Creating efficient collaboration for knowledge creation in area-based rural development

Chartchai Na Chiangmai

School of Human Resource Development, National Institute of Development Administration, Bangkok 10240, Thailand

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ABSTRACT

This paper describes how collaboration for knowledge creation in an area-based sufficiency rural development in Thailand works in coping with complex rural problems and needs. Based on extensive field observation in the implementation of the Royal Initiatives Discovery Institute's projects in two provinces over the past two years, the writer contends that the existing ideas of collaboration in community development based on a concept of top-down technology transfer is not helpful enough to appreciate the collaboration for the bottom-up knowledge creation in an area-based sufficiency development. New sets of local knowledge built up through development collaborative actions are described. Structural and organizational constraints on collaborative actions to facilitate new local knowledge building are discussed. The paper proposes a redesign of the collaborative process to increase information flow and enhance the capacity of development collaborators in their facilitation of bottom-up knowledge creation in an area-based sufficiency rural development. A social learning process should be used to improve collaboration through a contextual based "link and learn" collaborative process of knowledge creation. A training scheme to develop three management competencies of collaborative teams is suggested.

Introduction

Rural development refers broadly to the economic and social development of rural communities through the participation of those directly affected. The idea is that the capacity of the rural people to help themselves is motivated and facilitated by the intervention of external expertise organizations and individuals. Thus, successful rural development needs the involvement of people and organizations from different sectors and communal organizations collaborating to help facilitate learning and create knowledge for local people. The primary purpose of collaboration between public officials and village leaders

and activity group leaders in rural development is to transfer technologies and deliver tangible inputs such as training and education, construction of roads, water reservoirs, and other social infrastructures.

Contrary to conventional rural development collaboration, collaboration has been sporadic in an area-based rural development approach in Thailand that involves people and organizations from different sectors with different motives and different levels of administration in development. Furthermore, collaboration for the purpose of facilitating local people and activity groups in knowledge application and practical knowledge creation is in an embryonic state both in practice and theory. As learning and sharing knowledge with other organizations in the government and business ecology and community are increasingly important for human resource development, multiple development collaborators will have great

E-mail address: cn4474@gmail.com.

difficulty in facilitating learning and building knowledge in and between organizations in which information and knowledge as well as power and status are distributed asymmetrically. As competitiveness of an organization is more likely to be determined by the speed of learning, we need more knowledge that can help make development collaboration, as a self-managing organization, in rural villages faster and more effective in a world of increasing uncertainties.

This paper discusses development collaboration for creating practical knowledge to solve development problems in rural communities. It considers how different development partners work together to support activity groups in rural villages to create practical knowledge for economic and social development. Structural and organizational constraints to effective collaboration are identified. The paper proposes a redesign of collaborative process to increase information flow and enhance capacity of development collaborators in facilitation of bottom-up knowledge creation in an area-based sufficiency development. A set of three shared management competencies of development collaborators from different sectors and different levels of administration is suggested to build collaborative advantage.

The data and information used in this paper derive mainly from an extensive participatory observation of collaborative processes for development in rural villages using a Royal Initiatives Discovery Institute (RIDI) approach to sufficiency development in two provinces—Nan and Udon Thani—over the past two years. The writer contends that development collaboration should be conceived as a dynamic and self-managing social organization that should be designed to fit particular development issues, areas, and times. The development belief and mindset of government officers, local authority officers, and community leaders that are based upon conventional rural development approaches and traditional public administration are not leading to effective development collaboration under the current fluid and volatile nature of local problems.

Literature Review

Rural development is the development of human resource in a broader sense covering development of person, organization, and community (McLean & McLean, 2001; Na Chiangmai, 2005). Human resource development in this paper refers to a process of improving people's ability to find and choose better choices for change. In this sense, management of rural development is thus a process of setting and attainment of human resource development goals. A dynamic factor is thus ability in knowledge creation in a process of rural development. Since rural development issues are divergent problems that need interdisciplinary perspectives and knowledge and cross-functional judgments and decisions, problem-based action learning mode and learning-by-doing are suitable for supporting collaborative learning among public officials, local authorities, and community groups and stakeholders. These learning processes also facilitate a shift in values and beliefs or culture of individuals and organizations working together (Kotler & Caslione, 2009).

Collaboration is an idea and term used in many fields of study and practices such as business performance management, higher education administration, city governance, knowledge management, knowledge creation, and community development (Busi & Bititci, 2006; Hirose, 2011; Huxham, 1996; Rae, Taylor, & Roberts, 2006; Vigoda, 2002). There are enormous varieties in definition of collaboration, in setting for collaboration, in process of collaboration and in ideology for collaboration. Collaboration can be between individuals toward a common purpose and can be collaboration between organizations.

Nonaka and Takeuchi (1995, 2011) describe why collaboration for knowledge management and knowledge creation in business organizations is a complex process and very difficult to achieve. In a case study of collaboration for knowledge creation in a city, Hirose (2011) contends that successful collaboration needs at least three factors: (1) shared physical and mental foundations, (2) a knowledge-creating process and social ecosystem and ties, and (3) distributed leaders with shared values and intrinsic motivations. Collaboration creates new knowledge in its process of achieving a new social value. Barr and Huxham (1996) studied collaboration in transferring expertise and technologies to support community development in the UK. They admitted that collaboration at the community level is a very difficult process. While successful collaboration between government organizations in community development is more difficult to achieve, these difficulties are aggravated in collaborations involving both organizations from different sectors and community organizations and individuals.

Collaboration is defined in this paper as a process of people and organizations working together to achieve a collective set of rural development goals by sharing and creating knowledge. With regard to the task environment of collaboration, collaboration in building up knowledge for development of a rural community is more difficult than that taking place in complex organizations where environments for collaboration are rather stable and required by the organization authority. One of the reasons why collaboration in rural development is not easy is because the stakeholders of rural villages in Thailand today are more isolated and detached from each other than in the past. In a recent ethnographic study, Walker (2012) argues that social relationships, networks, and families in rural villages have become weaker as the rural villages have urbanized and disaggregated and villagers have depended more on government development projects. As a result, rural residents are increasingly isolated and detached from each other, from the local government, and from the community.

Collaboration for Area-based Sufficiency Development

In Thailand, area-based integrated rural development has been undertaken in line with the philosophy of "Sufficiency Economy" bestowed to the Thai people by His Majesty the King Rama IX. The philosophy stipulates a more balanced, holistic, and sustainable development approach. The approach is based on three decision-making principles, that is, moderation, reasonableness, and resilience to

external changes. Furthermore, development activities have to be conducted with proper adherence to appropriate knowledge and moral values. This philosophy emphasizes the importance of responsible consumption and the diversification of household-level production as well as appropriate conduct at individual, community, business, and government levels. The philosophy's "middle path" approach strongly reinforces a people-centered and sustainable approach towards human development (Na Chiangmai, 2005; UNDP, 2007).

The area-based integrated sufficiency development places much emphasis on the conditions that local people know, on seeing their own problems, and that they are willing to help themselves in solving their own problems with only the assistance of external organizations that they need. Then, external public officials work together with village organizations and people to build practical knowledge that can solve local problems and lead to sustainable development. The success of this rural development approach depends on the speed of knowledge building from below to solve local problems. The ultimate goal of sufficiency development is to shift the people's mindset and reinforce their confidence in self-help, self-reliance, and building their ability to work and learn together with public and private organizations as well as civil society organizations.

For the auspicious occasion of the sixtieth anniversary of His Majesty King Rama IX's accession to the throne, the Royal Initiatives Discovery Institute (RIDI) was founded in 2009 to disseminate accurate understanding and appropriate applications of His Majesty's Royal Development Principles and Initiatives in pursuing sufficiency development. Its mission is to transfer practical knowledge derived from over three thousand Royal Initiative projects employing a people-centered development approach to community organizations, local authorities, government agencies, business organizations, and activity groups that are in need and to provide the necessary technical support to knowledge management and knowledge sharing among communities (Royal Initiatives Discovery Institute, 2010). Since 2010, RIDI has implemented area-based development projects using a sufficiency development philosophy in the two provinces of Nan and Udon Thani. With respect to relationships with the government's rural development projects, RIDI seeks to bridge administrative loopholes resulting from relatively centralized administration, fragmented functional government departments, and poor integration of development functions among government offices at the provincial and district levels.

The RIDI approach to development focuses on how to build the efficiency of the development collaboration as an area-based learning platform to help the poor to help themselves. In this regard, the management capability of development collaboration, as a self-managing unit, in the promotion and facilitation of a holistic people-centered development of local communities is very important. The team of development collaborators consists of two clusters of organizations and individuals from outside and inside a village. The first consists of government officials from concerned central departments, provincial and district offices, local authority officials, RIDI development workers, university lecturers, nongovernment organization workers, and businessmen. The second includes village development committee members, village development volunteers, local intellectuals, and members of village activity groups.

In line with the implementation of Royal Development Initiative projects elsewhere, the setting of development goals for a rural community is an important first step. A development collaborative team working in close cooperation with the village's development committee and village groups identifies a precise and tangible development goal to be achieved in the next two to three years. Similar to successful complex organizations, having a common purpose and goals that are firmly committed to by the leaders, collaborators, and village groups is a powerful driving force in mobilizing ideas and efforts as well as internal and external resources in striving to achieve the targeted development goals. The ability of rural villages in the acquisition of information and practical knowledge needs to be substantially improved so that they can correctly perceive and understand the complexities and uncertainties of the global commodity markets and logistics that have direct effects on the costs of agricultural products and services and hence their income.

Collaborative Process for Practical Knowledge Creation

According to the RIDI approach to rural development, a process of collaboration for local knowledge creation consists of three consecutive technical steps of interactive action.

1) The primary step is to increase the ability of the local people to understand their own problems, needs, and opportunities in a more systematic manner, and to increase awareness of possible options for sustainable living.

2) The second step is to provide access to needed and desired technology and assistance in the form of training and education.

3) The third step is to assist the application of knowledge, both technical and local, to improve quality of life and to generate new local knowledge or practical wisdom.

These three steps are crucial to the effectiveness of development collaboration and the success of people-centered and knowledge-based development. Not only should the second step should be done to provide information and knowledge at the desire of the local people, but the third should be steered to enable a fusion of external knowledge with local knowledge to bring about new local knowledge suitable for sustainable living.

New local technical knowledge that has been developed in villages undertaking the RIDI development approach includes both technical knowledge and knowledge in management of group activities. The following two examples highlight the subject matter knowledge and group management knowledge that have been created through

collaborative learning processes in Baan Kok Lam, Udon Thani province—a village that has adopted the RIDI development approach, over the past 2 years.

1. Knowledge in organic rice farming

Like millions of Thai farmers, rice farmers in Baan Kok Lam took up a method of chemical farming. The chemical method reduced their finances and way of life. A lot of money had to be committed to chemical substances to kill mealybugs and other insects, while fertilizer was always needed as the soil kept losing its fertility. Consequently, not much profit remained after selling the rice, while the pesticides worsened the environment and people's health in the village. Through rounds of talks with the village development collaborators, especially the Rice Department officials, a group of 44 rice farmers decided to attend in-the-field training and an action learning program on organic farming organized by a nonprofit organization in Suphanburi province for seven days in early 2013. In the 2013 rainy season, 41 farmers decided to switch to organic rice farming covering about 254 rai of land or 22 per cent of the village's total rice farm land. Each rai produced 600 −635 kg of paddy, with a productivity that equaled chemical farming though the rice price was slightly higher as most organic rice can be sold as premium product. What made a significant difference was the cost. On average, the cost of growing organic rice in Baan Kok Lam in the 2013 rainy season was about THB 4,000 per rai less than that of chemical farming. Keeping the cost of production low and getting a higher selling price are two important factors in rice farming. The most important matter to the farmers was learning a new way of farming and building their own practical knowledge of organic farming. Among other things, they have learned how to produce their own organic fertilizers using local raw materials and to restrain unwanted insects through natural biological control and the use of local herbs. It is expected that the number of farmers converting to organic rice farming in the 2014 season will increase.

2. Knowledge in water resource management

After about 3 years of working together on a trial and error basis with provincial irrigation officers, agricultural extension workers, and RIDI facilitators together with village development volunteers, three water user groups in Baan Kok Lam in 2013 were able to agree upon an annual water distribution plan, using weekly recorded data of the water supply and aerial photos, to respond to the seasonal needs of farmers with different farm locations and amounts of cultivable land. They learned together how to rebuild water stop blocks to keep as much water in the reservoir as possible in the dry season, how to readjust feeding water pipes to distribute water efficiently to farm lands that are far away from the main water pipes, and how to keep precious water in each plot of land through simple irrigation. They developed an adaptive approach to knowledge in water management to fit the physical, biological, and socio-economic contexts of their villages. In 2013, the water user groups received several groups of visitors from other villages and water experts from the Irrigation Department who came to learn about the Baan Kok Lam system of land management and water use based on knowledge and practical ideas and to exchange information.

Structural and Organizational Constraints to Collaboration for Knowledge Creation

The practical knowledge creating process through collaborative actions in Baan Kok Lam and other villages using the RIDI development approach is encouraging. The practical knowledge was created through a continuous dialogue between tacit and explicit knowledge. Four patterns of interaction involving tacit and explicit knowledge, that is, socialization, externalization, combination, and internalization were detected (Nonaka & Takeuchi, 1995). While individual farmers developed new knowledge, activity groups played a critical role in articulating and amplifying that knowledge. It involved adaptive knowledge for the improvement of development outputs and organizational capabilities through better know-how and the use and distribution of individual and collective knowledge resources. However, the development collaborators faced various challenges in transferring external practical knowledge for development into community practices for enhancing efficient investments in agriculture and natural resource management in order to attain local community development outcomes. The speed of practical knowledge building through development collaborations to solve local problems was not fast enough. Development collaboration, as a learning platform and knowledge management tool, has not yet functioned well enough in facilitating local practical knowledge building and a change in attitude from reliance on outside development assistance to more self-reliance.

Field observation data revealed a number of challenges to efficient collaboration in development. Structural and cultural as well as organizational factors that impede the efficiency of collaboration in knowledge creation include: leadership, rural development values, adequate supply of information and technical knowledge, motivation and incentives, communication, trust, political and institutional support, contextual collaborative processes, skills, and behavior. A discussion of all these factors is beyond the limit of this paper. This paper chooses to discuss the important structural and organizational constraints hindering collaborative actions for knowledge creation and suggests a set of required competencies for development collaborators.

The Thai social patronage system and the centralized administration of provinces with its tight control system over local authority administration are two main structural constraints to collaboration for knowledge building in rural villages. The administration process for rural development has made the government officials and local authority officials unfamiliar with a development process emphasizing horizontal flow of shared information and interactive learning processes through actions in which everyone is equal. They are at higher levels of social status and some of them kept their social distance from the people. Sink (1996) also pointed out obstacles to effective collaboration in

community development in the United Kingdom in terms of differences in social status and information. The administration staff has been working under an administrative culture intended primarily to handle routine administrative works and public services delivery. Differences in information and level of technical skills possess between these two groups of people have in effect slowed down the processes of knowledge identification, sharing and development in the village. Shared values on sufficiency development and shared skills of knowledge application and creation have thus developed rather slowly among and between local people, village development volunteers, and local authority and district officials.

"Link and Learn" Knowledge Creating Process and Competency Development

The writer proposes that effective capacity building of development collaborators should be done using the concepts of organizational development and human resource development. To make development collaboration more effective, the communication process and information flow in community development should be designed to increase dynamism. Besides other priorities, the following two organizational development interventions should be considered:

1) Increase the bottom-up flow of communication and persuasive power while decreasing the top-down flow of command and control. In other words, increase the level of self-regulating ability in development collaboration.

2) Expansion of the space of cross-organization learning and horizontal transfer of knowledge and information via interactive learning together through actions.

These organizational interventions can be practically implemented through a "link and learn" knowledge creating process together with management of training and development programs to build required competencies. A knowledge-creation work process is needed to increase the speed of learning of the development collaborators to catch up with the speed of changes in the task environment of rural development (Na Chiangmai, 2012).

This organizational and human resource development strategy requires an imperative management condition that decision-making in development-oriented activities must be made based on a structure of linkage of practical knowledge and information that concerned groups and organizations possess. Such decision-making is a learning platform in which development collaborators and villagers as well as all concerned parties share ideas, experiences, and lessons gained from implementing development activities. Repetitive rounds of collective decisions based on linkages of practical knowledge and best practices in development will gradually strengthen the capabilities of the involved collaborators in facilitating knowledge creation and facilitate a shift in the mindset of people in rural communities toward sustainable development. This collaborative process is indeed a social learning process through which a sense of belonging, work commitment, and trust will gradually develop among the development collaborators.

To make knowledge creation work better under the "link and learn" strategy, development collaborators from different functional organizations and administrative tiers and community groups have to be equipped with three sets of organizational competencies in facilitation of knowledge creation:

1) Promotion of productive collaboration. This set of competency consists of important management skills, that is, effective communication, team learning and coaching.

2) Development of knowledge-based collaborative. Public officials, development workers, and village development volunteers should improve their skills in critical thinking, project planning, problem solving, and knowledge creation and management.

3) Articulation of new local knowledge creation. Development collaborators, as a team, should have the ability to act as a knowledge-linking pin and learning facilitator in forming, shaping, and channeling from-the-ground-up initiatives for social and economic development of rural communities. In so doing, they should be motivated to have higher learning intentions and achievements. They have to possess good skills in self-regulated learning and in the facilitation of authentic learning as well as after-action review and embedded formative assessment (William, 2011). They should be inspired to develop the sufficiency development philosophy's purpose and principles together with local people in pursuing new practical knowledge for sustainable living.

Concluding Remarks

Continuous improvement of development collaborators' management capability in facilitating knowledge creation in an area-based sufficiency development has to be implemented in a systematic manner. Further studies should empirically identify the relationships of structural and behavioral factors that enhance effective collaboration in knowledge creation with regard to increasing the fast flow of new ideas and technical knowledge among collaborators and encouraging cross-functional experiential learning and innovative thinking. A question concerning methodology in collaboration for sufficiency development is how and to what extent we can transfer lessons gained from the RIDI development approach to different areas to enrich our understanding and improvement of collaboration for knowledge creation and capacity building of development collaborators in rural communities elsewhere. In this light, an overall research question is how best to capture, structure, store, and distribute knowledge of collaboration to develop knowledge creation in villages adopting the RIDI sufficiency development approach.

Conflict of Interest

There is no conflict of interest.

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