

Strand: Community and Conservation Education

Title: Evaluation and Capacity Building for Community Forestry Education in Taiwan

Min-Hwang Liang

Associate Professor of Graduate Institute of Environmental Policy,
National Dong Hua University Taiwan

ABSTRACT

Four hundreds communities have participated in the Community Forestry Project initiated in Taiwan, since 2002. This paper reveals the formulation of policies, need assessment results and shares EE strategies for building capacities of community educators in forestry sector.

Keyword : community forestry, need assessment

INTRODUCTION

Responded to the aboriginal movement pressures, sustainable forestry and community based of conservation, the National Forestry of Taiwan followed the tide of community development policy to set up grants for its first Community Forestry Policy since year of 2002. The policy has been designed to achieve by encouraging applicant communities to go through three stages: stage I Nature Conservation & Marketing, stage II Community Empowering, and stage III Co-management of Public Forests. In last five years, more than four hundred communities had won funding from regional headquarters of Forestry Services to start conservation education and ecosystem management program. And six communities entered into stage II in year of 2006. It is an innovative approach in the country that provides various options for achieving sustainable communities, in addition, creates various conservation education opportunities for adults to learn on community- based conservation. This paper described results of a two-year evaluation studies conducted from 2005-2007 to

explore deficits of program delivery, needs for program change and appropriate education theories that could meet needs of project.

RESEARCH METHODS

The research team adopted multi-methods including: 1) literatures review on theories of adult education and learning pedagogies, conservation education, organizational development and social capital; 2) interview with eight forest staffs, 40 community organizers and ten school principals, 3) five survey researches on policy stakeholders, staff, volunteers and community organizers to clarify needs of further training.

The researcher adopted ideologies of community capitals proposed by Roseland (2005), which consists of natural capital, physical capital, economic capital, human capital, social capital, and cultural capital to pave the frame work. This research was started due to our concern of 1) what strategies had been adopted, 2) what outcomes were resulted after the implementation of community based policy in terms of community capitals?

RESULTS

This paper shares our four stakeholder surveys, experiences learnt from programs and future strategies may be able to meet the needs. The survey found that 50% of staffs who were in charged of community forest project had one year experience only, 18.8% of staffs had two years experiences, 9.7% of staffs had three years experiences and only 21% of staffs had four years experiences. Only 22.7% of staff responded that they were very familiar with the project, 45.5% of staffs were a little familiar and 31.8% were fresh. The major information sources were come from in-service training (68.9%), proposal review meeting (68.9%) `CF classes (57.8%), web site (42.2%), commands (42.2%) and personal communication from top agencies (42.2%), books & periodical published by NFS (33.3%) and office meeting (28.9%).

The top ten difficulty duties responded were in below sequence: visiting and persuading new community to initiate project; assisting community to solve the accounting process problems; preparing performance check report for each project; working over time and on holiday period; putting community's outcome to website; assisting community to close case; preparing final checking report; assisting community to diagnose assets, revising and positioning project; and monitoring implementation of project.

Most frequently topics instructed by the responded staffs were idea of CF policy, principles of nature conservation, tree identification methods, stream conservation, ethnobotany, wild bird resources, tree planting techniques, wildlife conservation, community development, and forestry law and regulations.

Top ten issues perceived by the responded staff were lacking of 1) knowledge of CF and experience of success case studies, 2) capability of project planning and management; and 3) skill to identify local political environment and community needs, 4) experience and capability of mentoring and facilitating community groups, 5) supporter in the bureaucracy, 6) long term commitment, 7) experience of integrate community problems with forest management, 8) skill of literature collecting method, 9) communication and persuasion skills and 10) social and culture of community and communication language.

Ten urgent courses needed by responded staff were: 1) planning & evaluation skill for CF, 2) communication & persuasion skill, 3) practices of community empowering, 4) community based eco-tourism and impact control, 5) multi-culture education, 6) forest resource inventory & conservation skill, 7) community education curriculum development & evaluation, 8) CF's theory & practice, 9) partnership building and 10) interpretation theory & practices.

Courses that have high intention to learn by staffs were: 1) community based eco-tourism and impact control, 2) forest resource inventory & conservation skill, 3) interpretation

theory & practices by community, 4) practices of community empowering, 5) partnership building.

Factors perceived by the responded staffs as very important to affect outcome of community forestry policy were: 1) clear policy statement, 2) well train staff with sophisticate skills and enthusiastic, 3) an encouraging policy and vision for promotion, 4) an easy and communicable operation procedure during delivery process, 5) an enough strong and perceivable incentives for engagement, 6) fully respect traditional wisdoms, value and multiple culture of the target community

The results display the status before and after the participation in community forestry project in terms of seven dimensions of community and participants' responds. Before the participation, the overall capitals of communities were poor, among them, from high to low, the rank of seven capitals are comprehensive capital, culture capital, social capital, nature capital, humanity capital, economic capital and physical capital. The community capital (average mean) is only higher than the parameters of last second capitals. After the participation, from high to low, the rank of seven capitals are comprehensive capital, humanity capital, culture capital, social capital, nature capital, economic capital and physical capital. In summary, the major impacts of project on community are aggregated in comprehensive capital, humanity capital, and cultural capital. Impact on economic capital and physical capital are very minimal. The evaluation research also found that the overall social capitals and human capitals at the community level are still very weak to take the responsibility. This research suggest that analysis of community capitals may served as bridge cross fields of nature environment, humanity and society and beyond that imagination. It may be a mechanism for policy planning and implementation, resources investment, operational design and also could provide a more holistic and systematic base for evaluation.

The survey also indicated that: 1) CF related in-service training is perceived as urgent by

all levels of forest service, if the policy will be continued to be ranked high in forest institution. 2) A curriculum developing team shall be initiated to design appropriate topics to meet staff with different needs and interests. 3) Recruitment of more forestry volunteers is also urgent to serve as local expert and bridge cross the CF organizations. 4) Adoption of social learning approach for leaders of CF teams to learn cooperatively. 5) Funding a regional/ or county mentoring center to start an action research that bring all stakeholders to learn together. 6) Clarification foci and roles of CF project at urban/rural areas toward biotope preservation, maintenance/restoration and nature conservation education. 7) In stead of providing fund to all interesting community, the forest service shall identify those communities where their location are situated inside or surrounding the hotspot of biodiversity or forest resources. 8) Participatory approach and committed experience mentors shall be selected to help those urgent needed communities to diagnose assets, needs and seek for suitable vision and action agenda. 9) In order to promote community-based eco-tourism, core competencies of interpreter shall be established first when designing community interpretation training programs. 10) Web site that displays contents and results of approved projects is necessary for all interest stakeholders to build social network with similar needs. 11) Adoption of different strategy for indigenous culture or multi-ethnic groups, including empowerment, respect local wisdoms, culture, arts, music and verbal communication. 12) Development of a national monitoring and evaluation system to measure performance of participant community and find out the needs for change.

The results also demonstrated that if the policy is going to be effectively implemented, from central and frontline forestry staffs to community leaders are in need of capacity building to gain new concept and process of forestry management. In addition, mixture of conservation and community education strategies can be adopted (Figure 1) such as 1) local agenda 21, 2) community volunteer action, 3) social marketing project, 4) interpretation, 5)

EE for new immigrants and multi-culture ethnic group, 6) facilitation and mentoring, 7) green school approach, 9) environmental learning center, 10) eco-museum, 11) biotope conservation, must be taught to meet individual community situation.

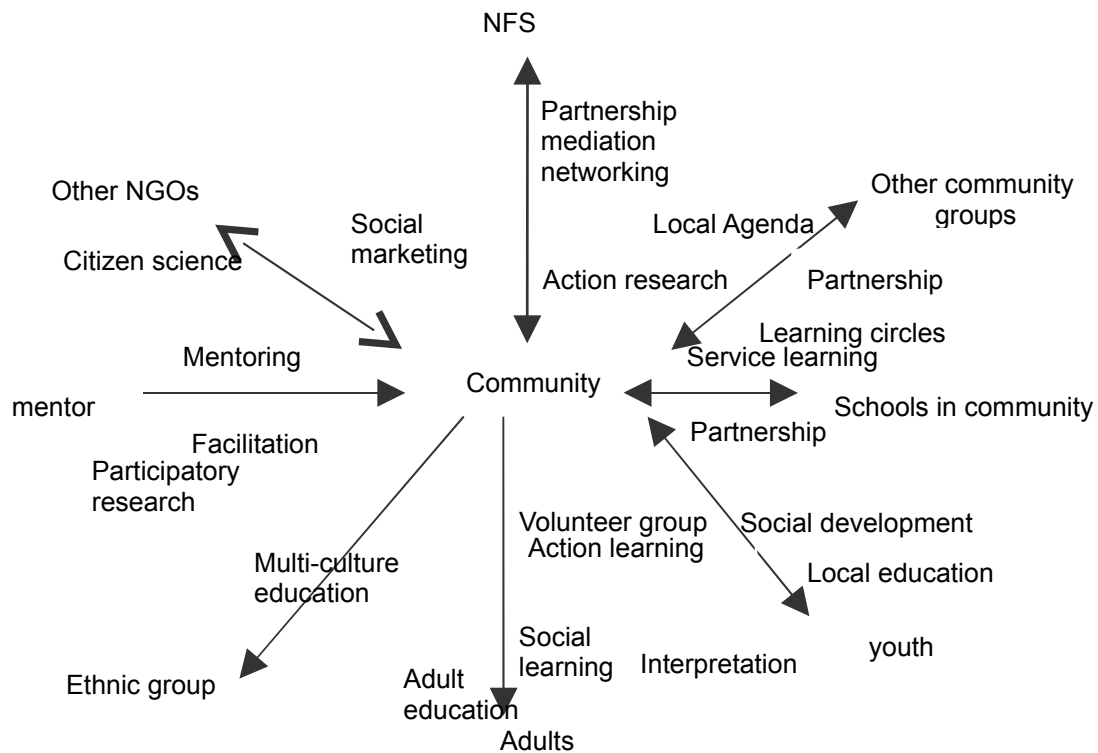


Figure 1 Approaches for enhancement of community forestry project in Taiwan.

CONCLUSION

Community forest policy is currently implemented in Taiwan, by communities that have certain kinds of community development experiences and assets. The impact of project implementation on the communities could be revealed through perspectives of community capitals. However, need assessment results explicated that the majority of stakeholders are craving for receiving certain kinds of training to enhance their performances. This implies that adult targeted community based conservation education is in need of development.

REFERENCES

Roseland, Mark. 2005, Toward sustainable communities: resources for citizens and their government, Canada: New Society Publishers.