

The Development of the Training Program for the Community Hardcores on Community Forest Conservation

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Abstract: The community forest conservation is a means for decreasing deforestation and doing conservation correctly. The project for training of the community hardcores for the community forest conservation is very essential for the forest conservation, which will help them know how to do correctly and result in having people know how to do it in the same manner. This research aimed to study knowledge, opinions and behaviors of the community hardcores in conservation of the community forests and to compare knowledge, opinions and behaviors in conservation of the community forests of the community hardcores with different genders and years of study. The sample consisted of 35 students in the 1st and 2nd years of study, obtained by the use of the quota and the purposive sampling techniques in the Project of the University for Life at Chaiphum Rajabhat University. The instruments used for collecting the data included the training package for hardcores on community forest conservation, the test on knowledge, the questionnaire on opinions and behaviors in conservation of the community forests in 5 aspects: forest usage, forest maintenance, forest improvement and forestation, forest maintaining participation and related law and regulation. The statistics used for analyzing the data were percentage, mean, standard deviation and for testing hypotheses the paired t-test and f-test (1-way MANCOVA) were employed. The research findings revealed as follows: the hardcores as a whole and as classified according to genders and years of study showed gains in their knowledge about community forest conservation in general and in 3 aspects: forest usage, forest maintaining participation and related law and regulation, before the training at the 0.05 level of significance. Whereas, they did not indicate gains in the aspects of the forest maintenance and forest improvement and forestation before training and maintaining participation before the training ($p < 0.05$). In addition, the 1st-year hardcores indicated gains in opinions about the maintenance aspect and the 2nd-year hardcores showed gains in the forest usage aspect before training ($p < 0.05$). According to behaviors in conservation of the community forests, the hardcores as a whole and as classified according to genders and years of study showed gains in conservation in general and in each aspect at the 0.05 level of significance. Hardcores with different genders and the hardcores with different years of study did not indicate knowledge, opinions and behaviors in conservation of the community forests as a whole and in each aspect differently ($p > 0.05$). The developed training program on the community forest conversation for community hardcores was appropriately efficient in developing knowledge, opinions and behaviors in conservation of community forest of those involved. This program should be supported to be implemented in training other hardcores in different communities in the future.

Key words: Community forests, training model, development of the training program, community hardcores and conservation community forest

INTRODUCTION

The main aim of human living is well-being in the community. This makes human-beings have to search for things needed and discover methods and find ways for quantitative and qualitative production. This in return also makes them become radical factors in destroying

natural resources, deteriorating nater iwhich creates disasters to human-beings in the long run. The environmental experts have concluded that human-beings are radical factors in destroying nature and environmental conditions with technologies as their acceletors. The destruction has kept on endlessly, because of the greeds and carelessness. The depletion of natural resources, the

destruction of forests and creation of pollution are resulting evidences. The development that regards the impacts on environment, has benefits to life and upgrade quality of life is extremely necessary.

The important environmental problem-solving is to improve the human behaviors. The inquiries for the means to protect and solve environmental problems have been given more attention by global communities. For instance, the Stockholm Conference in 1972, on the disasters faced by human-beings at present and to be faced in the future, poverty problems and environmental deterioration and the Belgrade Conference in 1975, on the alertness of the quality of environment and the quality life and the expansion of the production problems affected environment, have shown that human-beings pay more attention and find more ways to solve these problems. Thailand is one of the countries that places and emphasis on taking care of natural resources and environment, as well as their impacts on life of Thai citizens (Veerawattananon, 2003).

Forest resources are essential to all living organisms. They are sources of the rivers, create abundance, important sources of food for human-beings and other living things and so on. They are regarded as extremely valuable things. However, human-beings are still doing exploitation unceasingly. They intrude to destroy forests and the forests were destroyed rapidly as of the increasing number of population. It is therefore, necessary to find ways to conserve forests sustainably, as of His Majesty the King's speech, given to the forestry authorities when he went to Huay Khun Khong Water Source Unit, Chiang Dao district, Chiang Mai, on 24 December 1994, stating We must wisely know how to use resources, which means not to use them wastefully and uselessly; but watchfully, economically, carefully, technically, reasonably, suitably, with an emphasis on national benefits, both at present and in the distant future. Chaiyaphum province has the most forest area in the northeastern Thailand, with Loei and Ubon Ratchatani provinces are the 2nd and the 3rd (Forestry Department, 2007). It can therefore be stated that the study on forest conservation particularly in Chaiyaphum is the topic of interest in order to find measures or methods of forest conservation, with the purposes to alleviate the problems of deforestation in Chaiyaphum province and in other areas henceforth.

Thailand has been seriously started developing when beginning to have National Economic and Social Development Plans. At the 1st start the national policy aimed at industrial productivity to replace importation, improvement of public infrastructures, expansion of agricultural land areas, which led to deforestation. During the later period the development direction was revised to

put and emphasis on humans as the center of development, by encouraging communities and community organizations to participate in development, to revitalize nature and environment, to maintain the abundance of natural resources and biodiversity. At present, the development is dependent upon community participation and building common consciousness to fulfill economic and social needs and to maintain sustainable natural balance (Ramitanont, 1993). In addition, the Constitution of the Kingdom of Thailand, B.E. 2550 (2007 A.D.) specifies that the State's land use must be thought of natural environment, management by communities and local administrative organizations in making plans, conserving, maintaining and using it for mutual benefits.

The notion of community forest is, therefore, a model of management of the forests by using people participation, such as mutual needs, mutual benefits, mutual planning and mutual management. The notion of community forests is a means to keep forests in Thailand away from being destroyed and becoming effective for conservation of other types of forests as well (Pragthong, 1992).

In terms of psychology it can be concluded that human behaviors can be changed through learning that renders the learners to change their characteristics in 3 domains: cognitive or wisdom domain, affective or opinion domain and skill or practical domain. In addition, the desirable behaviors can be changed by a training process. The training is therefore necessary for changing knowledge, opinions and behaviors.

Accordingly, the development of the project for training the community hardcores on community forest conservation is an important method to change knowledge, opinions and behaviors pertaining to community forest conservation, which will lead to alleviating the problems of deforestation henceforth.

MATERIALS AND METHODS

This research was an experimental one, with the one group pretest-posttest design. Population and sample, as follows:

Population: The population were 232 students who were studying in the Project of the University for Life (PUL) at Chaiyaphum Rajabhat University in the 1st and 2nd years, Bachelor of Arts (B.A.) in Interdisciplinary Studies for Local Development Program.

Sample: The sample were 35 students, accounting for 15% of the students in PUL, who were community hardcores, drawn from the population studying in the nearby learning

centers and were willing to participate in the training, by a quota and purposive sampling techniques. Research instruments. These included the following:

Training package: The training package with its training manual for community hardcores had the main content including: knowledge on forest resources, significance and benefits, factors creating forest fires, forest categories in Thailand, situations and causes of forest resource deterioration, impacts of deforestation and conservation, community forest and means of conservation, national laws and regulations relating to community forests, community hardcores on community forest conservation, means of reformation of knowledge, opinions and behaviors on community forest conservation.

The test: The test on 5 aspects of knowledge about community forest conservation: forest usage, forest maintenance, forest improvement and forestation, forest maintaining participation and related laws and regulations.

The questionnaire: The questionnaire on opinions in 5 aspects about community forest conservation: forest usage, forest maintenance, forest improvement and forestation, forest maintaining participation and related laws and regulations.

Data collection, the following steps were employed.

Step 1: Collecting pre-training data from the sample, by the test on knowledge about community forest conservation, the questionnaires on opinions about community forest conservation and the questionnaires on behaviors about community forest conservation; all in 5 aspects as mentioned earlier.

Step 2: Collecting immediate post-training data from the same sample, by the same 2 instruments as above, namely the test on knowledge and the questionnaire on opinions about community forest conservation.

Step 3: Collecting data from the same sample but 1 month later, by the questionnaire on behaviors about community forest conservation.

Data analyses: The statistics used for analyzing the data included percentage (%), mean (\bar{X}), Standard Deviation (SD), paired t-test and F-test (1-way MANCOVA).

RESULTS AND DISCUSSION

The community hardcores, as a whole: the community hardcores, as a whole had knowledge in the community forest conservation after training as a whole and in 3

aspects, namely forest usage, forest maintaining participation and related laws and regulations aspects, at the high level; increased from the pre-training 1 at the moderate level with statistically significant difference at the 0.05 level. However, they had knowledge in forest maintenance and forest improvement and forestation aspects at the same level of both pre-training and post training ones.

The community hardcores, as a whole had opinions in the community forest conservation after training as a whole and in 3 aspects, namely forest improvement and reforestation, forest maintaining participation and related law and regulation aspects, at the highest level; increased from the pre-training 1 at the high level. However, the opinions were increased from pre-training with statistically significant difference at the 0.05 level, in forest usage and forest maintaining participation aspects, while the rest with no difference.

The community hardcores, as a whole had behaviors in the community forest conservation after training as a whole and in almost all aspects, at the regular level; increased from the pre-training 1 at the occasional level, but in the related law and regulation aspect was found at the occasional level the same as the pre-training one. The behaviors as a whole and individual aspects were found statistically significant difference at the 0.05 level.

The community hardcores, as a classified by gender: The male and female community hardcores, as a whole had knowledge in community forest conservation after training as a whole and in 3 individual aspects, namely forest usage, forest maintaining participation and related law and regulation aspects, increased from pre-training one with statistically significant difference at the 0.05 level. However, they had opinions as a whole and in three aspects, namely forest maintenance, forest improvement and reforestation and related law and regulation aspects the same level of both pre-training and post-training ones. This was also found true for female hardcores as a whole and in individual aspects. However, they had knowledge in forest maintenance and forest improvement and reforestation with no difference from the pre-training 1.

The male community hardcores had opinions in community forest conservation after training in forest usage and forest maintaining participation increasing from the pre-training 1 with statistically significant difference at the 0.05 level.

The male community hardcores had behaviors in community forest conservation after training as a whole and in 4 aspects and female community hardcores had behaviors in community forest conservation after training as a whole and in all aspects increased from the pre

training one with statistically significant difference at the 0.05 level. However, the male community hardcores had behaviors in related law and regulation aspects with no difference from the pre-training ones.

The community hardcores, as a classified by year of study: The 1st-year and the 2nd-year community hardcores had knowledge in community forest conservation after training as a whole and in three aspects, namely, forest usage, forest maintaining participation and related law and regulation aspects, increased from the pre-training one with statistically significant difference at the 0.05 level. However, they had knowledge in forest management and forest improvement and reforestation aspects, with no difference from the pre training 1.

The 1st-year community hardcores had opinions in community forest conservation after training in the forest maintaining participation, increased from the pre-training ones with statistically significant difference at the 0.05 level. However, they had opinions as a whole and in the other four aspects, namely forest usage, forest maintenance, forest improvement and reforestation and related law and regulation aspects with no difference from the pre-training ones. The 2nd-year community hardcores had opinions in community forest conservation after training in the other 4 aspects namely forest maintenance, forest improvement and reforestation, forest maintaining participation and related law and regulation aspects with no difference from the pre-training ones.

The 1st-year community hardcores and the 2nd year had behaviors in community forest conservation after training as a whole and in all individual aspects gained from the pre-training ones with statistically significant difference at the 0.05 level.

The community hardcores with different genders and years of study had knowledge, opinions and behaviors in community forest conservation with no difference.

According to the research findings there were some points worth discussion as follows:

Knowledge in community forest conservation: The research findings revealed that the community hardcores as a whole and as classified by gender and year of study showed gains in their knowledge in community forest conservation as a whole and in three aspects: namely forest usage, forest maintaining participation and related law and regulation aspects, with statistically significant difference at the 0.05 level. However, they had no knowledge gained in the forest maintenance and forest improvement and reforestation after training. This finding reflected the efficiency of the training program for the

community hardcores on community forest conservation in terms of knowledge development. The program had effective activities, namely self-study training package, lecture summary as specified in the training package with media, brain-storming and field study or in real site, which made them had knowledge gained in 3 aspects. However, they had no knowledge gained in forest maintenance and forest improvement and reforestation. This might be because the time allocated for lecture sessions of resource persons in these 2 aspects were too limited. Even during the brain-storming sessions on forest maintenance and forest improvement and reforestation, some of the trainees did not express their ideas, did not dare to express, or did not take chance to do so. In addition, the field studies might neither be applicable nor suitable for knowledge development.

The community hardcores as a whole and as classified by gender had opinions in community forest conservation in forest usage and forest maintaining participation aspects gained from before training with statistically significant difference at the 0.05 level, whereas the 1st-year community hardcores had opinions increased only in the forest maintaining aspects and the 2nd-year community hardcores had opinions gained only in the forest usage, from before training with statistically significant difference at the 0.05 level. The research results revealed as such because the community hardcores had knowledge gained in forest usage, forest maintaining participation and related law and regulation aspects, experienced suitable activities during training sessions. This made the community hardcores had knowledge gained and resulted in opinions gained as well.

The community hardcores as a whole and as classified by gender and year of study had behaviors in community forest conservation after training, as a whole and in all individual aspects, gained from before training with statistically significant difference at the 0.05 level. This might be because the community hardcores had learned during the training sessions so that they had understanding, both from the materials/documents and direct experiences from the field studies. Accordingly, they had knowledge and opinions gained, which led to behaviors in community forest conservation gained as well. However, after training the trainees had knowledge gained and they were ready to become resource persons on forest area conservation. That in line which Sithhidej (2003) finding, revealing that when people had knowledge and understanding in community forest, they could participate in community forest management.

It was found from the research that the community hardcores with different genders and years of study had knowledge, opinions and behaviors in community forest

conservation after training with no difference. This might be owing to the training organization was under the same condition, the same content and curriculum, the training duration and the training process, including training packages distributed to the trainees for self-study, lecture summaries made by resource persons as of the training guidelines with media, brain-storming and field studies, which made all community hardcores have knowledge, opinions and behaviors in community forest conservation gained at the satisfactory level.

CONCLUSION AND RECOMMENDATION

The community hardcores as a whole and as classified according to genders and years of study showed gains in their knowledge about community forest conservation in general and in 3 aspects: forest usage, forest maintaining participation and related law and regulation, before the training at the 0.05 level of significance. However, they did not indicate gains in the aspects of the forest maintenance and forest improvement and forestation before training.

The community hardcores as a whole and as classified by gender showed gains in opinions about community forest conservation in the aspects of forest usage and forest maintaining participation before training ($p < 0.05$). In addition, the 1st-year community hardcores indicated gains in opinions about the maintenance aspect and the 2nd-year hardcores showed gains in the forest usage aspect before training ($p < 0.05$).

According to behaviors in community forest conservation, the community hardcores as a whole and as classified according to genders and years of study showed gains in conservation in general and in each aspect at the 0.05 level of significance.

The community hardcores with different genders and years of study had no different knowledge, different opinions and different behaviors in community forest conservation as a whole and in all individual aspects with statistical significance.

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