# Accounting Development for Sustainable Production of Indigenous Rice in Southern Part of Thailand

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The southern part of Thailand is plenty of indigenous rice varieties. Several farmers produced and set the local community enterprises to promote their rice produce. The objective of this study is to evaluate the potentiality of financial discipline, saving and financial management after developing the fit family record frame and transfer to farmers who grow indigenous rice in the southern part of Thailand. The samples used in the study were 80 families of farmers growing indigenous rice. Questionnaires were generated to interview for data collection at pre - and post - transfer household account frame. Descriptive statistics (percentage, mean and standard deviation) and t - test were used in this research. The result showed that emphasis on financial discipline of famers after transfer household account frame was higher than pre-transfer; however, their debt still did not decrease. For saving behaviors, farmers usually do both timing and amount increasing, but the total saving was lower than one third of their monthly income. It is suggested that farmers should increase income and expense recording. Consequences to transfer household account lead to increase in their expense planning frame.

**Keyword:** household accounting, indigenous rice, sustainable production

#### Introduction

Rice is an export product of Thailand that yields the most income. The total income each year is not less than one hundred billion baht (from 2011 to 2014). The volume of exports was 35,027,959 million tons and the total income was 645,526 million baht. In 2014, the rice exporting was 10,969,360 million tons. That was an increase of 65% in 2013. The total income increased to 174,855 million baht (30.60%). Thai Rice Exporters Association and Ministry of Commerce of Thailand estimated the rice exporting of Thailand will increase and the price of the rice exporting will also rise. However, the trend of farmers'

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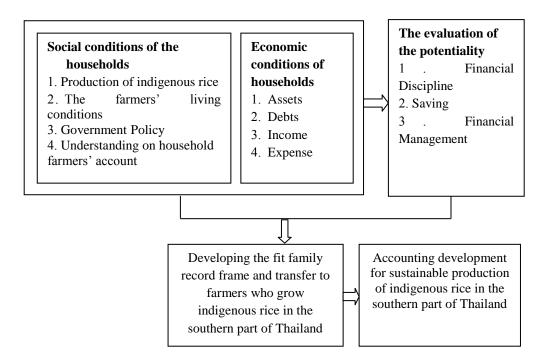
income can be compared with other occupations in Thailand due to a problem of poverty. This means they don't have sufficient income for expense so it has an important effect on the living condition of the farmers. "The important reason of poverty in the a gricultural sector of Thailand is most farmers have no knowledge about the productivity management" (Jongsakul, 2013).

The Strategic Research Issues 2012 - 2016 supported the creation of security and stability for the farmers who grow rice in the southern part of Thailand; developing comprehensive career fits the rice farmers' lifestyle, community and natural resources in areas under the sufficiency economy philosophy. The southern part of Thailand is plenty of indigenous rice varieties. Several farmers produce and set the local community enterprises to promote their rice product. In this way, developing a fit household accounts frame to the farmers who grow indigenous rice will encourage the farmers to record household data. When they have the data about income and expense in households, they know how to manage their financial records. They will have good financial planning for households in the future.

# **Research Objective**

- 1. To study the social and economic conditions of the farmers who grow indigenous rice in the southern part of Thailand.
- 2. To evaluate the potentiality of financial discipline, saving and financial management of farmers who grow indigenous rice in the southern part of Thailand.
- 3. To develop the fit household account frame for farmers who grow indigenous rice in southern part of Thailand.

## **Research Framework**



# Research Methodology

#### 1. Population and samples

The research sample was selected by means of a specific method. That is farmers who grow indigenous rice comprise 80 families; 40 families in Phatthalung and 40 families in Nakhon Si Thammarat Province.

#### 2. Research Instrument

The primary data was collected using the instrument as follows:

- 1) The interviews was used to compile the data about the social and economic conditions of household of famers who grow indigenous rice.
- Questionnaires were generated to evaluate the potentiality of financial discipline, saving and financial management of households at pre-and post-transfer household account frame.

# 3. Data Analysis

The results of the research were divided into five parts.

The first part concerning the social and economic conditions of households was analyzed using descriptive statistics including percentage, mean and standard deviation.

The second part deals with the evaluation before transfer of the household account frame. The researcher used descriptive statistics such as frequency, percentage, mean, and standard deviation.

The third part consists of the household account frame. The researcher used descriptive analysis to describe the form of household account book.

The fourth part focuses on the evaluation of the potentiality at pre-and post-transfer household account frame. The test compares the results before and after recording household accounts. Hypothesis testing using samples of two groups was compared by using t-test to obtain the results.

#### Results

- 1. The social and economic condition of farmers
  - 1.1 Social conditions of households
    - 1.1.1 The production of indigenous rice

Most farmers grow Sangyod rice (53.80%). The crop yields one time a year at 92.50%. They sow the seed in the rice field at 85.00%. The farmers grown rice for their own consumption in the household when the rice left over to be sold them by 76.25% and they have the barn at 77.50%

# 1.1.2 The farmer living

Most farmers keep the seeds for the next glowing by 66.25%. They hire workers for tilling (86.25%). They spend time for preparing the soil for about 5-6 months before the next growing (93.75%). Most farmers grow rice by themselves in the process of all growing (57.50%). The crops were harvested by the machine (98.75%). They sell the crop to the mill in the area (73.75%)

# 1.1.3 Government Policy

Supporting the seeds, the farmers know and participate in 91.25%. Establishing the community rice center, they knew and participate in 11.25%. For the establishing service centers for the farmers, they know and participate in 1.25%. Regarding the insurance price of rice, the farmers know and participate in 16.25%. Concerning the benefits for the farmers, they know and participate in 5.00%. Considering the farmers credit card, the farmers know and participate in

46.25% and they want the government to help the farmers about the rice price at 86.25%.

# 1.1.4 Understanding on household account of the farmers

Information about recording a household account of the farmers; most farmers didn't record the data of the household (85.00%). Most farmers have no basic knowledge of a household accounting (93.75%), never get to know about the household accounts (93.80%), had never attended a household account (82.50%) and had never received the media about household accounts (82.50%).

## 1.2 Economic conditions of the households

## 1.2.1 Assets

Most farmers have their own field (92.50%). Farmers have an area of land about 9.11 hectares to grow rice per household.

#### 1.2.2 Debts

The farmers are in debt for growing rice (18.75%) and the borrowing is mainly from the Bank for Agriculture and Agricultural Cooperatives.

#### 1.2.3 Income

Farmers' income from sale of rice is estimated at 6,349.23 baht per hectare per year. Other incomes are estimated at 60,112.50 baht per year and an average yield of 472.66 kg of paddy is per year per hectare.

## 1.2.4 Expense

The cost of rice is estimated at 2,328.14 baht per hectare per year. Most of the private capital accounted for 81.25%.

# 2. The evaluation of the potentiality

The potentiality of financial discipline, saving and financial management before developing the fit family record frame and transfer to farmers who grow indigenous rice in the southern part of Thailand was evaluated.

# 2.1 Financial Discipline

Most farmers focus on savings and they cultivate member of household to save money (92.50%). They deposit money with the bank to earn interest 67.50% but the deposit with the Depository Share and purchase in Government Savings Bank's Lottery 35.00% and 12.50%, respectively. However farmers still have debt more than one in three of monthly income.

#### 2.2 Saving

The majority of farmers saves money when revenues are collected before the remaining savings before they pay, and regular

savings both in terms of time and money are 72.50% and 70.00% respectively. However, the number of farmers has savings of less than one in four of monthly income is 47.50%.

# 2.3 Financial Management

Most farmers want to have sufficient life and planning to increase their income and reduce unnecessary costs in the future at 97.50 and 70.00 respectively. However, spending money in today's farmers is not good enough because most farmers don't have the timing and amount of spending in the household (60.00%) farmers do not record income accounts, expense of households (68.50%)

#### 3. Household account frame

The development of household accounting for farmers who grow indigenous rice in the southern part of Thailand. The researchers examine the social and economic conditions of the household and evaluate the potential effect of financial discipline of farmers. Values in savings and the management of funds of peasant rice farmers in southern native species that came to define the pattern of household account book that suits their style of living of farmers by dividing the book into two aspects: the revenue and the expenditure side. Each side has details of transactions to simplify the farmers' accounting records.

4. A comparison of the potential for sustainable development of rice varieties native to the South before and after using the model for recording household accounts

The relationship between the assessment of potential farmer was compared before and after the recording household accounts.

# 4.1 Financial Discipline

Farmers focus on savings and cultivate a love of family members savings, thus increasing their saving in the bank. However, the farmers' debt was steady.

#### 4.2 Savings

The farmers have been saving regularly, both in terms of time and money and saving money left from spending has increased. However, the number of farmers' savings is still less than one in four of monthly income.

# 4.3 Financial Management

Farmers who have recorded household accounts are increasing. As a result, it is planned to increase spending by households, including the purchase of essential household use, a list of the advance purchases of all time, and care of the bruising model for reuse.

## **Discussions**

Based on the findings above, the results of the comparative potential of farmers before and after the household accounting can be discussed as follows:

- 1. Farmers focus on savings and cultivate a love of family members with savings. Most farmers prefer increasing savings in a bank. This result is in accordance with Klangsawad's (2009) and Keawtong's (2008) findings which suggested that recording the data of income-expense of the household causes an increase in savings.
- 2. Farmers who have recorded income-expenses increase their revenues. As a result, the households have plans for an increase in their spending. For example, planning for buying essential things of households, writing a shopping list in advance and restoring an appliance in the household to be recycled. This finding is similar to the results of Klangsawad's (2009) that the household accounting enables more efficient management of the households. Farmers plan to reduce spending money on unnecessary expenditure.
- 3. After recorded income expense of households, the farmers' debt was steady because the timing of this study was short-term for recording household account (a month), but the debt grow previously. Most farmers' debt are long-term liability.

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