

Attitude of the Hilltribe Coffee Growers towards Coffee Growing and Extension in the Highlands

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ABSTRACT

The study aims to describe the attitude of the hilltribes towards coffee cultivation and coffee extension programme in the highlands of coffee growing and extension in the highlands. A comparative study of the hilltribes' attitude was also included.

Research Methodology : This study began in May 1986. Six coffee growing tribes were the respondents included Akha, Meo, Lisu, Lahu, Yao and Karen. The total of the respondents was 150 from Chiang Mai, Lampang. and Chiang Rai Provinces. Statistical methods used in this study were percentage, average rating scale and standard deviation.

Research findings : Problems that caused coffee cultivation and extension programme. It was found that coffee disease was the major problem, followed by lack of knowledge and skills of coffee cultivation coffee maintenance and care. The hilltribes considered the location of coffee plots as one of the problems because the steep slope made difficulty to manage the plot investment is also a problem. But hilltribes felt that coffee price and marketing, as well as coffee production transportation were minor problems as long as the trader and middle men could reach their villages.

Attitude of hilltribes towards coffee cultivation and coffee extension programme : Research findings showed that hilltribes considered coffee cultivation knowledge and skill were very vital needs because of its intensive care. They felt that coffee can grow in the highland conditions. Although coffee price and marketing were minor problems, the investment should be considered. Hilltribes also felt that their planting material demand should be increased and the area of coffee cultivation would be expanded in the future.

Regarding to the extension programme : They felt that the highland development projects were the organizations that provided good support. Their extension officers had adequate knowledge and skill to transfer to the hilltribes. They also felt that highland development projects provided a good support of agricultural supply to their coffee cultivation and facilitated them a fair coffee price and marketing assistance.

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INTRODUCTION

In 1973 the United Nations introduced a pilot project, the so called Crop Replacement and Community Development, in the highlands of Northern Thailand. This project aimed to testing the strategy of reducing the areas opium poppy growing by introducing development programmes to hilltribes. Agricultural development is one of the strategies in this programmes by introducing substituted crops for the highlands. Many cash crops and subsistence crops had been tried in the highlands. There were some crops that have shown the possibility for growing with highland conditions. Coffee (*Coffea arabica*) was one with a high potential and good prospects for the highlands. Later, many projects introduced this crop to the farmers by supporting both technical know how and materials. Arabica coffee shows good income return to the hilltribes because of the high demand on the world market. But coffee like other substituted crops was a new crop for the farmers and highland conditions, so it needs to be studied and followed up closely in many aspects. Problems of coffee cultivation have come to the farmers and to the highland development which are almost all concerning with the technical side. A coffee development seminar was conducted in 1980 at Northern Agricultural Development Center and all participating organizations agreed to establish a Highland Coffee Research and Development Center (HCRDC) which was initiated in 1983.

There are several objectives of the HCRDC which include :

1. To support the implementation of highland development programmes of various

agencies, particularly with respect to increasing the income of the hilltribes by means of growing coffee.

2. To act as an experimental and research centre for the selection of high yielding coffee varieties, improvement of nursery and field practices, disease and pest control, processing and marketing which will result in the production of good quality coffee by the farmers up to an international standard.

3. To be the training center for government and non-government extension officers and "key" farmers on coffee crop technology and quality control.

4. To serve as a source of technical support and supply of selected, uniform coffee seed, seedlings and up-to-date information for coffee promotion agencies.

5. To carry out the socio-economic and marketing research in support of coffee production.

Since 1984 many research projects have been carried out by trying to find a better coffee cultivation management for the highlands. It showed that all organizations involved in the highlands will produce good quality of coffee in the near future. But so far coffee production is still facing the problems on the extension and promotion. This concerns particularly on the extension methodology and hilltribe farmer factors. Since 1975 or before that period coffee has been introduced to the farmer in the highlands in the natural way, and there was no technical support;

Basically hilltribes grew Coffee without technical recommendation. Coffee growing training were rarely provided to them. These problems caused low and poor quality of

coffee production and could lead to stopping growing coffee. Apart from technical support, the study of hilltribes attitudes and perception towards coffee growing where seldom done in the past.

Therefore this study is one of the vital needs to investigate the attitude of the farmers and how they react to coffee growing. The result should be used as an indicator for the extension and development programme in the future.

Purpose of the Study

The primary and main purpose of this study was to determine the attitude of the hilltribes towards coffee growing and extension in the highlands. The following objectives were included :

1. To study the factors that influence the farmer of growing coffee.
2. To investigate the problems concerning coffee growing and extension programme.
3. To compare the attitude of the hilltribes towards coffee cultivation and extension programme.

Need and Value of the Study

According to the available information, coffee extension and promotion has been introduced to the hilltribes since 1975 as the substituted crop of opium poppy under the Pilot Crop Replacement and Community Development Project of UNFDAC. Coffee became the most promising crop for the hilltribes as the new income source. Therefore, many organizations both government and highland development projects of foreign donor countries have introduced coffee as the main

crop for the hilltribes. But there were still many problems encountered the coffee extension programme especially farm practices of coffee growing and production. This study is a vital necessity to be undertaken and investigated. Results of this study will provide some views of the farmers and will be useful for coffee extension programmes.

Contemporary and potential value of this study includes the following items :

1. Research findings will show the problem of coffee growing and extension on the highlands which will be the guideline for finding solutions in coffee promotion.
2. Research findings concerning the attitude of hilltribes will be used in the highland development projects.
3. Research report will provide some recommendations to the coffee extension programme on the highlands.

Research Design and Methodology

Research was designed to investigate the attitude of the hilltribes toward coffee growing and extension on the highlands in northern Thailand. The investigation was designed as the research methodology to obtain information from hilltribes who were involved in coffee growing and extension in three provinces including Chiang Mai, Chiang Rai and Lampang.

For improved coffee informations this study and investigation will have to accomplish the following tasks:

1. Determine the population for the study
2. Develop the methods of collecting data
3. Manage the data collection procedure
4. Analyse the data by statistical method

Population of the Study

The population of this study consists of the hilltribes from three provinces of Chiang Mai, Chiang Rai and Lampang. Respondents to the research study includes:

1. Chiang Mai Province
 - : Karen from Khun Pae Village of Chomtong District.
 - : Meo from Inthanon of Chomtong District.
 - : Lahu from Musor Paktang Village of Om-koy District.
2. Chiang Rai Province
 - : Lisu and Akha from Doi Chang Village of Mae-Suai District.
3. Lampang Province
 - : Yao from Mae-San Village of Wiang-Nua District.

Data Collection

After all information were collected the statistical analysis was done by using percentage, average rating scale and standard deviation.

Interpretation of Attitude Level

Levels of attitude by X	Rate of Interpretation
2.50 – 3.00	Much (High)
1.50 – 2.49	Fair (Medium)
0.00 – 1.49	Less (Low)

RESULTS

Part I : Hilltribes respondents' basic information

Hilltribes respondents included six major tribes : Lahu, Yao, Karen, Meo, Lisu and Akha (26.67 – 8.67 percent respectively), about one-third of them were between 30 – 39 years old. Another one-third were 29 years old and below.

The rest were 50 years old and over. Most of them were uneducated. Only a small number were finished grade 1 – 4 or over.

Hilltribes villages mostly located at the hillside. Some are at the foot of the hill which were indentified as Meo.

Hilltribes **economical conditions** were mostly at an average level and lower (poor-very poor) level. **Assts** : most of them owned radio AM receivers and sewing machines and a small number owned motorcycles or motor cars and farm tractors. **Land-holding** : most of them owned 1 – 3 rai of land while a small number owned land more than this. **Income** of hilltribes' family varied from 1,000 – 20,000 Baht (60 percent) : a small numbers received income more than that amount. **Income source** were mainly from agricultural products (coffee, cabbage, rice, maize and legumes), while opium poppy is still one of the income sources. Income from **secondary sources** labour, forest products and handicraft. A small number hilltribes ranging from 100 – 5,000 Baht borrowed money from their relatives neighbours and banks.

Social participation and communication : Most of the hilltribes participated in social and community development activities with their neighbours and received news mostly by radio receiver. And they always participate in their community development.

Part II : Agricultural information data

Agricultural practices in the highlands are diversified Hilltribes grow crops and raise animals such as pigs, chicken, cattle and horses. The purpose of livestock raising was for cultural sacrifice home consumption and labour force. It was found insect and pest control capital investment and lack of water that were agricul-

tural problems. Hilltribes cared for their coffee cultivation more than other crops and almost all of the coffee were arabica variety.

Hilltribes coffee cultivation on the highland showed that they were familiar with coffee for almost 10 years and they have cultivated coffee for 4 – 6 years and the average coffee plot size was 4 – 6 rai.

Hilltribes' consideration and decision to grow coffee was influenced by highland development project officers, good income return with the persuasion from government extension officers as the opium poppy substituted crop. They sold their coffee production in the village and to the highland development projects in the form of green beans.

Hilltribes preception of coffee cultivation showed that most of them will increase their planting areas because they need income substitution from opium poppy production and coffee gives them a good price and good income. They also motivative their neighbours to grow coffee for the reasons of good income.

Part III : Summary of hilltribes' attitude

Hilltribes' attitude toward coffee cultivation showed that they considered coffee cultivation knowledge and skill are vital need but coffee cultivation needs intensive care. They also felt that coffee can grow under the highland conditions they had ability to grow coffee, coffee can earn the income for their family and coffee marketing and price has high potential for the investment.

Hilltribes' attitude toward coffee extension programmes: They felt the coffee extension programmes have a good support from highland development project extension officers who have adequate knowledge and skill of coffee

and these officers are giving a good support, good supervision and strong attention to their coffee cultivation. It was also felt that highland development projects gave good to their coffee cultivation price and marketing management as well.

Hilltribes' attitude toward coffee cultivation problems : They felt that the biggest problems of coffee cultivation and coffee disease control, followed by lacking of coffee cultivation knowledge and skill coffee maintenance and care and lacking of land for coffee growing. On the steep slopes it was difficult to grow coffee to invest in coffee cultivation which included lack of capital. Finally they felt that coffee price marketing and coffee bean transportation were of minor problems.

Part IV : Comparison of six different hilltribes attitude

Attitude toward coffee cultivation.

1. Coffee can grow under highland conditions : Yao and Lahu felt quite strong on this matter while Meo, Lisu and Arka felt at the medium level which can consider a positive attitude and only Karen felt on this matter at the low level because Karen live at the low elevation of highland (mostly of the foothill).

2. Yao and Lahu felt that coffee can earn their family income while other tribes were not quite sure about coffee.

3. Yao felt that they have ability to grow coffee compared to Lahu, Karen, Meo and Lisu who felt at the medium level while Arka was not so sure on their ability.

4. Yao, Lahu, Akha and Meo felt that coffee growing needs knowledge and skill at high level compared to Karen and Lisu who felt to this matter was at moderate level.

5. Yao felt that coffee production can easily be stored compared to Karen, Lahu and Arka felt to this matter was at medium level while Meo and Lisu felt that coffee production can not be easily stored.

6. Yao and Lahu felt that the production can be sold at a good price in contrast to Arka, Meo, Karen and Lisu.

7. Yao, Lahu and Arka felt that coffee growing in the highlands need intensive care compared to Meo, Karen and Lisu who felt at the moderate level.

8. Yao and Lahu felt that coffee marketing have a high potential compared to Akha and Karen who felt at medium level and Meo and Lisu expressed a low potential.

9. Lahu and Yao felt that coffee growing investment can give a maximum return compared to Akha who felt they can get the moderate return while Karen, Meo and Lisu felt that coffee growing investment cannot give a maximum return.

Attitude toward coffee extension programmes in the highlands

1. Yao and Lisu felt highland development projects can give a good support of supply to their coffee growing compared to Lahu, Karen, Meo and Arka who felt this at the moderate level.

2. Yao, Lisu, Lahu and Karen felt that highland development projects give a good support to coffee extension programme at the high level compared to Meo and Arka who felt that at a moderate level.

3. Yao felt highland development projects give good support of coffee growing materials at high level compared to Lahu, Karen, Meo, Lisu and Arka who felt at the moderate level.

4. Yao and Lisu felt that coffee growing training programmes are very useful and efficient compared to Lahu and Arka who felt at the moderate level while Karen and Meo felt them less useful and less efficient.

5. Yao felt coffee price and market is good at high level compared to Lahu and Meo who felt at moderate level while Karen, Lisu and Arka felt that coffee price and market was not good.

6. Yao and Lisu felt that extension officers pay strong attention to hilltribe coffee growers at high level compared to Lahu, Karen, Meo and Arka who felt to this matter at the moderate level.

7. Yao and Lisu felt that extension officers give good support and good supervision to the farmers at high level compared to Lahu, Karen, Meo and Akha who felt on this matter at the moderate level.

8. Lisu and Yao felt that extension officers have adequate knowledge and skill of coffee cultivation at high level compared to Lahu, Karen, Meo and Akha who felt to this matter at the moderate level.

Attitude toward coffee cultivation problems

1. Yao felt that the location of coffee plots was the problem at high level compared to Karen, Mao and Arka who felt it was a problem at moderate level while Lahu and Lisu felt it was a problem at low level.

2. Yao felt that maintenance and care was a problem in a high level compared to the other tribes which felt that as moderate level.

3. Yao felt that coffee cultivation investment was a problem at high level compared to Lahu and Arka felt to this problem at moderate level

while Karen, Meo and Lisu felt to this moderate problem at low level.

4. Arka, Yao and Meo felt regarding coffee cultivation knowledge at high level compared to Lahu, Karen and Lisu felt to this problem at a moderate level.

5. Lisu, Lahu, Yao, Meo and Arka felt to the coffee disease control problem at the high level compared to only one tribe (Karen) who felt to this problems was at moderate level.

6. Yao felt to insect control problem at high level compared to the other tribes felt to this problem in a moderate level.

7. Meo, Karen Yao and Lisu felt to coffee water and irrigation problem at medium level compared to Lahu and Arka who felt to this problem at low level.

8. All the hilltribes considered coffee price and marketing in a low-level problem.

9. All the hilltribes found coffee bean transportation a low-level problem.

Conclusions of the Study

According to the purpose and objectives of the study, conclusions of this study are made as follows :

1. Factors that influence hilltribes to grow coffee include highland development project officers' inspiration, coffee gave the good income return to their family, government official inspiration and coffee income could substitute opium poppy income.

2. Problems encountered in the coffee cultivation and extension programme. Coffee disease control problem was the first problem followed by lack of knowledge and skill of coffee

cultivation, coffee maintenance and care. They considered the location of their coffee plot was one of the problems which could be identified because the steep slope land made it difficult to manage the farm. And also investment is also a problem. But hilltribes felt that there were no problems or low-level problems concerning coffee price, marketing and coffee bean transportation. It was considered that coffee price and marketing had still a high potential and trade and middle-man can offer a price at their village so there is no need to transport coffee to the lowlands.

3. Attitude of hilltribes towards coffee cultivation and coffee extension programmes. Research findings showed that hilltribes considered coffee cultivation knowledge and skill of vital need, that coffee cultivation needs intensive care, and that coffee can grow in highland conditions. They felt that they had ability to grow coffee and that they can earn income from it. Hilltribes also felt that coffee price and marketing had a high potential and investment should be considered. Hilltribes also expected their demand to be increasing and would expand the area of coffee cultivation in the future.

As for extension programme, they felt that highland development projects were the organizations that gave good support, that extension officers had adequate knowledge and skill, they also gave good support supervision and strong attention to the farmer. Hilltribes also felt that highland development projects gave a good supply support to their coffee cultivation and also facilitated them a coffee price and marketing as well.

Recommendations

Based on data analysis, summary and conclusions of the study, some recommendations for coffee extension and development programme should be made as follows :

1. Organizations which were involved in coffee extension and development programmes should consider to improve the extension officer knowledge and skill of coffee which will make them more effective and efficient. Coffee promotion and extension should be carefully implemented and also marketing promotion should be made as well.

2. Institutions and organizations involved in coffee research and development should carefully consider to solve problems that hilltribes are facing including the appropriate the methods in disease control either by resistant varieties or spraying programme, strengthen the training programme for the farmer as to develop their knowledge and skill, looking for the possibility of a source fund to support the farmer in planting material as well. And also, they should prepare the marketing promotion and mechanism for coffee production in the future. The attitude of hilltribes towards organizations was that they gave them a good

support with reference to highland development projects. These organizations' administration and management should be considered to be of use for the government organizations in the long terms as well.

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