, narrations, transcription of lessons, knowledge-sharing and note-taking. Also, time for conducting research should be longer.

There should be research and development for capacity development of community leaders, organization group leaders and local knowledge managers to be effective in KM to generate knowledge for healthy and joyful villages. There should also be research and development for upgrading KM centers and community organization networks.

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