

THE MODEL DEVELOPMENT OF PARTICIPATORY LEARNING PROCESS RELATED TO COMMUNITY ENVIRONMENTAL MANAGEMENT

Chainarong Kaewjumnong

Faculty of Graduate Studies, Mahidol University, Nakhon Prathom Province, Thailand

Abstract

The objectives of this research was to develop a participatory learning process model related to community environmental management, study factors effecting the participatory learning process, and evaluate the effectiveness of the participatory learning process model. The results of the research showed that the use of the participatory learning process had the following six steps: searching for problems, analyzing the causes of the problems, planning solution for the problems, making a Community Master Plan, action, and finally evaluation. Stakeholders were concerned about the perceived information, really understood community environmental problems, self analyzed their strengths and weaknesses, learned about real problems, perceived existing social capital, which could be used for preventing problems, and giving solutions to the community environment leading to a Community Environmental Management Master Plan. The factors affecting the participatory learning process, found that the female group, a group who used to receive training and attended the meetings/seminars on community environment, the group most in need of community environmental management, a group living in the area for 31 years or more, and a group with knowledge at the medium level affected the participatory learning process with the statistical significance of 0.05. And the effectiveness of the participatory learning process model was considerable. The research recommendations are as follows; the Local Government Organizations, have to be at the center and participate with internal and external agencies in systematically managing community environments, should develop information systems at the community center, support community activities which stimulate community environmental management, and provide a shared learning stage. Related agencies should also develop leaders who have potential and systematic management to bring about sustainable development of the community environment.

Keywords: Participatory Learning Process, Community Environmental Management

Introduction

Increase in populations and development of Thailand make people increasingly require to use natural resources. Due to inappropriate supervision and management, natural resources and environment negatively change and deteriorate, causing decrease in forests, drought, flood, degraded soil, seizure of land, extension of communities without good planning and appropriate supervision subsequently causing environmental problems. To supervise, prevent, and solve the community environmental problems, it is necessary to have the process which makes people and stakeholders in the community have knowledge, understanding, jointly supervise and manage community environment. Participatory learning process is the learning which people in the community are the learning center, comprising two basic learning principles as follows; 1) Experience Learning is the learning process for sharing experiences among people in the community. 2) Group Process Learning is sharing and learning of various people groups in the community, enabling people to thoroughly see real problems or situations in the present time, creating cooperation of people in the community. Local people have to mutually exchange experience by group process so that they are able to jointly learn, have knowledge and understanding, and be aware to help protect community environments, leading to participation and having a plan to jointly manage community environments.

Research Objectives

This study regarding three objectives:

- 1) To develop a participatory learning process model related to community environmental management,
- 2) To study the factors effected the participatory learning process related to community environmental management, and
- 3) To evaluate the effectiveness of the participatory learning process model related to community environmental management.

Research Scope

This research has specified areas of study, target and content as follows:

3.1- The area of study in this research was Tha Sak sub-districts (9 villages) in Muang district, Nakhon Si Thammarat province, Thailand.

3.2- The Target groups were grouped into 3 groups; local people, leaders, and agency representatives.

3.3- The area of content of this research was to get content on action research using participatory learning process and survey research in community environmental management.

Research Conceptual Framework

Conceptual Framework of the research is a Mixed Model Research as follows:

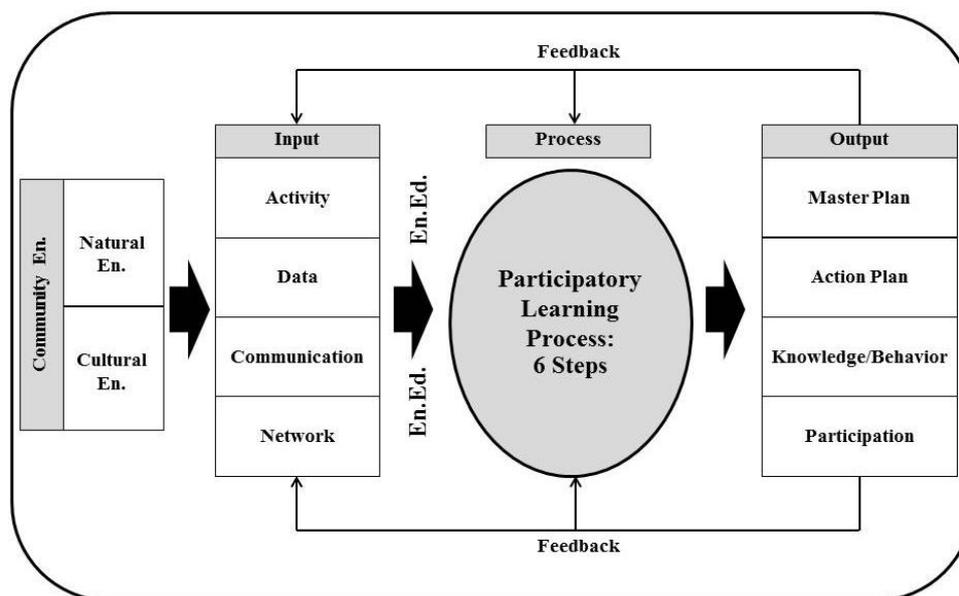


Figure 1: Conceptual Framework of the research

Related Literature

To achieve the above objectives and conceptual framework, this research studied related literature comprising Community Environmental Management, Participatory Learning Process, Environmental Education, Theories on Model Development, related Theories on evaluation and related Research.

Research Instruments

- 6.1- Action research using participatory learning process with six steps.
- 6.2- Survey research using questionnaire and interviews.

Research Statistic

Descriptive statistics; percentage, mathematical average, standard deviation, t-test and One Way Analysis of Variance were applied for information analysis.

Research Results

From studying the context, problems, community environmental management in term of the conservation of community environmental management by studying documents, textbooks, research papers, in-depth interviews, and the result of the model found as showed in Figure 2.

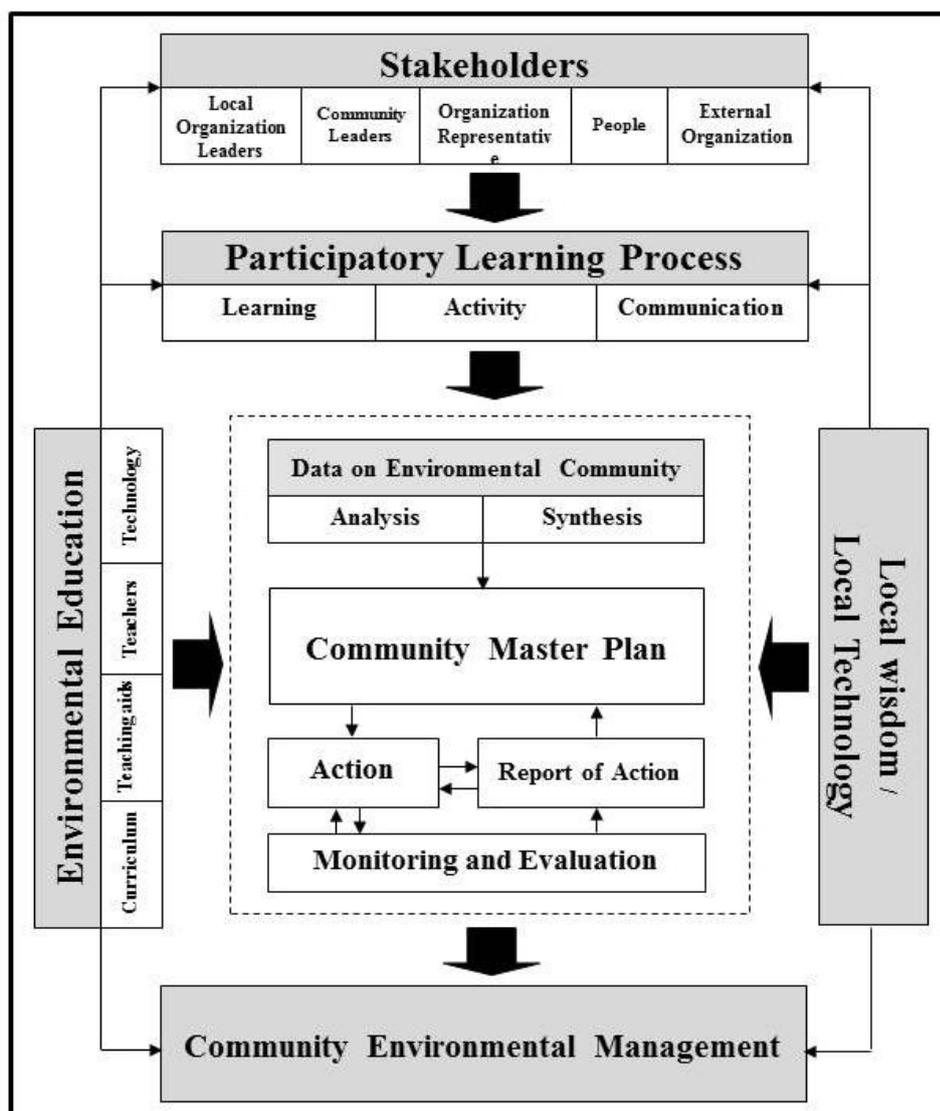


Figure 2: The Model Development of Participatory Learning Process related to Community Environmental Management

The model development of participatory learning process related to community environmental management was developed in six steps as follows;

- 1) Finding problems by surveying the area, collecting data from academic documents, interviewing leaders and people concerned, and conducting focus group discussion in the area,
- 2) Analyzing causes of problems by analyzing causes of community environmental problems which have worried people,
- 3) Planning solution to the problems of community environmental management by finding guidelines and models of solving community environmental problems,
- 4) Making the Community Master Plan on Community Environmental Management by participation to systematically solve community environmental problems, bringing

about strategies which stimulate efficient implementation of community environmental management,

- 5) **Action** bringing about project plans and agreement after community environmental management of Tha Sak Sub-district. Tha Sak Sub-district Administrative Organization has to be a main agency to implement and participate with other related agencies. Community environmental committee are mainly responsible for environmental management of Tha Sak Sub-district, and
- 6) **Evaluation** bringing about outcomes stemming from participatory learning process in every step.

The researcher discovered the model of participatory learning process related to community environmental management (Figure 2) and found that related stakeholders consisting of organization leaders, community leaders, organization representatives, people, and external organization have to fully cooperate. The stakeholders related to participatory learning process consist of

- 1) Organization leaders who are leaders of Local Government Organization, school directors, health center heads, abbots, and imams,
- 2) Community leaders consisting of sub-district heads, village heads, health volunteers, village committee, occupational groups' chairman, and local wisdoms,
- 3) Organization representatives consisting of representatives of Sub-district Administrative Organization, health centers, schools, temples, and mosques for implementing, monitoring, and supporting related agencies.
- 4) Local people and village committee, and
- 5) External organizations participating in supporting academic data on community environmental management.

The model development of participatory learning process related to community environmental management as the researcher used principles of Environmental Education which are the learning process focusing on giving knowledge of community environment including community environmental problems which impact on people, process participants have knowledge, awareness, attitudes, and behavior to make people willingly participate in solving environmental problems. Principles of Environmental Education consist of four aspects as follows;

- 1) Development of curriculums is to compile contents, issues, and activities which have to be used for participatory learning process.
- 2) Teaching aids have to be used in the learning process.

3) Teachers or process lecturers have to disseminate knowledge of community environment and

4) There is use of technology for disseminating data to people participating in the participatory learning process. Participatory learning process consists of three main elements as follows;

1) Learning is use of participatory learning process in the workshop focusing on exchange of experience and expression of opinions, making people know what they do not know. As for participatory learning process of the community, people not only listen to proposals and data but also understand opinions on problems presented by other people and know the problems when they jointly learn with other people.

2) Activity consists of survey of the area, analysis of documents, interview, focus group discussion, and workshop.

3) Communication consist of

3.1) Communication channels such as the news tower, brochures, notice boards, use of volunteers, 3.2) Communication methods such as talking, presenting via media, opening a stage, and meeting.

As for implementation of community environmental management, the researcher studied community context and knew general condition of the area both on community environment and cultural environment. Data were collected by interviewing, group meeting, observing, answering the questionnaire by people concerned, including reading academic documents and documents of related agencies, making the researcher know situations, causes, and impacts of community environmental problems in Tha Sak Sub-district, being consistent with the real condition of the area. After that, the researcher analyzed and synthesized to get clear conclusion for use in making the Community Master Plan on Community Environmental Management which consists of vision, mission, objectives, strategies, implementation plans, period, and responsible agencies. Community environmental committee supervise, monitor, and coordinate in the area with related agencies. Tha Sak Sub-district Administrative Organization is a main agency to support implementation according to the specified operation plans. There is periodical monitoring and evaluation, report of results in the meeting, and report of implementation via public media in the area. Local wisdom or local technology has to be used in solving community environmental problems.

Community environmental management process indicating management models used by the community for community environmental management. Before making project

plans or activities, people have to know data and situations on community environment, present problems occurring in the area, analyze problems and causes of problems which occur, and prioritize problems for use in solving the problems.

Therefore, the model development of participatory learning process related to community environmental management enables local people to participate in protecting community environment, preventing, preserving, and solving community environmental problems. Local people have to exchange experience by the group process, enabling them to jointly learn, have knowledge, understanding, and awareness to help protect community environment, bringing about participation and plan to jointly manage community environment.

Recommendations

Suggestions of this Research

Policy recommendations

1. The policy of Local Government Organization has to be clearly announced as public policy. Local people have to be widely informed about protection and promotion of community environment and prevention and solution to community environmental problems. The Local Government Organization has to concretely support activities of community environmental management.

2. An educational institute, especially should jointly do a research with the community on protection and promotion of community environment and prevention and solution to community environmental problems to enable the community to jointly and systematically learn real problems and know problems and solution to the problems .

3. External Government Organization and agencies related to said implementation have to give academic support, disseminate knowledge on technologies suitable for protection and promotion of community environment and prevention and solution to community environmental problems.

Action recommendations

1. The Local Government Organization has to be a main agency to participate with internal and external agencies to systematically manage community environment by thinking of quality of life of community. Moreover, the said local agency should support community activities which stimulate participation in community environmental management.

2. There should be development of data system of community environment as the community data center. Data should be disseminated to people so that they are able to know and understand real situations of the community. Surveillance, monitoring, and evaluation

system should be created. People in the community should have joint agreement or social measures of protection and promotion of community environment, prevention and solution to community environmental problems.

3. Potential of leaders, especially community environmental committee consisting of village committee, village health volunteers, and local people's representative should be developed to have knowledge, understanding, and skills of protection and promotion of community environment, prevention and solution to community environmental problems to stimulate efficient management of environment.

Recommendations for Further Studies

1. There should be the study and development of Environmental Education Curriculums both for school and general people using school as the Community Learning Center to bring about people's real learning and knowledge for leading to participation in participatory learning process, bringing about sustainable management of environment in the area.

2. There should be study and provision of community environment quality indicators for use as standard of indicating success in implementation and database for use in development of healthy city in environmental dimension so that the community is able to really use said indicators.

3. There should be comparative study of other area or the use of the said participatory learning process to more efficiently solve specific problems of community environment.

References:

- Atul Kansal, et. al. (2001). Community Environmental Management Study in Haryana Villages. Institute for Sustainable Development New. Delhi
- Barrett, B. (1994). Integrated Environmental Management – Experience in Japan. Journal of Environmental Management, Vol 40.
- Cairns, J. and Crawford, V. (1991). Integrated Environmental Management. Chelsea. Mich: Lewis Publishers.
- Chanin, J. (2007). Public Health Development by Participatory Learning Process: Action Recommendations. Rural Health Research and Training Center, Faculty of Public Health, Mahidol University, The 4th Printing.
- Cronbach, L.J. (1963). Course Improvement Through Evaluation. Teachers College

Record.

Erwin, W. (1976). Participation Management: Concept Theory and Implementation. Atlanta, Ga : Georgia state University.

Kasira K. ((2007). Community Environmental Management of Tri-partite Group in Karon Community, Phuket Province. Master of Arts Program in Human and Environment Management. Chiang Mai University.