

## CHAPTER 5

### CONCLUSION

The research on “Roles of farmer housewife in decision making concerning farming through sufficiency economy, Chiang Mai province” comprises of the objectives, research questions, research methodology and research result as follows:

#### 5.1 Objectives of the study

This study was aimed to investigate the following:

1. Roles of farmer housewives in decision making on doing the sufficiency economy farming
2. Factors related to roles of farmer housewives in decision making on doing the sufficiency economy farming
3. Impacts of housewives in decision making on doing the sufficiency economy farming on a better standard of living of farmer families.

#### 5.2 Research question

This research aimed to answer the following research questions:

1. How much role do agricultural housewives take a decision making on doing the sufficiency economy farming?
2. What factors influencing decision making to do agriculture in accordance with sufficient economics?
3. What factors influencing to farmer housewives to do agriculture in accordance with sufficient economics?
4. Does decision making of agricultural housewives to do agriculture in accordance with sufficient economics affect the well-being of farmer families?

### 5.3 Research methodology

#### 5.3.1 The target populations

The target populations in this study are housewives in farmer's household in Chiang Mai province which consists of 24 districts including 195,598 household farmers

#### 5.3.2 Sample group

The sample group in this study is farmer housewives in 9 districts in Chiang Mai province such as Meataeng, Chaiprakarn, Sanpatong, Om koi, Doitao, Sansai, Saraphi, Maejam, and Samoeng, totaling 375 people by using multi-stage sampling technique as follows:

**Stage 1** Classification of districts in Chiang Mai province in terms of topographic conditions.

**Stage 2** Selection of districts of each direction. Forty percent of the districts will be obtained by random sampling.

**Stage 3** Forty percent of sub – districts of the districts in step 2 will be selected by random sampling.

**Stage 4** Forty percent of the villages of sub – district in step 3 will be selected by random sampling.

**Stage 5** Forty percent of the households of the villages in step 4 will be selected by random sampling (6,112 households).

Thus, 6,112 households will be used for sampling frame in this study. Then, the size of sample group will be determined by using the formula of Taro Yamane for finding a number of samples.

Substitution in the formula Taro Yamane

$$n = \frac{N}{1 + Ne^2} = \frac{6,112}{1 + 6,112 (.05)^2} = 375$$

The number of samples is 6 percent of population in the sampling frame.

$$\begin{aligned} 6,112 \text{ households} &= 100\% \\ 375 &= \frac{375 \times 100}{6,112} = 6.135 = 6\% \end{aligned}$$

**Stage 6** The 375 household samples (6 percent) are obtained by simple random sampling frame

### 5.3.3 Research instrument

The researcher used questionnaire as an instrument in collecting data. The questionnaire comprises close-ended questions and open-ended questions. For content validity, the questions were consulted with and advised by thesis advisory committees. Then, the questionnaire was brought to test with 20 farmer housewives who are not the population of this research. The answers obtained from the questionnaire Part 1 (Item 11 - household economic role of farmer housewives, Item 12 – power relation (patriarchy), and Item 13 – sufficiency economic acknowledgement from various sources), Part 2 (roles of farmer housewives in decision making on doing sufficiency economy farming), and Part 5 (problems and obstacles in agricultural activities according to the principle of sufficiency economy) were analyzed to find reliability coefficients according to the method of Cronbach by using SPSS for Windows. The result appears that in each issue contains Cronbach's Alpha Coefficient as follows:

Part 1 Item 11	has Cronbach's Alpha Coefficient equivalent to	.836
Part 1 Item 12	has Cronbach's Alpha Coefficient equivalent to	.726
Part 1 Item 13	has Cronbach's Alpha Coefficient equivalent to	.775
Part 2	has Cronbach's Alpha Coefficient equivalent to	.723
Part 5	has Cronbach's Alpha Coefficient equivalent to	.865

### 5.3.4 Data Collection

In this study, the data collection was conducted from November 2010 to May 2011 by using the questionnaire with 375 farmer housewives individually.

### 5.3.5 Data Analysis

The analysis was done by using SPSS for Windows to find frequency, percentage, mean, standard deviation, max, min, weight mean score, and multiple regression analysis

## 5.4 Conclusion

### 5.4.1 General socio-economics background of farmer housewives and families

The sampling group of farmer housewives 36.0% ages between 41 – 50 years. The mean of which is 47.71 years. Most of them (62.7%) graduated elementary level; there were only 2.4% who graduated a bachelor degree. Likewise, the great majority of the husband (60.3%) graduated elementary level; there were only 2.8% who graduated a bachelor degree.

Families of farmer housewives 39.2% have 4 members in their families. Most of farmer housewives (72.0%) have only 2 agricultural workforces. For the period of marriage, it found that 39.2% of farmer housewives have a period of marriage between 21 – 30 years. The mean of period of marriage is 24.04 years. The farmer housewives 46.7% have 2 children.

The farmer housewives have the mean of income 3,948.27 Baht a month. In regard with the family income, most of the farmer housewives' families (62.7%) earn less than 10,000 Baht. Most of farmer housewives (92.0%) have never moved their residence. In search of group membership, it found that farmer housewives 28.3% were not the member of any group, and 41.1% of them were a member of Bank for Agriculture and Agricultural Cooperatives.

In studying of household economic roles of farmer housewives, it found that in an overall farmer housewives have economic role in the high level (mean 3.43). When taking into account of 10 aspects of sub-roles, it found in order of priority that the feeding the family was put in the high level (mean 3.94). The secondary aspect (mean 3.83) was cost control and assets and saving from what is earned, respectively. In some aspects the farmer housewives reflected in the moderate level were sales transaction (mean 3.34), animal husbandry (mean 2.80), and household bookkeeping (mean 2.65), accordingly.

From the study of power relation in the household by analyzing level of treat of farmer housewives in regard with power relation (patriarchy), it found that farmer housewives have low level of treat as male is superior in the household (mean 2.53). It found that there were 2 aspects which were in high level as follows: 1) both farmer housewives and husbands help out each other in household tasks (mean 3.71), and 2)

farmer housewives are irreconcilable to let man looks down upon, take advantage, oppress and violently abuse (mean 3.70). There were 10 issues in low level of treat, of which the important issues are as follows; when conflict happens between them; farmer housewives usually lack of confidence and self-esteem; and in the farmer housewives' families, man is superior in every respect (mean 2.51). Consequently, there were some issues in moderate level of treat, of which the important issues are as follows; after the marriage, farmer housewives have to use the husband' surname (mean 3.25); farmer housewives lack of social opportunity because they are responsible for the household tasks and primarily take care of the children and husband (Mean 3.10); and in the agricultural family, commonly, husband takes an leadership role in every respect (mean 2.94).

From the study of level of sufficient economics acknowledgment from various sources in an overall image, it found that farmer housewives had moderate level of acknowledgment (mean 2.85) as the sources of acknowledgment, which is in high level, are Television (mean 3.86), radio (mean 3.50). The sources of recognition, which is in moderate level, are broadcasting news tower (mean 3.19), neighbors (mean 3.03) and agricultural officer (mean 2.70). The sources of acknowledgement, which is in low level, are newspaper (mean 2.55) and advisory media like brochure or manual (mean 2.33). The source of recognition, which is in the very low level, is Internet (mean 1.61).

#### **5.4.2 Roles of farmer housewives in decision making on doing sufficiency economy farming**

From the study of roles of farmer housewives in decision making on doing sufficiency economy farming, generally, it found that decision making of farmer housewives on doing sufficiency economy farming was in high level (mean 3.43). If taking a look into each aspect, we would found that the aspects in high level are morality (mean 3.88) and moderation (mean 3.44). The aspects farmer housewives have moderate level of decision making are reasonableness (mean 3.33), self-immunity (3.19) and knowledge (3.12). In considering to each issue in details, it can be explained as follows:



### **Moderation**

In an aspect of moderation, farmer housewives took action in decision making in high level (mean 3.44). It can be seen that the followings sub-issues were rated in high level; purchasing necessary products for their living and occupation (mean 3.78); using household workforces in doing things together (mean 3.73); and using existing capital and equipment in doing agriculture (3.61), respectively. The issues farmer housewives have moderate level of decision making are as follows; storing some portion of products gained for further harvest without buying more seeds (mean 3.32); using compost and organic fertilizer that already contains in the soil without relying on chemicals (mean 3.24); and using natural enemies to prevent insect diseases instead of using too much insecticide (mean 2.94).

### **Reasonableness**

Generally, in an aspect of reasonableness, farmer housewives took action in decision making in moderate level (mean 3.33). It can be seen that the following sub-issues were rated in high level; planning harvest according to the need of the market (mean 3.47); and planning production based on geographical potential (mean 3.45). The issues farmer housewives have moderate level of decision making are as follows; studying sufficient agricultural knowledge that is beneficial to their occupation (mean 3.34); planning of land utilization for different purposes such as growing different plants in the same area (mean 3.28); and seeking out the cause of agricultural problems such as problem of reduced productivity (mean 3.14).

### **Self-immunity**

Generally, in an aspect of self-immunity, farmer housewives took action in decision making in moderate level (mean 3.19). It can be seen that the following sub-issues were all rated in moderate level in order of priority; money division for investment, consumption and saving (mean 3.38); saving from agricultural gain (mean 3.37); conducting an investment plan by prior studying its agricultural capital (mean 3.32); considering possible risks such as alternative products when the main product is reduced, etc., as well as finding solution to the risks (mean 3.15); and household bookkeeping and daily statement for the family planning (mean 2.73).

### **Knowledge**

Generally, in an aspect of knowledge, farmer housewives took action in decision making in moderate level (mean 3.12). It can be seen that most of the issues were rated in moderate level. There was only one issue being put in high level which is attending the meeting of the village (mean 3.67). The residual issues were all rated in moderate level as follows; seeking knowledge from other sources such as TV, radio, brochure, etc. (mean 3.13); finding a way to develop the career such as growing another kinds of plants or expanding harvesting area, etc. (mean 3.11); finding a relevant book regarding agricultural knowledge (mean 2.99); attending agriculture-related training or seminar to enhance their knowledge of sufficient economy (mean 2.94); and taking an observation field to study from the successful one (mean 2.87).

### **Morality**

Generally, in an aspect of morality, farmer housewives took action in decision making in high level (mean 3.88). It can be seen that the following sub-issues were all rated in high level in order of priority; diligence in performing occupation (mean 3.93); not claiming other belongings/ assets to be theirs (mean 3.91); leading a life on the basis of sufficiency – not exploit others (mean 3.90); being generous and supporting people who are deficient (mean 3.89); not taking advantage from others by determining a proper price (mean 3.88); after spraying preservation chemicals, not early selling products which are under the restricted period and being fair in solving problems (mean 3.87); and considering common benefits such as voluntary work of community development (mean 3.78).

### **5.4.3 Household agricultural activities in accordance with the sufficiency economy farming**

From the study of household agricultural activities in accordance with the sufficiency economy farming in each aspect, it found that:

#### **Man**

Agricultural activities of the families concerning man, farmer housewives more than 80% put into practice are as follows; using own workforce in carrying out agricultural activities (95.5%); work division in the families (93.95%); and finding more knowledge in doing agriculture according to sufficient agriculture, in order to be

apply for their farming, such as training or observation trip, etc. (90.7%). There was only one issue the farmer housewives' families less than 80% put into practice is not employing external workforces (74.9%).

### **Money**

Agricultural activities of the families concerning money, farmer housewives more than 90% put into practice are as follows; purchasing products only necessary to their occupation (96.3%); and reasonable spending, not extravagant (94.4%). There was only one issue the farmer housewives' families 53.9% put into practice is household bookkeeping for own audit.

### **Material**

Agricultural activities of the families concerning material farmer housewives more than 80% put into practice are as follows; agricultural resource circulation such as straw, paddy husk or dried grass as a cover of soil surface and using coir placed at the bottom of the hole when growing plants, or using coir when grafting, etc. (86.9%); utilizing own material or dung for the utmost benefit such as using leaves or dung to produce compost or manure, or feeding straw to cattle, or using firewood in boiling, etc. (82.1%). Another 2 activities the farmer housewives' families less than 80% put into practice are as follows: using animal workforces or the agricultural tools for the utmost benefits (79.2); and processing products or preserving it for own consumption such as sour pickling, drying out or preserving in syrup, etc. (74.4%).

### **Management**

Agricultural activities of the families concerning management, farmer housewives more than 80% put into practice are as follows; planning to use the house area for the utmost benefit (92.0%); growing backyard garden (90.4%); and determining precise period of doing agriculture according to sufficient economy (89.3%). Moreover, some issues the farmer housewives' families less than 80% put into practice are; planning by considering geographical potential (79.7%); growing rice for own consumption in a year (73.6%); feeding animal for own consumption and selling (71.2%). However, there was only one activity the farmer housewives' families less than 70% put into practice which is digging a pond for fishery and storing rain water (62.9%). The details are shown in Table 10.



### **Overall**

It found that most of the farmer housewives' families do agriculture according to sufficient economy which is rated in much level, the points was evaluated from the level of actual practice (18 – 26 points) or 82.7%. There were only 16.5% of farmer housewives who have a level of practice at a medium rate (10 – 17 points). And 0.8% of farmer housewives who have a level of practice at a less rate (1 – 9 points).

#### **5.4.4 Well-being of farmer families according to sufficiency economy farming**

From the study of well-being of farmer families according to sufficiency economy in each aspect, it found that:

##### **Sanitation**

In an aspect of sanitation, the questions farmer housewives more than 90% answered “yes” are; cheerful and delighted states of mind (95.5%); accessibility to public health service (95.5%); strong health being able to work regularly (95.2%); and being unworried and encouraged (93.6%). And the question the farmer housewives less than 90% answered “yes” is being deprived of diseases, having good health and living in non-toxic conditions (88.8%). From the additional interview, it also found that most of farmer housewives who answered “no” are suffering from high blood pressure and diabetes. They further stated that in the past they had used chemicals in doing agriculture.

##### **Working**

In an aspect of working, the questions farmer housewives more than 90% answered “yes” are; good working environment (96.5%); being able to fully take care their farms and take control of agricultural activities (93.6%); and having sufficient workforces (92.0%). The questions the farmer housewives less than 90% answered “yes” are; having sufficient circulating funds for agriculture (87.7%); and reducing the risk from natural disasters such as wildfire, storm, drought or flood, etc. (87.5%). However, the farmer housewives who answered “no” gave out the reason in the issue of circulating funds for agriculture that the family is still in debts and sometimes they need to borrow the money. Most of them are debtors of Bank of Agriculture and

Agricultural Cooperatives. In the issue of risk from natural disasters, they added that they still have to encounter the water problem both drought and flood, including wildfire.

### **Income**

In an aspect of income, most of farmer housewives more than 90% answered “yes” in all issues as follows; earning additional income from selling products that exceed from saving for own consumption (89.1%); having continuous income from agriculture (86.7%); having reserve fund (84.8%); and having sufficient buying power for their living (84.5%). From the additional interview regarding income, the farmer housewives added that they sometimes have additional income but it is not regular enough, and they do not have saving.

### **Family life**

Most of farmer housewives (more than 90%) answered “yes” in every issues as follows; having sufficient basic facility in life such as TV, vehicle, etc. (97.1%); making discussion among family members and helping one another solving problems (95.7%); warm and loving family (96.8%); happy family taking care of each other (95.5%); family members spend more time together (95.2%); and being strong and self-dependent family (94.1%).

### **Working environment**

In an aspect of income, most of farmer housewives more than 90% answered “yes” in all issues as follows; secure shelter (97.3%); good environment (96.0%); accessibility to sufficient public health services (94.9%); sufficient amount of consumable water (94.9%); and safety in life and property, no criminal and drugs (94.7%).

### **Overall**

When taking into account in an overall image, it found that most of farmer housewives’ families have a well-being according to sufficient economy, which was rated in the much level (17 – 25 points) or 95.2%. There were only 4.8% of farmer housewives who have a level of well-being at a medium rate (9 – 16 points). And none of farmer housewives who have a level of well-being at a less rate (1 – 8 points). It can be seen that even though agricultural career needs hard-working and full

dedication, and promotes less income, some farmer housewives' families have a good livability, well-being, and live a happy life according to sufficient economy.

#### **5.4.5 Problems and obstacles of farmer housewives in doing agricultural activities according to sufficiency economy farming**

From the study of problems and obstacles of farmer housewives in doing agricultural activities according to sufficiency economy farming, it found that, in an overall image, farmer housewives have problems and obstacles in carrying out agricultural activities in high level (mean 3.42). When delving into sub-issues. It found that the issue the farmer housewives have problems and obstacles in high level are as follows; the cost of some production factors such as seed, fertilizer, animal feed whose price are getting skyrocketed (mean 3.86); workforces in carrying agricultural activities are insufficient (mean 3.54); and insects and pests cause damage to the farm plant (mean 3.52), respectively. The issue the farmer housewives have problems and obstacles in moderate level are as follows; water source is not enough to do agriculture (mean 3.34); little agricultural area unsuitable to follow the principle of sufficient economy (mean 3.34); and sometimes, no excessive production for own consumption, except from selling (mean 3.34). However, from the additional study of problems and obstacles, it also found other problems such as; low productivity; low product price; farmer housewives do not have own reserve fund; no officer gives advice about doing agriculture, even sometimes the officer came but there was no consistency; farmer housewives' health is not propitious; and the agricultural operation lacks of continuance.

At all events, farmer housewives has made a relevant suggestion to doing agriculture according to sufficient economy that the concerned officer should take more action in giving knowledge or arranging agricultural activity training, as the matter of fact that this has been lacked of continuance. Especially, the knowledge of food processing and preservation should be made known to them, including finding a market for processed product as another marketing channel, in order to promote more income to farmer housewives. In addition, farmer housewives also wanted related government section looking after them and raising agricultural product's price since

most of agriculturists were taken advantage by the middleman who always forces the price down.

**5.4.6 Analysis of factors related to 1) roles of farmer housewives in decision making on doing sufficiency economy farming 2) household agricultural activities in accordance with the sufficiency economy farming and 3) well-being of farmer families according to sufficiency economy farming**

From the multiple regression analysis, it found that there were 3 variables with statistical significance related to **roles of farmer housewives in decision making on doing sufficiency economy farming** such as 1) household economic roles of farmer housewives 2) sufficiency economic acknowledgement from various sources and 3) problems and obstacles in doing agricultural activities according to sufficiency economy farming. All of them have a positive relation with roles of farmer housewives in decision making on doing sufficiency economy farming

There were 4 variables with statistical significance related to **household agricultural activities in accordance with the sufficiency economy farming** such as 1) number of family members 2) power relation (patriarchy) in the families 3) roles of farmer housewives in decision making on doing sufficiency economy farming and 4) problems and obstacles in doing agricultural activities according to sufficiency economy farming. The variables that share positive relation with doing agriculture according to sufficient economy of the agricultural families comprise of 2 variables as follows: 1) roles of farmer housewives in decision making on doing sufficiency economy farming and 2) problems and obstacles in doing agricultural activities according to sufficiency economy farming. Whereas the variables that share negative relation with household agricultural activities in accordance with the sufficiency economy farming comprise of 2 variables as follows: 1) number of family members and 2) power relation (patriarchy) in the families

There were 3 variables with statistical significance related to **well-being of farmer families according to sufficiency economy farming** such as 1) number of children 2) household economic roles of farmer housewives and 3) household agricultural activities in accordance with the sufficiency economy farming. The

variables that share positive relation with well-being of farmer families according to sufficiency economy farming comprise of 2 variables as follows: 1) household economic roles of farmer housewives and 2) household agricultural activities in accordance with the sufficiency economy farming. Whereas the variable that share negative relation with well-being of farmer families according to sufficiency economy farming comprise of 1 variable which is number of children.

#### 5.4.7 Hypothesis Test

The researcher has put null hypothesis into the test as follows:

- H<sub>0</sub>-1: None of variable results to be statistical significantly relate or conjointly explain or predict variability of decision making of farmer housewives to do agriculture in accordance with sufficient economics.
- H<sub>0</sub>-2: None of variable results to be statistical significantly relate or conjointly explain or predict variability to do agriculture, in accordance with sufficient economics, of farmer housewives.
- H<sub>0</sub>-3: Decision making to do agriculture, in accordance with sufficient economics, of farmer housewives is not related to well-being of agricultural families with statistical significance.

1. The researcher denied hypothesis H<sub>0</sub> – 1 while finding that there are variables with statistical significance related to roles of farmer housewives in decision making on doing sufficiency economy farming, which are household economic roles of farmer housewives, sufficiency economic acknowledgement from various sources, and problems and obstacles in doing agricultural activities according to sufficiency economy farming. All of them have a positive relation with roles of farmer housewives in decision making on doing sufficiency economy farming.
2. The researcher denied hypothesis H<sub>0</sub>-2 while finding that there are variables with statistical significance related to household agricultural activities in accordance with the sufficiency economy farming, which are number of family members, power relation (patriarchy) in the families, roles of farmer housewives in decision making on doing sufficiency economy farming, and



problems and obstacles in doing agricultural activities according to sufficiency economy farming. While the positive factors related to doing agriculture according to sufficient economy of the agricultural families are such as roles of farmer housewives in decision making on doing sufficiency economy farming, and problems and obstacles in doing agricultural activities according to sufficiency economy farming. As for the negative factors related to household agricultural activities in accordance with the sufficiency economy farming are such as number of family members, and power relation (patriarchy) in the families

3. The researcher denied hypothesis  $H_0-3$  while finding that there are variables with statistical significance related to well-being of farmer families according to sufficiency economy farming, which are number of children, household economic roles of farmer housewives, and household agricultural activities in accordance with the sufficiency economy farming. While the positive factors related to well-being of farmer families according to sufficiency economy farming are such as household economic roles of farmer housewives, and household agricultural activities in accordance with the sufficiency economy farming. As for the negative factor related to well-being of farmer families according to sufficiency economy farming is only number of children

## **5.5 Research discussion**

### **5.5.1 Factors related to roles of farmer housewives in decision making on doing sufficiency economy farming**

In this study, it found that there are 3 variables that have relation with statistical significance with roles of farmer housewives in decision making on doing sufficiency economy farming as follows: 1) household economic roles of farmer housewives 2) sufficiency economic acknowledgement from various sources and 3) problems and obstacles in doing agricultural activities according to sufficiency economy farming. All of them have a positive relation with roles of farmer housewives in decision making on doing sufficiency economy farming

#### **5.5.1.1 Household economic roles of farmer housewives**

From the study, it found that household economic roles of farmer housewives have positive relation with roles of farmer housewives in decision making on doing sufficiency economy farming. That is to say, the family whose housewives has more economic role will contribute more roles in decision making on performing career. This can be explained that farmer housewives have been taking more household economic role in the following aspects: feeding the family, working outside the house, managing production materials, etc. They also gain more power in negotiating on the household matters. Therefore, they have role in decision making on performing career according to sufficient economy. From the study of relations between each pair of independent variables (Table 16), it found that taking household economic role of farmer housewives has positive relation with education level of farmer housewives and has negative relation with education level of husband. This means that farmer housewives who take more household economic role will have higher education level than the husband. They tend to be the decision maker on performing agriculture according to sufficient economy.

#### **5.5.1.2 Sufficiency economic acknowledgement from various sources**

From the study, it found that level of Sufficiency economic acknowledgement from various sources has positive relation with roles of farmer housewives in decision making on doing sufficiency economy farming. It shows that farmer housewives who receive sufficient agricultural knowledge will have more roles in decision making on doing sufficiency economy farming. From the sources of their knowledge regardless

of television, radio or information, they enhance the occupational knowledge which in the same manner, they encourage them to have more role in making a decision. In accordance with Meada (2005), it stated that decision making of farmer housewives is based on levels of information recognition which helps them come to a final decision. And in pursuant of what Tiyanoon (1999) had found, it stated that most of agriculturists will recognize the knowledge regarding sufficient economy from television. However, Shinawatra et al (1987) found that one of the most important factor that keep the woman away from working efficiently is the knowledge accessibility, which tends to much more available to the husband more than farmer housewives. It is obviously seen that if farmer housewives receive knowledge and information from more sources, it will contribute them to take more part in making a decision, while creating reliability and acceptance among the husband.

#### **5.5.1.3 Problems and obstacles in doing agricultural activities according to sufficiency economy farming**

From the study, it found that problems and obstacles in doing agricultural activities have positive relation with roles of farmer housewives in decision making on doing sufficiency economy farming. This means that the farmer housewives' families, which have more problems and obstacles in carrying out agricultural activities according to sufficient economy, will contribute more roles in decision making on performing career. It can be explained that occurrence of problems concerning their occupation creates a considerable discussion between farmer housewives and husband in order to help each other solve the problems. As a result that they have to make a decision together, farmer housewives take more role in making a decision which is in concordant with Nakornthap (1996) who mentioned about learning process from problems and obstacles that learning from the problems in real life is an attempt to solve the real problems, which means solving own problems. The learning can occurred from discussion, problem analysis, seeking the cause of the problems, and finding a solution and implementing it. The agricultural families are, therefore, confident in making a decision, in own capability, and initiating things and finding additional knowledge for the own better livability.

### **5.5.2 Factors related to household agricultural activities in accordance with the sufficiency economy farming**

There are 4 variables that have relation with statistical significance with household agricultural activities in accordance with the sufficiency economy farming as follows: 1) number of family members 2) power relation (patriarchy) in the families 3) roles of farmer housewives in decision making on doing sufficiency economy farming and 4) problems and obstacles in doing agricultural activities according to sufficiency economy farming. The variables that have positive relation with household agricultural activities in accordance with the sufficiency economy farming comprise of 2 variables as follows: 1) roles of farmer housewives in decision making on doing sufficiency economy farming and 2) problems and obstacles in doing agricultural activities according to sufficiency economy farming. While there are also 2 variables that have negative relation with household agricultural activities in accordance with the sufficiency economy farming comprise of 2 variables as follows: 1) number of family members and 2) power relation (patriarchy) in the families

#### **5.5.2.1 Number of family members**

From the study, it found that number of family members has negative relation with household agricultural activities in accordance with the sufficiency economy farming, which means that the farmer housewives' families, whose members are fewer, will contribute to the agriculture which is more carried out in accordance with sufficient economy. From the study of relation between each pair of independent variables (Table 19), it found that the variable, number of family members, have negative relation with power relation, sufficiency economic acknowledgement from various sources, and roles of farmer housewives in decision making. It can be explained that the families, whose members are fewer, will have more relation with power relation, more levels of sufficiency economic acknowledgement from various sources, and have more roles of farmer housewives in decision making. Therefore, this becomes a reason why the fewer amounts of family members practice and follow the way of sufficient economy than other families which has more members.

### **5.5.2.2 Roles of farmer housewives in decision making on doing sufficiency economy farming**

From the study, it found that roles of farmer housewives in decision making on doing sufficiency economy farming has negative relation with household agricultural activities in accordance with the sufficiency economy farming, which means that the farmer housewives' families, whose members are fewer, will contribute to the agriculture which is more carried out in accordance with sufficient economy. This is because the farmer housewives have more power in making a decision on the household matters, especially, on performing career. If the farmer housewives understand and realize value and benefits from doing agriculture according to sufficient economy, the rest of the family will follow. According to the information gained from relation between each pair of independent variables (Table 19), it discovered that roles of farmer housewives in decision making on doing sufficiency economy farming has positive relation with education levels of farmer housewives, income of farmer housewives, group membership, household economic roles of farmer housewives, and sufficiency economic acknowledgement from various sources. It means that farmer housewives, who have more roles in making a decision on performing career, are the persons who graduated from higher level, have more income, are the member of many groups, have household economic role, and are able to receive greater amount of knowledge regarding sufficient economy. They tend to do agriculture according to sufficient economy.

### **5.5.2.3 Power relation (patriarchy)**

From the study, it found that power relation (patriarchy) has negative relation with household agricultural activities in accordance with the sufficiency economy farming, which means that the farmer housewives' families, which have less power relation (patriarchy), will contribute to the agriculture which is more carried out in accordance with sufficient economy. The families which have less power relation, the husband will not solely and totally dictate in decision making, and which the housewives are not overcome. The farmer housewives are not put in the inferior position. They are confident and able to help making decision on the important household matters. Therefore, they tend to do agriculture according to sufficient economy.



#### **5.5.2.4 Problems and obstacles in doing agricultural activities according to sufficiency economy farming**

From the study, it found that problems and obstacles in doing agricultural activities according to sufficiency economy farming have positive relation with household agricultural activities in accordance with the sufficiency economy farming, which means that the farmer housewives' families, which have more problems and obstacles in doing agricultural activities according to sufficiency economy farming, will contribute to the agriculture which is more carried out in accordance with sufficient economy. According to the information gained from relation between each pair of independent variables (Table 19), it discovered that problems and obstacles in doing agricultural activities according to sufficiency economy farming have positive relation with household economic roles of farmer housewives, sufficiency economic acknowledgement from various sources, and roles of farmer housewives in decision making on doing sufficiency economy farming. This means that the families which have problems and obstacles in doing agriculture according to sufficient economy usually are the families whose farmer housewives have more household economic role, receive sufficient knowledge regarding sufficient economy from various sources, and take more role in making a decision on performing career. This should be the reason why the families which have more problems and obstacles turn to do agriculture according to sufficient economy that the families on vice versa.

#### **5.5.3 Factors related to well-being of farmer families according to sufficiency economy farming**

There are 3 variables that have relation with statistical significance with well-being of farmer families according to sufficiency economy farming as follows: 1) number of children 2) household economic roles of farmer housewives and 3) household agricultural activities in accordance with the sufficiency economy farming. The variables that have positive relation with well-being of farmer families according to sufficiency economy farming are 2 variables as follows: 1) household economic roles of farmer housewives and 2) household agricultural activities in accordance with the sufficiency economy farming. while only 1 variable that has negative relation with

well-being of farmer families according to sufficiency economy farming comprise is number of children.

#### **5.5.3.1 Number of children**

From the study, it found that number of children has negative relation with well-being of farmer families according to sufficiency economy farming. It means that the families which have fewer number of children will live more well-being according to sufficient economy because having a lot of children mean a lot of following expenses. They have to send them to school and load more burden or even debts. Therefore, the well-being is reduced. According to Wattanalee (2006), it stated that income is the index of human's happiness; having an increased income also increases levels of happiness. So the greater number of children is the greater burden they have to carry, which substantially reduces the level of happiness of the family.

#### **5.5.3.2 Household economic roles of farmer housewives**

From the study, it found that household economic roles of farmer housewives has positive relation with well-being of farmer families according to sufficiency economy farming, which means that the families, whose farmer housewives has more household economic roles, will have a better livability because it shows that acceptance of farm husband towards decision making of farmer housewives. They jointly make a discussion and solve the problems. And as farmer housewives take more roles in feeding the family, they have more income from both the farmer housewives and husband, resulting in better livability. Likewise the concept of Wattanalee (2006), it stated about happiness measurement in regard with income that income is the buying power that is sufficient for the living and releases them from poverty. Besides, it is also added that having higher income results in higher levels of happiness.

#### **5.5.3.3 Household agricultural activities in accordance with the sufficiency economy farming**

From the study, it found that household agricultural activities in accordance with the sufficiency economy farming has positive relation with well-being of farmer families according to sufficiency economy farming, which means that the families, which carry out the agriculture more in a way according to sufficient economy, have better livability. The researcher considered the well-being in the following aspects:

sanitation and environment in making a living which relate to the 4 basic needs and relate to Atipanan et al (2001) who mentioned about good livability according to sufficient economy that there consisted of the 4 basic needs such as food, cloths, shelter and medicine. These things can be acquired by doing agriculture according to sufficient economy. Moreover it is added that bringing new practical theories to an actual use in the farm would provide sufficient consumable water, and the family is happy as a consequence. This conforms to the research of Sookgua (2007) and Supan (2005) which found that a farmer who is accepted the way of sufficient economy to their daily life and to the nature of their production has better income and livability. In addition, Sittimaetee (2001) found that farmers who joined in the sufficient economy program had a better livability; particularly, their 4 basis needs are better than the former times.

In addition, according to the information gained from relation between each pair of independent variables (Table 22) it discovered that roles of farmer housewives in decision making on doing sufficiency economy farming has highly positive relation with well-being of farmer families according to sufficiency economy farming. It can be explained that the families, which have more taking roles of farmer housewives in decision making will have more well-being in the family according to sufficiency economy farming. Because before making decision, farmer housewives will analyze and find the reasons to consider a better alternative to lead to the best practices and respond to family needs.

### **5.6 Research suggestions**

From the study, the researcher had made some suggestions, which is beneficial to concerned organization, in order to conjointly find the solution or ways to develop farmer housewives as follows:

#### **Knowledge transferring to farmer housewife**

1. Concerned organizations regarding farmer housewives promotion should give more importance to the role of farmer housewives; they should find the way that farmer housewives can participate in developing agriculture because, from the result of the study, it obviously shows that farmer housewives is the persons who take a role in making a decision on

important household matters. If received relevant knowledge and information, they can make more efficient decision on performing agriculture.

2. There should be a way in spreading out the knowledge regarding sufficient economy to farmer housewives on continuous basis, especially, about conducting bookkeeping. As a result of the research's finding, it found that very few number of farmer housewives conduct bookkeeping because in their point of view it is a complicated thing which wastes their times.
3. From the research, it found that farmer housewives receive knowledge regarding sufficient economy only from radio and television. The concerned organizations should give more importance in advising new knowledge and the method in doing agriculture according to sufficient economy via the media like television and radio for the benefits of the agricultural families who shall apply the knowledge onwards.

#### **Household agricultural practice in accordance with sufficiency economy philosophy**

1. Concerned organization should give more importance to water used in agricultural activities because, from the result of the study, it found that the large number of farmers do not have sufficient source of water, as the water is one of the most factor contributing to doing agriculture according to sufficient economy.
2. Finding preventions of insects and pests that might damage or even destroy products of farmers because this is the important problems and obstacles preventing them from doing agriculture according to sufficient economy.
3. Knowledge regarding soil improvement should be promoted to farmers because, from the result of the study, it found that soil is deteriorated and is not suitable for growing a certain plant. It would result in the long-term benefits if the farmers who have in possession of this knowledge.

### 5.7 Suggestions for further research

1. The extensive research in other provinces is required so that the results from each area will be compared and find the best solutions to promote farmer housewives in taking agricultural roles so forth.
2. The study of role of farmer housewives in the community where successfully carrying out agriculture according to sufficient economy should be conducted, in order to be used as guidance for the farmer housewives in other areas.
3. The figure of variable relation should be further tested by the method of path analysis.