# CHAPTER 1 INTRODUCTION

The highland area in Thailand is approximately 67.22 million rais, or 53 percent of area in 20 provinces including: Chiang Mai, Chaing Rai, Maehongson, Phayao, Lampon, Phare, Nan, Lampang, Tak, Petchaboon, Pitsanulok, Loi, Sukhothai, Kumpangphet, Kanchanaburi, Utaithani, Supanburi, Ratchaburi, Pachuapkeereekun and Petchaburi. These highland areas are a source of water but there has been a shortage of route access for two reasons. Firstly, an increase of the destruction of forestry from 1955 – 1969 and secondly, the continuing mobile opium plantation from the hill tribe population in northern Thailand As a result, the Thai Government was realized of such Highland problem as it effects the national security. Border Police and the Department of Public Welfare were responsible to solve this problem from 1969 – 1991. In the prevention of opium plantation and national security problem solving, there was co-operation between government agencies such as the Department of Forestry, Land Development, Agricultural Extension, and Universities. Projects were also developed such as NGOs from the Royal Project Highland, a Thai-German project and a Thai-Norwegian project. Some of the NGO projects have finished but some are still in operation up to the present day. Under the above conditions, the highland development has been adjusted in line with integrated development to reduce additional problems found in the highland areas. These problems include poverty, lower agricultural production, natural resource destruction, imbalance, land dividend, negative natural resources consumption, drugs and migration problem.

In 1969, King Bhumibol established the Royal Project aim to of developed the quality of life of the hill tribes, reducing opium plantation and restoring the water source at the same time. Accordingly, Research and Development Centers were set up in 5 provinces in northern Thailand, totaling 36 Highland Development and Learning centers. As a result, opium plantation is found no more in these areas, while more

economical plantation has become the most accounted part of the hill tribe's income. In addition, the Royal Project has also become an agricultural trader and post-harvest distributor as well as the supporter of education, public health, socio-economic and the highland's natural resources conservation (Highland Research and Development Center, 2007).

It is stated that the Royal Project is successful due to His the King's ideas and initiation for the first phase but do to the changing at the national, regional and global levels due to Globalization and free trade that increases the competition in the world. So the Royal Project development approach has adapted the strategy of integrated highland development as to encounter with Thai-China free-trade areas, climate change, with effect highland agriculture. Deforestation in the area for farming, oil prices and migration

The continued highland development strategy aims to upgrade the quality of life for both the agriculturists and the hill tribes by enabling the realization of ideas and behavior of the balance between man and the environment. In the past years, the overall of the Highland development was improved such as reduce deterioration, stop drug planting, increase the quality of life (road construction, electricity, and healthy) but in term of the development that focus human as the factor of the production didn't focus the potential of human. The pattern of human development didn't include the participation, even though results of the development were success. Moreover, the problems still occurred such as un-continuity and unsustainable of the agricultural activities, less take care of farmer in the base of participation process, unconscious of sharing, production and marketing of agricultural products. Those problems took place because of less participation in each step.

In the past, most of the development focused on the command of center office that didn't have the farmer's participation, which there, generated the problems especially in the production, resource production management that could be produced the conflict. The bottom-up policy or operation by the development Department and centers presented the problems such as conflict between the project staff and community on resource management, unsustainable impact after development. So, it is necessary to change the development concept and operation to participation

development. As the follow of the participation development, focused on the local area and self helping. There were international organization used the participation development such as World Bank. World Bank focused on the participation development that the result of the development transferred to the target groups with sustainable. In addition, the development process needed to change the strategies as following the social and problems changing. In the present, people's participation development was accepted and used as the template for development.

The process of the participation in depended start from the government, but it depended with people in the community especially in group pattern or local organization that having the participation as the objective. The power group and participation were the important factor that could be made the development successful. Participative development generated from 2 concepts. First, the participation of local area in term of designing, planning, project supporting that impact to the community; in addition, confidentially that perception of community, viewpoint, value, and knowledge could be used and feasible. Secondly, continually comprehension of feedback was integration of development activities (Mikkelsen, 1995). So, the emphasis of farmer's participation and organization network worked accordingly by promoting and supporting of government or development department. In addition, focusing in the option of economic and social feasibility of farmer was very important in order to toward the target of sustainable development. The development that didn't destroy the environment and based on fairness, needed to interweave various concepts with rationality. The participation of people was very important basic in decision process. It can reduce conflicts from the development. The success of the development was the efficiency of people activities or project that originated from people by themselves. As the result of the meaning, the development projects or activities must make by directly people. Recently, the success of the development from above was difficult because the development was from the government or organization as collaborator or consultant. Then, the success of the development was not exactly successful. Moreover, the success of the development was still ideal but it found that there were many communities developed that attempt to develop their community by conscious.

Participative development under highland conduct with farmer's participation in order to find the problem, designing, operation, performance, benefit, monitoring and evaluation in order to farmer have conscious in the project. In addition, agricultural development was also factoring to farmer that emphasis to the technological production development by less focusing on the farmer and farmer's participation. It can be caused development failure. Using the participative development in the projects must comprehension and learning in participation action research for data decision. Nevertheless, participative development can be made some people in the community or organization that participated in the case study in the community by operating with researcher since origin until finish the project. The operation with suffering the problem was the operation that people in the organization or community were not passive but they were active with participation enthusiastically and have power for decision making (Whyte, 1991).

In the past, in the area of the Royal Project Development Center of Agriculture has less farmers' participation in the steps. There was a few farmers' participation in the meeting, when there were some problem in the production and marketing, always produced conflicts between Royal Project Development Center and farmer or farmer's group. Most of local agriculturists still rely on the support from the agriculture authority and it is found not so many agriculturists take participation in highland development activities; therefore, the more level of participation from local agriculturists is the more success key of highland development strategy.

However, there are some organizations operate relating with research and development under highland such as Tribal Village Research Center, Highland Research and development Institute (Public Organization), The Thailand Research Fund Regional Office that cooperated with Royal Project on the research for regional in order to participation of community of activities in some areas. As a result, it was necessary to increase the participation of people and community including research and farmers' participation development in the area of the projects in order to decrease the problem under the development.

As the problem in the present, it was change the concept of the development to focus human as the center of the development and participatory development by starting on the "Farmers' participation in sustainable agricultural development in the

highland area of the Royal Project in Chiang Mai". It's interesting and very important to know about the farmers' participation in sustainable agricultural development in the highland area such as deliberation, statement of the problem, solution, decision, care taking, benefit, monitoring and evaluation, parameter affecting of the farmers' participation. The troubles of the participation were considered by personal basic factor, economic and social of farmer, comprehensive of the problem. Actually need to study the farmers' participation in sustainable agricultural development in the highland area with stakeholder in the participatory action research. In order to acceptation or agreement from farmers, it can move through the participation entirely and improve the community. So, it can solve the problem of the conventional operation and move through agricultural development in the projects or other activities more successful. Also, it can be the template of the sustainable agricultural development in the highland by using the farmers' participation. If there was not research by using farmers' participation in the project, the problems will occur including the production and marketing, also the department of the development will lose the important data and novel knowledge. In addition, it is necessary to study the data and apply experiences from the Royal Project which have good results in developing participation from local agriculturists including the use of proper way to difference target agriculturists, area, know ledges, technology and marketing factors in order to develop the work of the Royal Project.

# **RESEARCH QUESTIONS**

In this research, The questions are as follows:

- 1. What are the economic and social issues for Farmers in the area of the Royal Project in Chiang Mai that farmer and farmers' participation are independent and dependent variables, respectively?
- 2. What are the situations of Farmers' perception on participation in the sustainable Agricultural development in the Highland area of the Royal Project in Chiang Mai at the time of this research?
- 3. What are the factors contribute to the farmers' participation in sustainable Agricultural development in the Highland area of the Royal Project in Chiang Mai at the time of this research?

- 4. What are the problems and difficulties for Farmers' participation in sustainable Agricultural development in the Highland area of the Royal Project in Chiang Mai at the time of this research?
- 5. What are the processes of Farmers' participation in sustainable Agricultural development in the Highland area of the Royal Project in Chiang Mai?

#### **OBJECTIVES OF THE STUDY**

In this research, the objectives of the study are as follows:

- 1. To study the general information and socioeconomic of the Farmers in the Highland area of the Royal Project in Chiang Mai.
- 2. To determine the situation of Farmers' perception on Participation in Sustainable Agricultural Development in the Highland area of the Royal Project in Chiang Mai.
- 3. To study the relationship among the factors and the Farmers' Participation in Sustainable Agricultural Development in the Highland area of the Royal Project in Chiang Mai.
- 4. To identifies the problems, the traits, and the suggestion related to the Farmers' Participation in Sustainable Agricultural Development in the Highland area of the Royal Project in Chiang Mai.
- 5. To identify lessons learnt of 6 Royal Project Development Centers the farmers' participation processes on the economical planting in the highland area and case study of farmers' participation process in Banpok Tumborn Huay Kaew Maeaon District in planting soil and water conservation in the highland area of the Tin Tok Royal Project Development Center in Chiang Mai Province.

#### **OUTPUT OF THE RESEARCH STUDY**

In this research, the output of the research study are as follows:

1. The general information of each Farmer in economic and social terms of the Royal Project in Chiang Mai.

- 2. Knowledge on situation of Farmers' Perception on Participation in Sustainable Agricultural Development in the Highland area of the Royal Project in Chiang Mai.
- 3. Factors and effects of Farmers' participation in Sustainable Agricultural Development in the Highland area of the Royal Project in Chiang Mai.
- 4. Information on problems and difficulties for Farmers and to make recommendations to help them in their participation in Sustainable Agricultural development in the Highland area of the Royal Project in Chiang Mai.
- 5. Processes of Farmers' participation in planting soil and water conservation and practical solutions that can be used in areas.

#### RESEARCH SCOPE AND LIMITATIONS

# Scope of area and population

In this research I study about leaders in Farming groups, all the Farmers in each district in Chiang Mai, Chiefs and Officers of the Royal Project Development Center, researchers and assistants, Farmers in the area of the Centre of the Royal Project in Chiang Mai in the Highland areas of the Royal Project and the economical planting in the water and soil conservation in the Royal Project (2007/2008).

#### **QUANTITATIVE RESEARCH VARIABLES**

#### 1. Independent Variables

- 1.1 Basic Information
  - Age
  - Education

#### 1.2 Economic Information

- Number of household members.
- Number of household members' age child.
- Number of working age members.
- Total household income.
- Land area holdings in household.

#### 1.3 Social Information

- Channel of agricultural development information receiving.

- Contact to Extension staff and officers and government officers.
- Participation in activities of the village or community.
- Participation on agricultural development.
- Participation on agricultural training and workshop.
- Duration of settlement in the area.
- 1.4 Benefits to the Farmers of sustainable agricultural development in the Highland
- 1.5 Knowledge about sustainable agricultural development in the highland

#### 2. Dependent Variables

Farmers' participation in sustainable agricultural development in the Highland area of the Royal Project and the economical planting in the water and soil conservation of the Royal Project has seven factors to consider. The first is mentoring of Farmers by Royal Project officers. The second is the presentation of solutions and considerations of planting in the water and soil conservation project. Thirdly, cooperation between every member of the project is essential. The fourth is active participation in planting. The fifth is every member of the project to take care of basic amenities in their community. The sixth is the benefits of consumption by the Farming community. And finally for the members to monitoring and evaluate the project.

#### **DEFINITION OF TERMS**

The definitions of each term used in this research paper are as follow:

- 1. Farmers: People who plant in the Highland area Water and Soil Conservation System during the agricultural season 2008-2009 In the promotion system of the Royal Project fund who live in the region of the Royal Project in Chiang Mai.
- **2. Sustainable Agricultural Development:** Economical planting project; for example, vegetables, agriculture plants, fruits, flowers, etc. in the Highland area of the water and soil conservation of the Royal Project, Chiang Mai province (2007/2008).

- **3. Participation in activities pertaining to agricultural development:** The participation of activities regarding agricultural development of the sample group by counting the times of participation in one year.
- **4. Duration of settlement in the area:** The time that each member of the sample group lives in the area, from birth to present, by counting the year.
- 5. Benefit Consumption from sustainable agricultural development: The benefits from sustainable agricultural development planting activities in the Highland Water and Soil Conservation System in the agricultural year 2008-2009 of the sample group.
- 6. Knowledge of sustainable agricultural development:

The knowledge and recollection of the sample group of sustainable agricultural development.

- **7. Benefit Consumption from sustainable agricultural development:** The benefits from sustainable agricultural development planting activities in the Highland Water and Soil Conservation System in the agricultural year 2008-2009 of the sample group.
- **8. Participation:** The participation of the sample group in mentoring with staffs, Resolution in planting project, presentation and consideration in cooperation in action, in benefit consumption and in the following evaluation. In the project and activities according to the sustainable agricultural development planting activities in the Highland Water and Soil Conservation System in the agricultural year 2007-2008 of the sample group.

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#### **Independent Variables**

#### Farmer

Age, Education Level

#### **Economic factors**

Number of household members, Number of household members' age child, Number of working age members, Total household income, Land area holdings in household

#### Social factors

Channel of agricultural development, information receiving, Contact to Extension staff and officers and government officers, Participation in activities of the village or community, Participation on agricultural development, Participation on agricultural training and workshop, Duration of settlement in the area

#### Other factors

- Benefits to the Farmers of sustainable agricultural development in the highland -
- Knowledge about sustainable agricultural development in the highland

#### **Dependent Variable**

Farmers' participation in sustainable agricultural development in the Highland areas of the Royal Project on the economical planting in the water and soil conservation has seven factors to consider:

- Discussion
- Solution and decision
- coordination
- practice
- care taking
- benefit
- monitoring and evaluate

#### **Identify lessons learnt**

Identify lessons learnt of 6 Royal Project Development Centers the farmers' participation processes on the economical planting in the highland area

- Pa Miang Royal Project Development Center
- Huai Som Poi Royal Project Development Center
- Nong Hoi Royal Project Development Center
- Mok Jam Royal Project Development Center
- Mae Poon Luang Royal Project Development Center
- Nong Khieo Royal Project Development Center

# **Study Participatory Processes**

Case study of farmers' participation process of Tin Tok Royal Project Development center

#### **Qualitative Research**

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# **Output**

- 1. The general information of each Farmers in economic and social terms of the Royal Project in Chiang Mai
- 2. Knowledge on situation of Farmers' Perception on Participation in Sustainable Agricultural Development in the Highland area of the Royal Project in Chiang Mai
- 3. Factors and effects of Farmers' participation in Sustainable Agricultural Development in the Highland area of the Royal Project in Chiang Mai
- 4. Information on problems and difficulties for Farmers and to make recommendations to help them in their participation in Sustainable Agricultural development in the Highland area of the Royal Project in Chiang Mai
- 5. Processes of Farmers' participation in planting soil and water conservation and practical solutions that can be used in areas

**Ouantitative Research** 

Figure 1 Mixed Methodology of Framework of Quantitative Research and Qualitative Research