

Community Based Action Research Training to Strengthen Training Curriculum and Competency for University Researchers on the Aspect of Agricultural Community Development

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Abstract: Community based action research has been used as a tool for development of agricultural communities. However, this alternative type of the research is not yet well known and practiced, and is not widely taught in universities. Therefore most of the new generation researchers lack skills and knowledge on community research because in school they were taught mainly conventional research procedure. This research aims to identify competency of young community researchers and formulate training curriculum to develop new generation of community researchers from different universities in the Northeast region of Thailand. The training aims to enable them to use community research as a tool to develop agricultural communities. The research process had two phases: Identifying competency; and formulating a training curriculum to develop competency of new community researchers. Qualitative research approach was employed -12 group discussions with experts were conducted and data was subjected to content analysis and conclusion. The study found two sets of competencies, namely core competency consisting of six competencies and technical competency which also consisted of six competencies. The training curriculum was divided into four content sets: 1) basic knowledge on community research; 2) research project proposal development; 3) techniques and tools for data collection; and, 4) analysis and synthesis of the data and report writing of community research respectively. The formulated curriculum will be implemented and evaluated in future.

Key words: Community based action research, Training curriculum development, Competency development, University researchers, Agricultural community development.

INTRODUCTION

In the past, projects for rural agricultural community development in Thailand emphasized only increment of agricultural yield and incomes of the farmers but neglected the importance of learning processes that led to self-reliance of the farmers. Agricultural community development of Thai official organizations was conducted using top-down approach (Nuntapanich, 2005). However, at present the projects of agricultural community development has been conducted using bottom-up approach, emphasizing participation of local people and establishing community organizations for participatory thinking, planning, decision making, and operations (Nuntapanich, 2006 and 2007).

Many researches have been conducted regarding operations of rural agricultural community development programs. However, community based action research (Stringer, 1999) or community research, an alternative research methodology, is not well known and has not been taught in universities. New graduates lack knowledge and skills in community research because only conventional research procedures were taught to them. While there is interest in using research as a tool for community development, the researchers have not been able to apply the philosophy, principle, thought, basic belief, process and methodology of community research which is different from general conventional research. Community research is a paradigm, methodology and method (Sarobol, 2009) for community development that uses learning processes and people's participation for empowerment.

The Office of the Higher Education Commission of the Ministry of Education have a functional role to support and develop new researchers from the universities in the Northeast region of Thailand so they would conduct the researches for rural agricultural community development. They would employ the community

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research process which the research network started since 2003.

Currently, many research reports show that new researchers lack knowledge, skills and understanding in community research. Hence, these reports could not be used for rural agricultural community development.

Based on this, it is important to develop competency of new researchers that can conduct community research efficiently. Therefore, the aims of this study are to determine the necessary competency of community researchers and to formulate a training curriculum to develop the necessary competency to conduct community researches.

Methodology of Research:

This study employed a qualitative research approach divided into two phases as follows:

Phase 1:

The study was conducted to find out and elucidate the necessary competency (NC) of community researchers (CR). In this phase, five group discussions with experts was conducted to determine the necessary competency of community researchers and the level of competency to define the training curriculum for new community researchers from the different universities in the Northeast region of Thailand. Matrix ranking was used to classify the sets of necessary competency for community researchers based on the method of Khongkhasawat (2006).

Phase 2:

The study was conducted to formulate the training curriculum to develop the competency of the researchers in the universities located in the Northeast region of Thailand. In this phase, seven group discussion with experts was conducted to formulate the training curriculum and learning process design.

The data was subjected to content analysis. These were validated with the experts before using them as the foundation data and content for the next group discussion activity.

Results of Research:

A. Necessary Competency for Community Researcher:

The initial desirable characteristics of community researchers consist of four aspects, namely thinking and attitude, capability in field operation, data management and capability in community research methodology. Each initial desirable characteristic is composed of minor traits as shown in Figure 1.

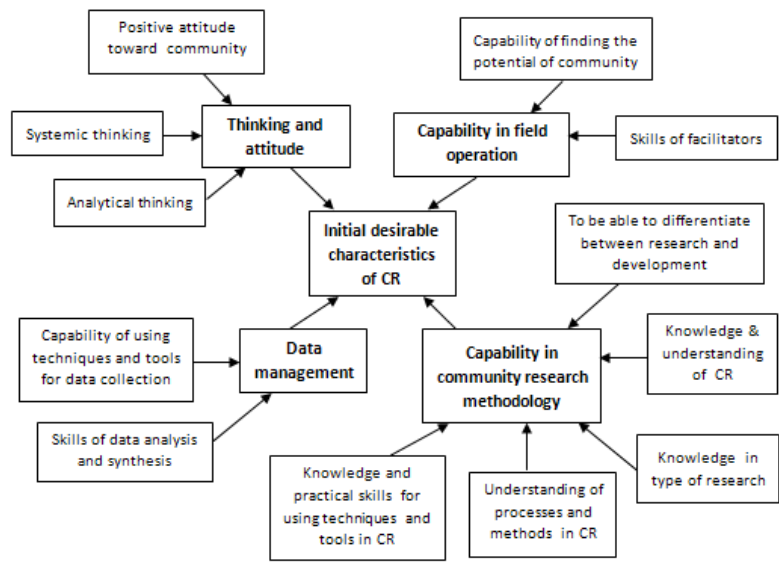


Fig. 1: Initial desirable characteristics of community researchers (CR).

The initial desirable characteristics were used to modify and to identify the necessary core and technical competencies of CR, as shown in Table 1. These 2 sets were defined under the competency descriptions and each of competency descriptions was fixed as 5-level rating scale for monitoring and progress assessment in the competency development of community researchers. The details for each core competency, its description and levels are discussed below.

Table 1: Necessary competency (NC) of community researchers (CR).

Set of competency	Necessary competency (NC)
1. Core competencies (CC)	1.1 Knowledge and understanding of CR philosophy 1.2 Positive attitude toward community 1.3 Systemic thinking competency 1.4 Analytical thinking competency 1.5 Skills of data analysis and synthesis 1.6 Capability of differentiating between research and Development
2. Technical competencies (TC)	2.1 Knowledge in type of research 2.2 Capability of finding the potential of community 2.3 Understanding of processes and methods in CR 2.4 Skills of facilitators 2.5 Knowledge for using techniques and tools in CR 2.6 Knowledge and practical skills for using techniques and tools for data collection

1. Knowledge and Understanding of CR Philosophy:

Thoughts, beliefs, social values and goals of community development; learning process and participatory analytical thinking as systemic thinking for community development; strength, dimension integration of knowledge for sustainability; understanding of research methodology related to community basic needs; potential for empowerment of community.

Level 1:

Lack of Knowledge and understanding of CR philosophy.

Level 2:

Ability to explain the principles, thought and objectives of CR, and goals of community development

Level 3:

Ability to understand and explain the principles of learning process of community.

Level 4:

Capability of multi-disciplinary knowledge integration of CR.

Level 5:

Ability to design the research patterns that are relevant to community needs or potential or interests.

2. Positive Attitude Toward Community:

To understand community's strengths is the important base to develop the community and country as well.

Level 1:

Lack of community understanding.

Level 2:

Understanding of community and its components.

Level 3:

Ability to explain the community potentials, analyze social capital and the dynamic changes of community.

Level 4:

Ability to appreciate the community and its potentials.

Level 5:

Ability conduct research and community development.

3. Systemic Thinking Competency:

The classification of many components including input and output factors of community and their interactions or processes

Level 1:

Lack of ability of systemic thinking.

Level 2:

Ability to explain principles of systemic thinking.

Level 3:

Ability to classify components and interactions among community components.

Level 4:

Ability of writing model of community.

Level 5:

Ability of systemic thinking modification to explain the dynamic changes, adjustment and behavior system of community.

4. Analytical Thinking Competency:

Convergent and divergent thinking, integration and interaction between systemic thinking and divergent thinking leads to creative thinking

Level 1:

Lack of ability of analytical thinking.

Level 2:

Ability to explain convergent and divergent thinking.

Level 3:

Ability to compare the difference among convergent, divergent and systemic thinking.

Level 4:

Ability of analytical thinking for community analysis.

Level 5:

Ability of modification of divergent and systemic thinking to build the scope of thinking.

5. Skills of Data Analysis and Synthesis:

Ability of tool instruction and use for data classification, grouping and determining relationships between and among data sets for identification of systemic patterns; to gather reasonable data interpretation and conclusion.

Level 1:

Ability to use tools for data analysis or synthesis.

Level 2:

Ability to explain details, standard and criteria for using tools for each type of data analysis or synthesis.

Level 3:

Ability to group and classify type of tools for data analysis or synthesis.

Level 4:

Ability to make decisions and select appropriate tools for grouping, classifying and finding the systemic data relationships.

Level 5:

Ability to interpret the meaning of data.

6. Capability to Differentiate Between Research and Development:

Understanding principles and goals. of research, development, the application of research for development or using the development process as the base for research conduction including ability of comparing the difference and integration between research and development

Level 1:

Lack of ability for differentiating between research and development.

Level 2:

Ability to explain the principles of research and development.

Level 3:

Ability to compare differences between research and development.

Level 4:

Ability to apply knowledge concerning research and community development.

Level 5:

Ability to design research for community development process.

The details for each technical competency, its description and levels are discussed below.

1. Knowledge in Type of Research:

Knowledge of methodology, process and tools for qualitative, quantitative, action and evaluation research approaches

Level 1:

Ability to explain the principles, procedures and processes of some research methods.

Level 2:

Ability to explain the principles, procedures and processes of quantitative, qualitative, action and evaluation research approaches.

Level 3:

Ability to specify the kind of tools for each type of research.

Level 4:

Ability to classify and compare the characteristics among the types of research.

Level 5:

Ability to design each type of community research.

2. Capability of Finding the Potential of Community:

Ability to research community profile, identify human resources to drive community development; ability to identify social network and support factors of community, potential resources, local technology

Level 1:

Lack of research ability on community profile and potentials.

Level 2:

Ability to understand and explain the techniques for research on community profile and potentials.

Level 3:

Ability to compare and select appropriate research techniques.

Level 4:

Ability to modify knowledge for research design.

Level 5:

Ability to search for background and potential of community.

3. Understanding of Processes and Methods in CR:

Understanding participation in research process, ability for participatory community vision building and planning.

Level 1:

Lack of knowledge in process and methodology of CR.

Level 2:

Ability to explain participatory research.

Level 3:

Ability to design participatory research.

Level 4:

Ability to lead in participatory vision building of the community.

Level 5:

Ability for participatory planning.

4. Skills of Facilitators:

Learning various skills such as: being observant, conflict resolution, listening skills, questioning skills, skills to stimulate communication and participation

Level 1:

Lack of knowledge for facilitation.

Level 2:

Ability to explain principles, scope, roles and functions of facilitators.

Level 3:

Capability for facilitation skills such as the observation, listening, questioning, stimulating communication and participation.

Level 4:

Ability for analysis and designing tasks.

Level 5:

Ability to perform facilitators' roles and functions.

5. Knowledge for Using Techniques and Tools in CR:

Knowledge in use of techniques and tools in CR.

Level 1:

Lack of knowledge for using techniques and tools in CR.

Level 2:

Ability to explain principles and important techniques that are popular for CR.

Level 3:

Ability to explain principles, methods, roles and important techniques, and tools for CR.

Level 4:

Ability to classify and group techniques and tools in CR that are relevant to the objectives of applications and operations.

Level 5:

Ability to decide and select appropriate tools and techniques in CR.

6. Knowledge and Practical Skills for Using Techniques and Tools for Data Collection:

Ability to formulate tools for data collection in CR and for community development

Level 1:

Lack of practical skills for using tools for data collection.

Level 2:

Ability to construct tools for CR.

Level 3:

Ability to design appropriate method for data collection in CR.

Level 4:

Ability to use techniques or tools in CR.

Level 5:

Ability to evaluate tools for CR.

B. Formulation of a Training Curriculum for Necessary Competency Development of Community Researchers:

After the necessary competency of community researchers was determined, group discussions with experts was conducted to formulate a training curriculum relevant to the required necessary competency of community researchers. The curriculum pattern consisted of 4 content sets: 1) basic knowledge on community research; 2) research project proposal development; 3) techniques and tools for data collection; and, 4) analysis, synthesis and report writing (see Figure 2). The four sets contain 13 main topics and 69 sub-topics.

The training curriculum emphasized action learning and enquiry based learning by using problem-based learning approach. The facilitators used problem based learning with the specific condition or problem in the community being discussed. Aside from this, brain storming, exchange of experiences, role-play, knowledge management, case study and actual practice in the rural community were also applied. The learning process might begin by stimulating the trainees by viewing some films or short movies or asking questions which allows the trainees to join the participatory learning. Experiences are shared by the participants and later they would reflect on the knowledge gained from the learning activities. The trainers might present and lecture additionally after learning from main topics and sub-topics discussed by the facilitators (Figure 3).

There is a gap of one or two months before next trainings are conducted to allow for review and actual practice in the community. The learning activities and duration of training are shown in Table 2. The evaluation of learning activities is based on the expected outcomes and competency changes of the trainees.

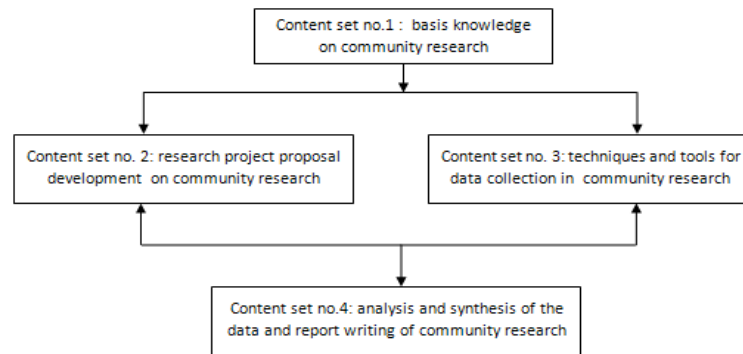


Fig. 2: Community base action research training curriculum structure.

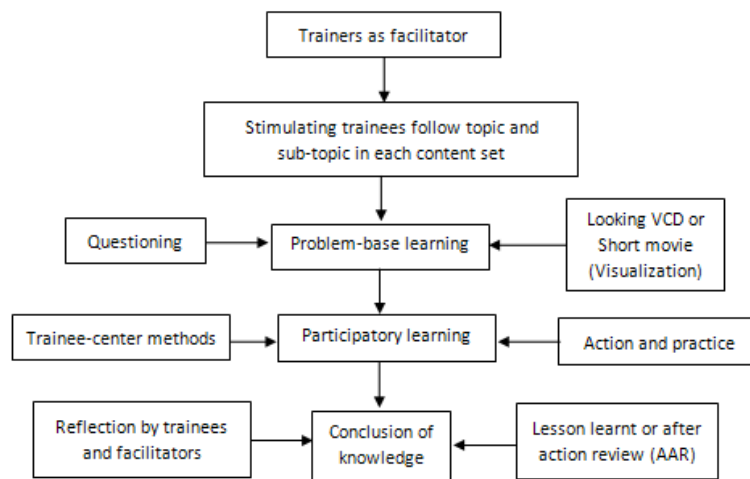


Fig. 3: Show action learning process design of training curriculum.

Table 2: Show the learning activities and period of time for training in each content set.

Content Set	Main learning activity	Period of time (days/hour)
Content Set no.1: basic knowledge on community research	expectation about the course, looking VCD or short movies, questioning, brainstorming, sharing experiences, facilitation, knowledge café, group discussions, case study, field visit, fieldwork or on site study, village walk, lecture, daily observation, after action review.	at least 4/34
Content Set no.2: research project proposal development	questioning, brainstorming, sharing experiences, group discussions, looking VCD or short movies, case study, field visit, fieldwork or on site study, role play, lecture, daily observation, after action review.	at least 3/25
Content Set no.3: techniques and tools for data collection	questioning, brainstorming, sharing experiences, group discussions, case study, field visit, fieldwork or on site study, daily observation, lecture, after action review.	at least 3/25
Content Set no.4: analysis and synthesis of the data and report writing of community research	questioning, brainstorming, sharing experiences, group discussions, case study analysis and synthesis, daily observation, lecture, after action review.	at least 2/16

The monitoring and evaluation process would be conducted as pre-training and post-training competency evaluation on the continuous changes of the trainees.

Conclusion:

The following are the research conclusions:

1. The initial desirable characteristics of community researchers according to experts consisted of four aspects, namely thinking and attitude, capability in field operation, data management, and in community research methodology.
2. Community researchers need six core and six technical competencies.
3. The curriculum consist of four content sets: 1) basic knowledge on community research; 2) research project proposal development; 3) techniques and tools for data collection; and, 4) analysis and synthesis of the data and report writing of community research.
4. The trainee-centered training uses action learning processes such as enquiry based Learning, brain storming, sharing of experiences, role-play, case study and gathering of lessons from the lectures and experiences.

Three of the six core competences relate to thinking and attitude such as positive thinking toward the community, ability for systemic thinking and ability for analytical thinking. Community researchers must have the ability to differentiate between research and development. Community research creates knowledge which can be applied for solving the problems of the community.

The methodology of community research has five total competencies composed of: 1) Knowledge and understanding of CR philosophy; 2) Capability of differentiating between research and development; 3) Knowledge of type of research; 4) knowledge of methodology; and, 5) knowledge of techniques and tools in CR. Community research has to be implemented in the target area with the participation of the people. The success of community research would depend on two aspects such as ability to determine community potentials and research facilitation skills.

Community researchers must also have the ability to manage research data, specifically knowledge of use of various tools and techniques and skills for data analysis and synthesis

This research was conducted to find out the initial desirable characteristics and the necessary competency of community researchers as well as to formulate the training curriculum for developing the competency of community researchers.

The curriculum was formulated based on action learning and problem-based learning to develop the necessary competency and change the paradigm of the community researchers that led to develop them to conduct community research more efficiently towards empowerment and sustainability of rural agricultural community development. The expected model of the competency development in community research for rural agricultural community development is shown in Figure 4.

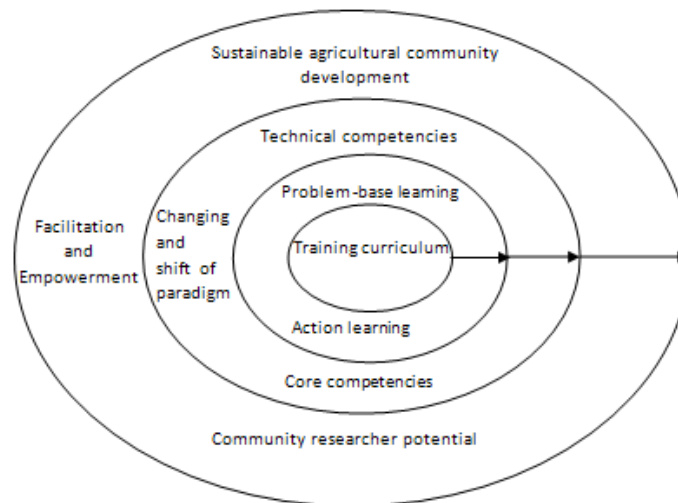


Fig. 4: Model of competency development in community researchers.

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