

# **New Farmer Development in Agricultural Land Reform Area in Thailand**

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## **New Farmer Development Project**

### **ABSTRACT**

*Thailand is located in suitable climate and geography that enable to perform various agricultural activities. However, low price of production and low quality of products are still remained. This issue is farmers are lacking of knowledge on farm management for instances production planning and marketing. Consequently, farmers earned less income, got in debts, some of them decided to look for other sources of income by leaving their farmland and move to the city in order to find new jobs. Leaving farmland is affected to living apart from family which may lead to collapse of family in rural areas.*

*The development gaps between poor and the rich are clearly defined by “knowledge” and “access to information”. In the past, agricultural knowledge was transferred by the government agencies which classroom training and demonstration methods were basically conducted. Moreover, some of farmers’ problems were solved by the academicians rather than solutions were generated by farmers themselves. This is for example rice farmers in the central region of Thailand were getting used to as the best applications in their rice paddy such as which type of seed is the best, what would be a good fertilizer and what is new chemical pesticides. Their answers were not analyzed concerning the advantages, disadvantages and risks that may occur. This is result to the investment without good analyzing which affecting to high input and low income.*

*The concepts of new farmers development are following:*

- 1. Develop the new farmers can be defined as a farmer is a person who has farming occupation, use information to analyze planning, able to manage the risks, main income from agricultural activities and able to lead others.*
- 2. Encourage teenage to apply in agricultural course in College of Agricultural and Technology. Education institutes should provide theories and practical training in order to create their knowledge and skills in agricultural profession. Besides, the course should enable them to start their own farms with attitude and confidence in farming, especially, they will be able to earn income not less than 15,000 THB per month which compare to the salary of those graduates.*

3. Utilize of existing College of Agricultural and Technology to be foundation of recruit new generations into agricultural sector.

4. Create collaboration between government agencies namely Thailand Research Fund (TRF), Office of Vocational Education Commission (VEC), Agricultural Land Reform Office (ALRO) and Bank of Agriculture and Agricultural Cooperatives (BAAC). One of these four agencies can be hosted and building up network to ensure long-term mechanism.

There are 4 characteristics of the new farmers are following

- Adjusting producing procedures from resources – based to knowledge – based which gain competitiveness.
- Having managerial skills through production chain which is covering farm planning to marketing
- Using and analyzing relevant information in order to make decision wise in instable market situation.
- Strengthening their own farm and extend to community in according to the Sufficiency Economy Philosophy

The project of new farmer development is conducted in three courses

- 1) New farmer development course is opened up for all Thai citizens who are interested in agricultural occupation and want to become a farmer. This curriculum takes 6 months for training which conducted in both theory and practical sessions. After trained, land will be allocated to those participants who have no farmland and willing to be a farmer which land size is not larger than 5 rai per person.
- 2) Professional farmer development course is established for students who are studying in the high vocational certificate of college of Agriculture and Technology. This takes approximately 2 years as the course of higher vocational certificate requires 2 years. Farmland will be allocated to them after graduate and size of farmland is not larger than 5 rai per person.
- 3) Sustainable farmer development course is set up for farmers who are located in the land reform areas. This course is aimed to increase knowledge and management skills in farming.

Keywords: New Farmer, Famer Reform, Agricultural Land Reform (ALRO), Farmer Development, Land Allocation, sustainable farmer

## INTRODUCTION

Agriculture sector is still one of the most important economic sectors in many developing countries including Thailand. In Thailand, the main goal of national development in 1990s was given priority to industries and other sectors rather than development of agriculture sector for last few decades. As a result, the industries and services were encouraged to grow up and required higher numbers of labor. Most of labors moved to industries and services, especially, young workers shifted to work in industries and services. Then, labor force in

agriculture sector was gradually decreased. Consequently, farm labor shortage is occurred. A number of Thai farmers has been continuously declining from 60 percent in 2003 to 38.7 in 2011 though demanding of labor in agriculture still remain high. In term of social, the aging to Thai agriculture is one problem. Elderly farmers are increasing which 50 years old and above are average age of farmers in Thailand. The older farmers are likely difficult to invest new farming system. In addition, there is low number of students enrolled in related agriculture subjects.

For the reason, Ministry of Agriculture and Cooperatives (MOAC) and Ministry of Education (MOE) have signed the memorandum of understanding in order to execute the project “New Farmer Development” on March, 12<sup>th</sup> 2008, with following state of operation frameworks:

1. MOAC and MOE collaborate to create vocational training program in agricultural occupation for participants. Training centers will be taken by VEC in several colleges such as the College of Agriculture and Technology, Fishery College and Vocational Education College with particular curriculums for both theory and practical.

2. MOAC and MOE provide appropriate agriculture technology and develop appropriate infrastructure in MOE training center which can be effectively used for practical session.

3. MOAC and MOE collaborate in research and development in order to extend knowledge and facilitate the development of agriculture project

4. MOE set the training programs including theory and practical, specifically concerning agriculture subjects

In addition, Thailand Research Fund (TRF) is responsible for setting research on training program, support research fund for cooperative organization

### **Propose of the project**

There are two main goals of this project following

1. To promote new farmers, to be equipped with theoretical knowledge and practical skills when they take up agricultural occupation; and
2. To develop sustainable agriculture and solve problems of inadequate farmers’ knowledge and skills in their future occupation

### **New Farmer Development Project undertakes 3 training courses below;**

#### **1. New farmer development course**

This project is opened up for all citizens who are interested in agricultural occupation to be a farmer, especially; unemployed persons are suggested to participate as initiative of project aim to support unemployed persons with new career. The course will give opportunity to new farmers to be able to access knowledge and land. New Farmers have to apply skills and knowledge gained to use the allocated land, and become a leadership to support and develop sustainable agriculture in that land area.

- 1) To be able to change the way of production from resources based to knowledge based in order to take advantage in competitiveness

2) To be able to manage their own farm throughout the production chain; from the farm to the market

3) To be able to use existing information to create alternatives to cope with fluctuating market

4) To be able to strengthen their own farming, and enlarge into a group or community following the philosophy of sufficiency economy

## **Operation Plan**

### **1) Project subcommittee meeting; New Farmer Development Project**

The project committees are representatives from integration agencies who involves in New Farmer Development Project. There are representatives from other department agencies within MOAC, Office of the Vocational Education Commission (VEC) and The Thailand Research Fund. ALRO holds a project committee meeting to set a project plan as following steps;

- Review operating results in the previous year
- Proposed operating plan, targets and annual budget
- Proposed integrated project plan and budget plan

### **2) Project committee meeting; New Farmer Development Project**

The operating plan, targets and annual budget will be presented in the project committee meeting to have an approval.

## **Preparation of Farmland**

1) Provincial ALRO makes a survey for available land, and report to the ALRO authorities for consideration and approval if the land can be allocated for new farmer each year

2) Land allocation database

- Provincial ALRO presents detail of the land
- Provincial ALRO presents the capacity land that can be allocated for new farmers

## **Public relations activities**

ALRO makes an announcement for application at the beginning of fiscal year; October – November. The application of project is place through website and publication of all collaborative departments such as Provincial ALRO offices, VEC officer and TRF officer. All application can apply and submit application form by themselves at ALRO offices. After applied, they were interviewed by VEC for selection to participate in a training program.

## **Participant Qualifications**

- 1) Thai nationality
- 2) Willing to be a farmer and bring development to agriculture sector
- 3) Age 20 years or above, but not more than 45 years
- 4) Full-time farmers
- 5) Graduated Grade 6 (Senior High school) or equivalent
- 6) Healthy to carry out agricultural activities
- 7) Intent to be a farmer

## **Enrolment Places**

Provincial ALRO officers, College of Agriculture and Technology, Land Reform Learning Center

## **Course Activity**

During the training, these activities below will be included:

- 1) Teaching and Learning session
  - Training in College of Agriculture and Technology
  - Training in Training center of New Farmer Development project
- 2) Supervision session
- 3) Presentation of allocated land
- 4) Post-Teaching and Learning session
- 5) Evaluation of the participants
- 6) Sending the new farmer to the farmland for 6 months of trial period

## **Teaching and Learning session**

The participants have opportunity to select the College of Agriculture and Technology. They have to enroll in the colleges on the due date. Besides, it is compulsory to follow the college's rules. Training program will include training with theory and practical session, field visit, and seminar. College of Agriculture and Technology has responsibility for setting specific training program that will help develop the capacity of the participants to be ready for their future farm. The training center will cooperate with integration agencies to have a support for effective training.

## **Supervision session**

During the 2<sup>nd</sup> month of training, representatives from ALRO, VEC and TRF and other integration agencies will visit the participants who are training in the College of Agriculture and Technology for a support and information about the land allocation and a 6 months trial period, and supervise the project operation.

## **Presentation of allocated land**

At the end of the supervision session, the participants have chance to select and visit the allocated land where they want to choose for their farmland. ALRO will send Provincial ALRO the database of participant who wants to be in the place. Then, provincial ALRO will be set the date to take participants to the place.

## **Post-Teaching and Learning session**

To prepare the participants for a 6 months trial period, this session is required at the last week of training for these activities;

- To prepare participants before they complete their training
- To make a career plan for a 6 months trial period and the plan has to be approved

- To provide networking opportunity between farmers

### **Evaluation of the participants**

After the teaching and learning session, College of Agriculture and Technology have to make an evaluation to approve the completion of the training course. The approval will be considered for theoretical, practical and career plans.

### **Sending the new farmer to the farmland for 6 months of trial period**

ALRO will confirm Provincial ALRO about numbers and names of participants who want to be in the farmland of that province. The Provincial ALRO will set the date to sign a contract for 6 months of trial period, and then take the participants to the place.

### **Delivery of Land certificate**

New farmers will be evaluated after they entered the allocation land. The evaluation is set by Provincial ALRO; new farmer who is able to carry out the 6 months of trial period with the career plan has possibility to complete the trial. The completed one will be proposed for a land certificate of land ownership by ALRO according to Agricultural Land Reform Act.

## **2. Professional development courses**

Learning and teaching method used for the Professional development courses will follow the existing courses of each vocational college, depending on their professional such as fishery, crop planting, animal science, etc. The colleges have to adjust way of teaching to provide students with positive attitude towards agriculture. Besides, students will obtain confidence and potential to enter their career.

Students who are qualified can get ALRO land allocation following the process of New Farmer Development project. However, it is only for student who applied for the vocational college that participates in the project.

The colleges that participate in New Farmer Development project must be able to prepare knowledge, skills and facility for agriculture and fishery according to VEC. The qualification is approved TRF and the committees of New Farmer Development project.

### **Admissions plan**

Before 31<sup>st</sup> of September each year, the colleges will present an admissions plan to the committee of New Farmer Development project. The committee will consider the plan and give an approval for it. The approved plan will be informed to other integrated agencies for to make co-operation plan effectively.

### **Admissions Public Relations**

Once the admission plan is approved, next steps will be as following;

- Transfer Technology and Development Bureau of ALRO will inform Provincial ALRO to publicly tell for the recruitment.
- VEC inform all vocational college to do a Public relations for student enrollment

- Enrolment period is during January - April each year, student can apply to the vocational college who participate in the project only
- Selection process for admission
- The vocational colleges make a conclusion of admissions, and report to the VEC to inform ALRO

### **Course workshop**

To implement the course including the project, the VEC will organize a workshop for development of teaching method, course content and teachers as well as to primarily prepare teachers for the understandings of the project and the learning process. The workshop will be done before the first semester each year.

### **Agency Integration Action Plan**

The VEC will make a report the project sub-committee to inform integration agencies about numbers of enrolment students and colleges. Then, integration agencies can make an agency integration plan to support the project, and use some resources together. This stage will be executed within June.

The plans will be sent to Transfer Technology and Development Bureau of ALRO. After that, ALRO will officially inform all integration agencies to operate their agency integration action plan.

### **Learning and Teaching**

The colleges operate and manage teaching with regards to general course done, then write a report of operations and send the report to Office of the Vocational Education Commission.

Supervision: Helping students to have positive attitude to the career and have enough confidence and potential to enter the career. The supervision is required at least once a semester to consult and give recommendations to the college, and supervised by representatives from the Thailand Research Fund (TRF) and related agencies.

### **Reporting Graduates**

At the end of the course (high vocational certificate / vocational certificate), the college will report numbers and names of graduates to Office of the Vocational Education Commission (VEC) and Agricultural Land Reform Office (ALRO). The land will be allocated for those graduates following ALRO land allocation process.

### **Access to the land**

After graduation, graduates follow ALRO land allocation process to temporarily have their own land for agricultural activities, and they will become ownership of the land when they can pass the agricultural professional trial. The trial period will be for six months the same as Agricultural Leadership development course.

In addition, the VEC has to inform Technology Transfer and Development Bureau of ALRO to report the Provincial ALRO for sending graduates into the land.

### **Assessment**

- (1) Students must pass an evaluation of the college curriculum
- (2) Before entering into the temporary allocated land, students must present an agricultural practice plan to get an approval of it.

### **3. Sustainable Farmers development course**

#### **Course Concept**

The evolution of agricultural production since the National Economic and Social Development Plan No. 1 year 1959 onwards, the production has been depending on the use of natural resources and labor factors. Crop production received from pioneering new areas, export goods was from the use of natural resource particularly for rice, rubber, teak and tin. Consequently, the Thai government had to shut down the national concessions in year 1989. The situation enabled the policy to change an increased agricultural production method, from increasing cultivation area to increase production per area unit. However, the current situation is 1) suitable land for agriculture is only 53 % of the total 2) 54 % of agricultural areas is owned by farmers, the remaining 46% is held by government 3) The land is not efficiently used. In addition, it is found that only 74 % of farmers having compulsory education. These farmers still follow an original style of cultivation which focuses on land/resources and labor without applying knowledge and technology. While, numbers of agricultural labor is decreasing as well as the reduction of land used for cultivation. This may affect production capacity, agricultural competitiveness and food security. Although, related agencies try to find out solution, it is well-known that fundamental problems in agriculture sector are farmers do not use proper knowledge for the career.

#### **Framework of Sustainable Farmers development course (duration 4-6 months)**

Farmers living in rural areas are persons engaged in agriculture, they grow crops using knowledge from their experience. To enhance their skills that they can use to improve the crop production or use land efficiently, it is possibilities to combine their own intellect with some knowledge. The sources of knowledge are from local philosopher, and agricultural specialist who have knowledge of modern agricultural techniques. In addition, integration of analytical thinking and records such as household accounting and farm accounting into the daily life is a way to collect data. The data can be used to make a plan or create an alternative plan to carry it properly following the Philosophy of sufficiency economy.

#### **Objectives**

- 1) To develop land usage skills according to plant types, and enhance planting process such as rice, cassava, sugar cane, rubber, oil palm, fruit, flower, vegetable and husbandry.
- 2) To increase planning skills and household management following the philosophy of Sufficiency Economy by using the household accounting, farm accounting and preliminary planning of their household accounts.
- 3) To increases skills in networking and coordinating with the government to access budget, and be able to coordinate with other agencies to reinforce or develop career activities.
- 4) Agricultural local knowledge

## **Subject content**

- 1) Basic agricultural skills, appropriate agriculture depending on areas and agricultural practice techniques according to main crop in community
- 2) Agricultural resources management community; soil and water conservation, resource management participation, life and agricultural culture, local history and the impact of global changes
- 3) Farm management ; farm accounting, household accounting and preliminary analysis of agricultural economics
- 4) Understanding of coordination with the government other agencies and developing social enterprises network

## **Course development plan**

- 1) Regional agency cooperation, local networks, College of Agriculture, studying subject content, course framework and objectives
- 2) Availability evaluation, agricultural activity and resources, local production, landscape in line with government policy to set a course content (basic agricultural skills and local agriculture )
- 3) Sample of training course from document of training development plan
- 4) Brainstorming sessions to integrate local knowledge and new knowledge in order to formulate the daily training plan for 4 months.

## **Activity plan and Integration agency budget**

- 1) Project subcommittee meeting; New Farmer Development Project

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## **Preparation of Learning Center to optimize land use in land reform area / agricultural philosopher / provincial organics group and target group**

- 1). Provincial ALRO carries out a survey and schedules meeting to set a training center and learning center ; Leaning Center in Land Reform Area , agricultural philosopher, organics producer groups and educational cooperation agencies.
- 2) Provincial ALRO holds a meeting together with the Leaning Center in Land Reform Area, agricultural philosopher, organics producer groups and educational cooperation agencies to discuss about the target area; farmer's need, resources, career development and solution.

### **Public relations activities**

Steps to promote and recruit participants as following;

- 1) Leaning Center in Land Reform Area, agricultural philosopher, organics producer groups and educational cooperation agencies jointly promote the recruitment.
- 2) Preparing operating plan and training subjects/topics

### **Participants (Farmer) Qualification**

- 1) Thai Nationality
- 2) Being farmers
- 3) Being able and ready for learning and development

Registration Places are Provincial ALRO officers in every province, and participated Leaning Center, agricultural philosopher and organics producer groups.

### **Admission criteria**

- 1) Participants (Farmers) must apply in person
- 2) The application must be certified by provincial ALRO
- 3) Requiring document must be complete and submitted to provincial ALRO

### **Training Place**

Provincial ALRO office, Learning Center of Sufficiency Economy (Leaning Center in Land Reform Area), Land Development Station and Vocational Institute

### **Summarizing number of target farmers and Setting sub-subject content**

Integration Agencies / Cooperation Agency Learning Center of Sufficiency Economy (Leaning Center in Land Reform Area), agricultural Philosopher, organics producer groups, Land Development Department and Vocational Institute carry out a meeting to consider sub-subject content local and summarize number of participants /farmers.

### **Training activity (4-6 months)**

- 1) Training activities for Sustainable Agricultural Development course will be done following the operating plan. Training subjects is taught corresponding to the needs of farmers (target groups) focusing on career support and development.

2) Supervision will be executed by the Thailand Research Fund (TRF), Office of the Vocational Education Commission, Agricultural Land Reform Office (ALRO) and integration agencies to have information below;

- Understanding of New farmer development project
- Privilege to have a support and development from other agencies

### **Participants Assessment**

Assessment process will be taken place during training and after the training period by ALRO and integration agency.

Certificates will be given to farmers who are able to complete the course.

### **Monitoring and Evaluation**

The purpose is to activate farmers to apply gained knowledge to the allocated land, and use land efficiently. It is an acceleration to optimize land use for the benefit of farmers. Besides, it is to inspect new farmers who are landless and intent to deserve the land following Agricultural Land Reform Act.

The landless new farmers have to fill in the land request form, and sign papers before enter the land as a farmer; evaluation period is six months.

### **Assessment Framework**

Provincial ALRO will assess new farmers whether they have enough potential and determination to be a farmer in the allocated land. Provincial ALRO will make a visit plan and assessment scope to observation and interview new farmer using the assessment form which consists of 6 parts as follows.

- |        |  |
|--------|--|
| Part 1 | Overview   |
| Part 2 | Land allocation for agriculture <ul style="list-style-type: none"><li>• Residential building activity</li><li>• Utilities</li></ul>                    |
| Part 3 | Agricultural occupation status <ul style="list-style-type: none"><li>• Agricultural occupations</li><li>• Agricultural occupational activity</li></ul> |
| Part 4 | Applying agricultural knowledge  |
| Part 5 | Records of farm accounting and household accounting  |
| Part 6 | Land Use Plan  |

## **CONCLUSION**

### **Operation results**

New Farmer development course: an integrated development prototype among College of Agriculture and Technology, Agencies under the Ministry of Agriculture and Cooperatives. In addition, it is increasing number of farmer and farming community in the

Land Reform Area. There are new farmers trained by the project more than 4,284 cases and more than 1,242 cases are able to deserve the land, who becomes agricultural leadership. Still, there is around 150 cases are currently under evaluation.

Agricultural Professional development courses: an ideal teaching method in agriculture vocational Institute ; Project-based Learning (PBL), and education system outside school . PBL will be focus on thinking, analyzing and creating alternative for judgment. Consequently, agricultural students can improved their career professional, and confidently enter the career without worrying for earning income. As a new agricultural professional, they will certainly earn a salary the same as or even higher than undergraduates in other career fields. There are agricultural students who participate in the project around 1894 cases.

Sustainable Farmers development course: a prototype of enhancing farmer ability to manage their own careers in the allocated land, Agriculture Land Reform area. A number of participants are more than 32,679 cases.

Table 1: Projects concerning New Farmer Development project supported by the Thailand Research Fund (TRF)

No.	Project	Researcher
	Synthesis of political recommendations, Support and Management to enter the career of agricultural graduates, Office of Vocational Education Commission	Pongphet Pitayapala
	Development the teaching model by creating high-value agriculture and farm master of the College of Agriculture and Technology	Kriangsak Sinprasit
	Development process of agricultural attitudes, and management model to develop new professional farmers ,College of Agriculture and Technology, Sisaket	Sunee In-tarasawad
	Development model based on farm management , College of Agriculture and Technology, Singburi	Ekkachai Yuttachai-worakun
	Management of Vocational Agriculture to strengthen upland communities ; case study Learning Center Baan Nato , Mae Fah Luang, Chiang Rai Province	Warapong Wimonphan
	Study of integration and connection to sustainable market under "New Farmer Development" project in Wang Nam Khieo, Nakhon Ratchasima	Pravet Chaifan
	Study of farmers integration to develop production and marketing in area of Nong Ma Mong, Chainat	Ekkachai Yuttachai-worakun
	Development model of small-scale land use to produce high-value crop, and development of ALRO farmer learning process , Chachoengsao	Surasak Suksiri
	Consultant on development of agricultural undergraduates and new farmers	Kriangsak Sinprasit
	Public relations of research works "New Farmer Development " in the academic exhibition, the Thailand Research Fund	Surasak Suksiri
	The effectiveness of the project "New Farmer Development "	Dr.Veerachai Nakviboonvon

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Table 2: Operation output “New Farmer Development” project, year 2008 – 2015

year	Total from 2008 - 2015			Courses								
				New Farmer development (cases)			Agricultural Professional development (cases)			Sustainable Farmers development (cases)		
	plan	output	%	plan	output	%	plan	output	%	plan	output	%
Total	42,140	46,978	111.48	5,525	4,439	80.34	2,995	2,059	68.75	33,620	40,480	120.40
2008	5,100	4,891	95.9	1,410	1,087	77.09	1,410	1,521	107.87	2,280	2,283	100.13
2009	5,970	6,922	115.95	1,410	2,211	156.81	-	-	-	4,560	4,711	103.31
2010	3,690	7,372	199.78	705	550	78.01	705	58	8.23	2,280	6,764	296.67
2011	7,380	7,513	101.8	300	292	97.33	80	22	27.5	7,000	7,199	102.84
2012	6,000	6,153	102.55	300	75	25	200	273	136.5	5,500	5,805	105.55
2013	6,000	6,006	100.1	800	69	8.63	200	20	10	5,000	5,917	118.34
2014	4,000	4,031	100.77	300	69	23	200	15	7.5	3,500	3,947	105.31
2015	4,000	4,090	102.25	300	86	28.66	200	150	75.00	3,500	3,854	110.11

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