
The Current Condition of Teaching and Learning on Agriculture Teachers Training of Thailand.

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This study aimed to investigate the present condition of teaching and learning on agriculture teachers training in Thailand in terms of 6 aspects: 1) instructor, 2) teaching and learning activities, 3) teaching media, 4) evaluation, 5) school structure (building)/convenience facility/ environment, and 6) learner. A set of questionnaire was used for data collection administered with instructors at 4 agriculture teachers training institutes in Thailand. This included: 1) Chiang Mai Rajabhat University, 2) Phetchaburi Rajabhat University, 3) Surin Rajabhat University, and 4) King Mongkut's Institute of Technology Ladkrabang. Content analysis was conducted and quantitative analysis was done by using frequency, percentage, mean, and standard deviation. Finding showed that the present condition of teaching and learning on agriculture teacher training in Thailand had a high level of appropriateness. Based on its details, the following were found at a high level of appropriateness: instructor, teaching and learning activities, teaching media, evaluation, and learner. However, school structure, convenience facilities, and environment were found at a moderate level.

Keywords: teaching and learning, agriculture teachers training, management condition, components

Introduction

Agriculture teachers training is directly very important to agricultural occupations since it concerns with the development of agriculture, quality of life, community, society, and economy at various levels. Besides, agriculture teachers training indirectly play roles in democratic promotion as the political system of Thailand.

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Thus, it has influence on country development which is beneficial to farmers as the majority group of the country. That is, it helps make people have better livelihoods in terms of increased incomes and good health. All of these are livelihood basis related to agriculture teaching since it is an important factor in the process of social, economic, and political development (Siriwan, 2014). It can be said that agriculture teachers training is an important key leading to modernization of the country. Siriwan (2014) stated that education in agriculture is not only a factor employed for agricultural development but also a study having wide roles in the development of progress and securities in all aspects of the country; particularly on the community and an individual. Therefore, the facilitation of education in agriculture in Thailand since the beginning puts the importance on agriculture teachers training. This is because teachers of agriculture are usually close to people and the community. Besides, they play important roles in art and agricultural science transfer to their students who will teachers of agriculture, farmers, and other agricultural practitioners in the future. Nowadays, there are only 4 higher education institutes offering agriculture teachers training course 95-year-program, bachelor's degree) in Thailand, namely: 1) Chiang Mai Rajabhat University, 2) Phetchaburi Rajabhat University, 3) Surin Rajabhat University, and 4) King Mongkut's Institute of Technology Lardkrabang.

Although there are few higher education institutes offering agriculture teachers training course in Thailand at present which unlike in the past, but there are no data on the condition of agriculture teachers training. This includes the 6 aspects of the components of the facilitation of education in agriculture which covers: 1) instructor, 2) teaching and learning activities, 3) school structure (building), 4) convenience facilities, 5) environment, and 6) learner. Therefore, this study will be beneficial to the development of education in agriculture facilitation. This is because results of the study will be an important a basic body of knowledge which can be applied to the development of the education in agriculture facilitation in all dimensions. In addition, this development will be effectively responsive to needs of learners, the community, and the society. It also includes coping with the changing era of the ASIAN community promoting Thailand to be a leader in agriculture teachers training in the future.

Objective

Specifically, this study aimed to investigate the current condition of Teaching and learning on agriculture teachers training in Thailand.

Literature Review

To be successful in the facilitation of agriculture teachers training it should have 7 important components: 1) instructor, 2) teaching and learning activities, 3) teaching media, 4) evaluation, 5) school structure (building), 6) convenience facilities and environment, and 7) learner (Siriwan *et.al.*, 2000 : 3). Meanwhile, Apapirom (1998 : 32-45) and Educational Supervision Unit, Department of General Education (1980 : 184) concluded 4 components having an effect on the facilitation of basic agriculture teaching as follows: 1) curriculum and learning content, 2) teaching and activities, 3) teaching media and convenience facilities, and 4) evaluation. This conforms to a study of Muangthip (2007: 37-71) on the condition of the facilitation of agriculture teaching in Rajabhat Universities in terms of 4 important components: preparation of teaching and teaching activities; teaching methods and activities; teaching and learning media; and evaluation. Besides, Thuathong (2000: I-III) conducted a study on condition of basic agriculture teaching in the lower secondary school level in terms of the following: 1) learning content, 2) teaching/learning activities, 3) teaching/learning media, and 4) evaluation. Thus, it can be concluded that the important components of the facilitation of agriculture teaching training includes 6 aspects: facilitator and teaching activities, teaching media, evaluation, school, structure and convenience facilities, environment, and learner.

Methodology

This study employed quantitative research and a set of questionnaires was used for data collection. The details were as follow:

Population

The population in this study consisted of 48 instructors on agriculture teachers training from the following: 1) Chiang Mai Rajabhat University, 2) Phetchaburi Rajabhat University, 3) Surin Rajabhat University, and 4) King Mongkut's Institute of Technology Ladkrabang.

Research Instrument

The questionnaire consisted of 3 parts. Part 1. was socio-economic attributes of the respondents. Part 2. Was condition of the facilitation of agriculture teachers training which had 6 components: instructor, teaching/ learning activities, teaching media, evaluation, school structure/convenience facilities/environment, and learner. Part 3. Suggestions about the facilitation of agriculture teachers training. All of these

were in accordance with the investigation on documentary review, concepts, theories, and research related to the facilitation of agriculture teachers training which was based on the objectives and scope of the study.

Inspection of the research instrument quality included the following: 1) Subjectivity and content validity of the questionnaire (Choochom, 2002 : 49-65, 135-366) by 5 specialist which Index of Item – objective Congruence (IOC) was determined it was found that the value of some question items was more than 0.05 and it was improved based on suggestions of the specialists whereas those of less than 0.50 were deleted. Besides, there was the addition of question items. 2) Reliability value of the questionnaire was found by using alpha coefficient method (Choochom, 2002: 49-65, 294-333). The questionnaire was tried out with 30 instructors on agriculture teachers training at Uttaradit Rajabhat University. It was found that the reliability value was at 0.98. Based on its details the following were found: instructor = 0.93; teaching/learning activities = 0.93; teaching media = 0.87; evaluation = 0.93; school structure/convenience facilities/environment = 0.92; and learner = 0.96.

Data Collection

Data were collected from respondents at: 1) Chiang Mai Rajabhat University, 2) Phetchaburi Rajabhat University, 3) Surin Rajabhat University, and 4) King Mongkut's Institute of Technology Lardkrabang. The former 3 universities employed questionnaire mailing whereas the last one did not. Twenty nine questionnaires were returned to the researcher (60.41%). Time span of data collection was 3 months, (1st December, 2015 – 29th February, 2019).

Data Analyses

The Statistical Package was used for data analyses on socio-economic attributes of the respondents as well as the suggestions about the facilitation of agriculture teachers training. Content data and quantitative data were analyzed by using frequency and percentage. For data on condition of the facilitation of agriculture teachers training (5-rating-scale), it was analyzed by using frequency, percentage, mean, and standard deviation. The mathematical equation on the width of the interval = a highest score – a lowers score / a number of interval. Obtained distance of each interval was at 0.80 as shown below (Roengprapan, 2000 : 30 and Boonnak, 1894 : 29).

- 1.00 – 1.80 = A lowest level of an appropriate condition on the teaching / learning facilitation.
- 1.81 – 2.60 = A low level of an appropriate condition on the teaching/ learning facilitation.

2.61 – 3.40 = A moderate level of an appropriate condition on the teaching/ learning facilitation.

3.41 – 4.20 = A high level of an appropriate condition on the teaching/ learning facilitation.

4.21 – 5.00 = A highest level of an appropriate condition on the teaching/ learning facilitation.

Results

Socio – economic attributes of the respondents

More than one-half of the respondents were females (51.75%), 42.03 years old on average, and Master's degree holders (58.62%), agricultural graduates (65.52%) and agricultural education graduates (34.48%).

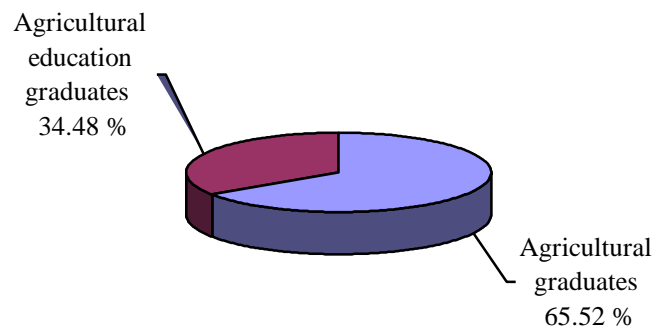


Figure 1 The qualification of Instructors on Agriculture Teachers Training.

Most of the respondents did not have academic rank; that was, 58.62 % were instructors, 31.04% were assistant professors, and 10.34% were associate professors. The respondents had agricultural teaching experience for 9.34 years on average.

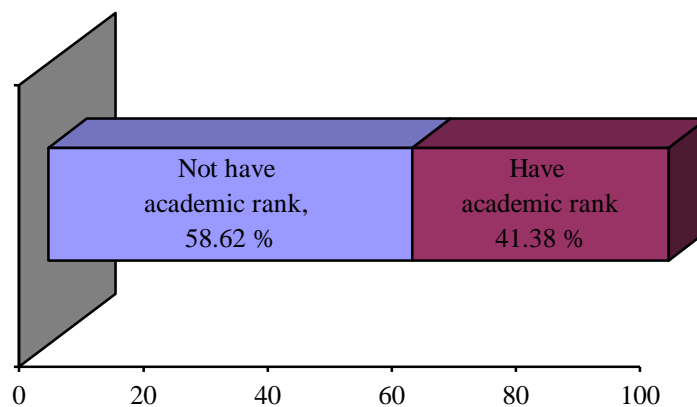


Figure 2 Academic Positions of Instructors on Agriculture Teachers Training.

More than one-half of the respondents (58.62%) had main tasks in the curricular program in agriculture teachers training. This was followed by committee of agriculture teachers training program (24.14%); executives of agriculture teachers training program (13.79%); and Chairpersons of agricultural teachers training program (3.45%), respectively.

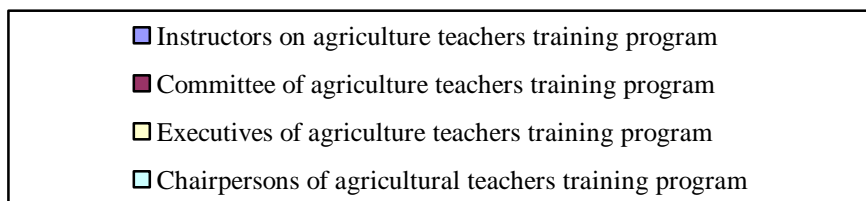
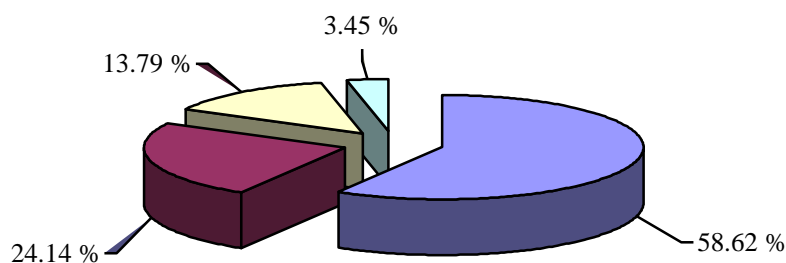


Figure 3 Main tasks in the curricular program of Instructors on Agriculture Teachers Training.

Condition of the facilitation of agriculture teachers training

The respondents stated that the condition of the facilitation of agriculture teachers training was at a high level of appropriateness. Based on its details, the following were found at a high level: instructor, teaching / learning activities, teaching media, evaluation, and learner. However, school structures/ convenience facilities/ environment was found at a moderate level (Table 1).

Table 1. Condition of the facilitation of agriculture teachers training

Items	Teaching/learning facilitation (N=29)		
	μ	σ	Description
1. Instructor	3.97	0.48	High
2. Teaching/learning activities	3.97	0.48	High
3. Teaching media	3.52	0.74	High
4. Evaluation	3.65	0.59	High
5. School structures/convenience facilities/environment	3.03	1.09	Moderate
6. Learner	3.64	0.66	High
Overall	3.65	0.52	High

Additional suggestions about the facilitation of agriculture teachers training

The respondents claimed that the facilitation of agriculture teachers training must always include ethics and virtue most (10.34%). This was followed by importance of agricultural occupations and preference in knowledge transfer to learners must be included (6.90%), and agricultural subjects/virtue must be included in all levels of the classroom (6.90%).

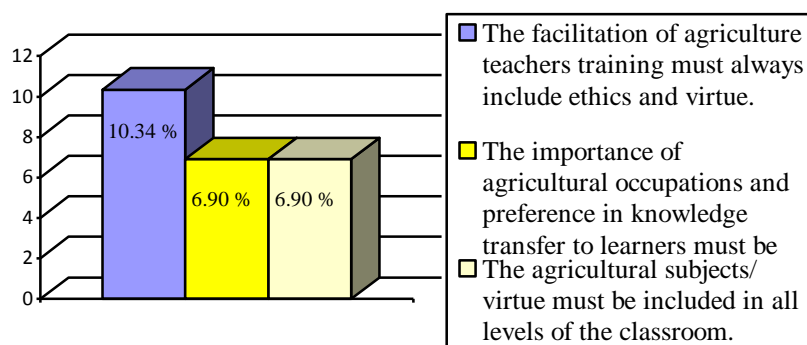


Figure 4 Additional suggestions about the facilitation of Instructors on Agriculture Teachers Training.

Conclusions

The condition of agriculture teachers training facilitation was at a high level of appropriateness. Based on its details in the conditions of agriculture teachers training facilitation, all aspects were found at a high level except the school structures/ convenience facilities/ environment aspect which was found at a moderate level.

Discussions

Instructors of the agriculture Teachers Training Program in this study usually have more than 1 duty. That is; aside from teaching (100%), 4 instructors (13.79%) are program administrators, 1 instructor is program chairperson, and 11 instructors (37.93%) are program committee members. According to results of the study, as a whole, it is found that the facilitation of agriculture teachers training is at a high level of appropriateness. Based on its details it is found that 5 aspects are found at a high level of appropriateness: 1) instructor, 2) teaching/learning activities, 3) teaching media, 4) evaluation, and 5) learner. However, the school structures/convenience facilities/environment aspect is found at a moderate level.

Interestingly, results of the study do not conform to a study of Siriwan et.al. (2000: 36-70) on the facilitation of agriculture teachers training in 2000 of higher education institutes under the supervision of the Ministry of University Affairs. In their study, the following were good enough; the condition of teaching/learning facilitation in terms of academy and practice are not enough in almost all aspects; internal and external coordination is not good enough. 2) Teaching/Learning Activities – it is not good enough in almost all aspects. 3) Teaching Media/ Evaluation/ School Structures/ Convenience Facilities/ Environment, and Learner Condition are not good enough in all aspects.

In addition, results of the study do not conform to a study of Choochan (2000 : I-II) on condition of the facilitation of agriculture teachers training in Rajabhat University in 2000. Likewise, it was found that the teaching/learning facilitation on the basis of evaluation, school structures, convenience facilities, environment, and learner is not good enough in all aspects. This implies that the current facilitation of agriculture teachers training has been improving. This may be because there are many factors related to this matter e.g. 1) there is strict quality control by the office of Higher Education and 2) time span of the study program is longer than in the past (from 4 to 5 years). This truly makes learners want or intend to be a teacher, results in the development of the current facilitation of agriculture teachers training.

Table 2 Development of the facilitation condition on agriculture teachers training in the past and at present

Facilitation condition of agriculture teachers training	Condition level (Appropriateness)		
	In 2000 ¹	At present	Description
1. Instructor	Some aspects are not good enough	High	Improved
2. Teaching/learning activities	Some aspects are not good enough	High	Improved
3. Teaching media	Some aspects are not good enough	High	Improved
4. Evaluation	Some aspects are not good enough	High	Improved
5. School structures/convenience facilities/environment	Some aspects are not good enough	Moderate	Improved
6. Learner	All aspects are not good enough	High	Improved
Overall	-	High	-
*Remark ¹	Results of a study on the facilitation condition of agriculture teachers training in higher education institutes under the supervision of Ministry of University Affairs (Siriwan et.al, 2000 : 44-54).		

Suggestions

1. All agriculture teachers training institutes should place the importance on the development or improvement of buildings, convenience facilities, and environment. This will be appropriate with the facilitation of agricultural teaching and learning for effective learning achievement.

2. All agriculture teachers training institutes should continually explore the condition of agriculture teachers training facilitation. This aims to perceive the condition of teaching and learning facilitation in terms of appropriateness and improvement.

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References

- Apapirom, R. (1998). Agriculture Teaching. Bangkok: Teaching Material Project of Faculty of Industrial Education, King Mongkut's Institute of Technology Lardkrabang.
- Boonnak, M. (1994). Statistics for Decision-making. 4th edition. Bangkok: Chulalongkorn University Printing.
- Choochan, S. (2000). Condition of Agriculture Teachers Training Facilitation in Rajabhat Institutes. Research report. Loei Rajabhat Institute, Loei.
- Choochom, O. (2002). The Teaching Material on the Construction and Development of Behavioral Science Tools. Bangkok: Behavioral Science Institute, Srinakharinwirot University.
- Educational Supervision Unit, Department of General Education. (1980). A manual on agriculture teaching for the lower secondary school level. Bangkok: United Production.
- Muangthip, K. (1997). Condition of Agriculture Teachers Training Facilitation of Agriculture Instructors at Rajabhat Universities. unpublished master thesis. King Mongkut's Institute of Technology Lardkrabang, Bangkok.
- Roengprapan, C. (2000). Basic Statistics Together with Specimens of Analyses by Using Minitab SPSS and SAS. Khonkaen, KhonKaen University.
- Siriwan, N. (2014). Miscellaneous Education in Agriculture, Thailand: Important Content Needed to be Reviewed. Bangkok: Mean Service Supplies.
- Siriwan, N. *et.al.*, (2000). Condition of Agriculture Teachers Training Facilitation in Higher Education Institutes Under the Supervision of Ministry of University Affairs. (Research report). King Mongkut's Institute of Technology Lardkrabang, Bangkok.
- Thuathong, A. (2000). Condition of the facilitation of Basic Agriculture Teaching and Learning for the lower secondary school level, Educational Service Office area 12. (Unpublished master thesis) King Mongkut's Institute of Technology Lardkrabang, Bangkok.

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