

The Effect of Training on Activities in Organic Farm of Farmers in Maharakham Province Thailand

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Abstract: This research aimed to study the effect of training on activities in organic farm of farmers in Maharakham province Thailand and to comparing their knowledge after training. The sample composed of 38 farmers in Namthaieng village, Kosumpisai district, Maharakham province which have been selected by a purposive sampling technique. The research design was just one group pre-and post-test. The data collection was analyzed by mean, standard deviation and testing hypothesis by t-test. The study results showed that total knowledge on activities in organic farm of farmers in Maharakham province was at the high level. The farmers had knowledge on knowledge on activities in organic farm after training was rated higher than before training ($p < 0.05$).

Key words: Environment, activities organic farm, training, agriculture, farmer, Thailand

INTRODUCTION

Farmers have started to cultivate plants and domesticate animals with creating the Agro-ecosystem balance in farms. Many of them have succeeded in the organic farming management that helps to generate organic or green products creating health benefits to farmers and consumers as well as income to farmers in long term operation (Tokeeree *et al.*, 2010).

Organic farming is an agricultural production system of foods and fibers in terms of environmental, social and economic sustainability. It concentrates on soil fertilization and paying respect to natural capabilities of plant, animal and agro-ecosystem (IFOAM, 2008; Arnut, 2006). Organic farming as a key to sustainable agriculture has captured the attention of many countries worldwide. Interest in organic agriculture methods is growing especially where there is evident degradation of resources essential to agricultural production such as land due to conventional farming system.

Organic farmers do not leave their farms to be taken over by nature; they use all the knowledge, techniques and materials available to work with nature. In this way, the farmer creates a healthy balance between nature and farming where crops and animals can grow and thrive.

Organic farming does not mean going back to traditional methods. Many of the farming methods used in the past are still useful today. Organic farming takes the

best of these and combines them with modern scientific knowledge. The training program is the process for improving the abilities of each person in many aspects such as knowledge, attitude and skills that happen systematically. If some of them know and understand clearly in each topic, they would change their behavior according to the experiences that they have learnt under the condition of the situation and appropriate time (Jansamood *et al.*, 2010).

The research's purposes:

- To study the effect of training on activities in organic farm of farmers in Maharakham province Thailand
- To compare knowledge on activities in organic farm of farmers in Maharakham province Thailand before and after training

Hypothesis: The farmers in Maharakham province Thailand had knowledge on activities in organic farm after training were higher than before training.

MATERIALS AND METHODS

This research was an Quasi-experimental one with the one group pre-and post-test design.

- Population and sample are as follows: Population were 141 farmers as an agent who is in Namthaieng village, Kosumpisai district, Maharakham province

- Sample, 38 farmers as an agent who is in Namthaieng village, Kosumpisai district, Maharakarm province selected by a purposive sampling technique
- Research instrument including the following:
 - The training on activities in organic farm
 - Soil is the foundation of the life course farmers
 - Culture of frogs
 - To make bio-organic fertilizer
 - To make fermented herbal insect repellent
 - Plant propagations
 - The growing vegetables without chemicals
 - Charcoal extraction of wood vinegar
 - Mushrooms
 - The test of knowledge on activities in organic farm
- In data collection, there was the step as follows
 - Step 1: Collecting pre-training data from the sample by the test of knowledge on activities in organic farm before training
 - Step 2: Collecting the immediate post-training data from the same sample by the same instruments, namely
 - Step 3: Analyzing data by mean, standard deviation and testing hypothesis by t-test

RESULTS AND DISCUSSION

The major findings revealed as the farmers have shown their total knowledge on activities in organic farm at high level ($\bar{X} = 3.57$); concept and attitude aspects total shown their at high level ($\bar{X} = 3.67$) and the maximized mean showed that sufficiency economy philosophy applied on a daily basis at high level ($\bar{X} = 4.02$) and the minimized mean showed that production planning within the farm at medium level ($\bar{X} = 3.42$); economic aspects total shown their at medium level ($\bar{X} = 3.48$) and the maximized mean showed that the accounting activities at high level ($\bar{X} = 3.81$) and the minimized mean showed that Sarjor-caju mushroom at medium level ($\bar{X} = 3.23$) (Table 1). The farmers had knowledge on activities in organic farm after training were higher than before training with statistically significant difference at the level of 0.05 which shows that the developed training program making more knowledge and experience receiving for the farmers which relating to the activities in organic farm directly to the program's target which is accorded to the Traithip *et al.* (2008) who found that the community environmental leaders had knowledge in a forest resource conservation that according to a sufficiently economic philosophy after training is higher than before training (Table 2).

Table 1: Knowledge on activities in organic farm

Knowledge	\bar{X}	SD	Level
Concept and attitude aspects			
Sufficiency economy philosophy applied on a daily basis	4.02	0.82	High
To reduce expenditure on non-essentials	3.47	0.72	Medium
Production planning within the farm	3.42	0.68	Medium
To reduce chemical use and quitting	3.73	0.86	High
The principles drama used in everyday life	3.76	0.94	High
The management plan of life	3.60	0.88	High
Total of aspects	3.67	0.55	High
Economic aspects			
The accounting activities	3.81	0.83	High
To produce fertilizer	3.42	0.91	Medium
A charcoal kiln production of wood vinegar	3.47	0.95	Medium
The cultivation and propagation in various ways	3.42	0.94	Medium
Horticulture organic herbs for consumption and sale	3.60	0.88	High
Sarjor-caju mushroom	3.23	0.88	Medium
The fish, frog farming	3.34	0.87	Medium
Agriculture combined	3.39	1.07	Medium
Organic farming	3.57	0.94	High
To conserve soil and water environment	3.57	1.00	High
Total of aspects	3.48	0.58	Medium
Total	3.57	0.50	High

*1.00-1.49 = Very low; 1.50-2.49 = Low; 2.50-3.49 = Medium; 3.50-4.49 = High; 4.50-5.00 = Very high

Table 2: Compare knowledge on activities in organic farm of farmers in Maharakarm province Thailand before and after training

Knowledge	Before		After		t-values	Sig.
	\bar{X}	SD	\bar{X}	SD		
Concept and attitude aspects	3.05	0.62	3.67	0.55	-4.756	0.000*
Economic aspects	2.61	0.76	3.48	0.58	-5.370	0.000*
Total	2.83	0.64	3.57	0.50	-5.433	0.000*

CONCLUSION

From this research, the activities in organic farm training was rated as a high efficiency and they also had knowledge on activities in organic farm after training were higher than before training. Information from the study was giving beneficially to the development of organic farm system in community.

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