# Amino Acid Composition and Nutritional Value of Seed Proteins in Some Sesame (Sesamum Indicum L.) Cultivars Grown in Vietnam

### Tran Thi Thanh Huyen<sup>1</sup>\*, Nguyen Van Mui<sup>2</sup>, Cao Phi Bang<sup>3</sup>

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In the recent perspective of Thai peoples, it is a career of hardship while many farmers turn to do other secure occupation. Presently, it found that the overall portion of farmers in Thailand is dramatically decreased. However, in some areas, its portion is increased, especially in Si Sa Ket province where is one of the six provinces in the northeast Thailand with the rising trend of such. The thesis question, after farmers entranced into farming as an occupation, what factors contributing to persistence in farming career; Si Sa Ket province is chosen to be the study area. This study starting by using a rapid rural appraisal technique for selecting 4 villages under different economic level as represent the study site. The grounded theory study method for data collection and analysis. This study found grounded theory that, the causes why farm household (FHH) still remain in farming career—whether who doing only farming as a full-time career or only one career, who doing farming coupled with other employed or non-employed occupation—they are all caused following factors: (a) in respect of individuality: most age is in the middle-to-old range, they are not highly education level, and they are skilled in farming, (b) in respect of family: gratitude to the parent or ascendants and the family tie, marriage to one who descendant farming family, owning the farmland or inheriting it from parent or ancestors, earning income from farming that is sufficient to their FHH living, earning income from other careers that support farming and living of the FHH, and having budget and being able to access to source of financing for farming, (c) in respect of social: having the marketing place for selling farm products, having neighbors who do similar farming activity, owning enough manpower or machine in farming or being able to hire others, having public infrastructures convenient: electricity and communication and transportation, and (d) in respect of agriculture resources: having farmland that is suitable for farming, having water resources for farming throughout the year. Therefore, to promote farmer contributing to persistence in farming career, the concerned authority should launch the policy ponder based on the state of the factors above mentioned. However, this finding is grounded theory, so that, before the promotion project was actually an implementation to farmer should be understanding the details of the factors contributing farmers' persistence in farming career that is suitable for socio-economic contexts of each target area.

**Keywords:** occupation, vocation, profession, remain in farming career, stay in farming career

<sup>&</sup>lt;sup>1</sup>Department of Plant Physiology and Applications, Faculty of Biology, Hanoi National University of Education

<sup>&</sup>lt;sup>2</sup>Deparment of Plant Physiology and Biochemistry, Faculty of Biology, University of Natural Sciences, Vietnam National University, Hanoi

<sup>&</sup>lt;sup>3</sup>Biotechnology Research Center, Faculty of Natural Sciences, Hung Vuong University

#### Introduction

Ordinary Thai people's perspective on agricultural occupation, they see that it seems to be a misfortune, laborious and require a lot of patience and attempt, depends on weather conditions and also the career can make less income, belongs to a poor person and no honor or social reputation. Wherewith, this might be that in the past, our farmers are underdeveloped when compared with nowadays—less of farming tool or machine, farmers earning product's price is low and others—that affects to the farmer is not sufficient for their household expense. Many of them turn to do something else to earn more money. They also compel their descendants to do another career which seems to be more secure and solvent, implanting and nurturing their descendants that when they grow up, they will have to be a boss and will not do farming like their parent. This is corresponding to the report of Suwan and Opatpatanakit (2015) stated that, withdrawal of people from rural agricultural sector to take up non-farm employment has been a common phenomenon statistically and visually. In addition, Ayuwat and Pankham (2009) and Semyonov and Gorodzeisky (2008) had reported about migration for other non-farming career that it not only brings about change on culture, but also economically, the moving into big cities to seek for fortune rapidly extends as they send money home to their families to buy facilities as well as to invest in farming.

Currently, it can be seen that Thailand has reduced portion of farmers, but however, in some areas, the portion is increased like in the northeastern provinces such as Kalasin, Chaiyuphum, Mha Sarakam, Mukdahan, Loei and Si Sa Ket, where the proportion of farmers is increased (National Statistical Office, 2011) Particularly, in Si Sa Ket province, it pertains to the most increasing portion of farmers within the country (National Statistical Office, 2011). This leads to the research question, after farmers entranced into farming as an occupation, what factors contributing to persistence in farming career of farmers. The answer gained will be used as a guideline in determining the policy of farming career promotion that corresponds to factors facilitating farmers' persistence in farming career with secureness.

#### **Research Methodology**

#### 1. Site Selection and informant categorization

#### 1.1 Site selection

In this process, Si Sa Ket province as the study area was chosen to study. In 2009 Si Sa Ket province had the most portions of farmers and most increasing trend of farmers of the country (National Statistical Office, 2011). Applied the rapid rural appraisal technique (RRA) as per the Farming

System Research Group, Khon Kean University (Simaraks and Subhadhira, 1987 and Borisutdhi, 2015) as a research method for site selection, by stating understanding the general context of the province, the districts were categorized based on the people's average income of the population in each district (information gained from Si Sa Ket Office of the Community Development (2012) to analyze quartiles into 4 groups included; poor economic standing, fairly poor economic standing, fairly good economic standing district groups and good economic standing. Then the field survey was conducted and the district and village were chosen to represent the study area of each group and also observed phenomenon and interviewed key informants (KIs) such as district agriculture officer, district development officer, chief executive or mayor of Tambon (Sub-district) Administrative Organization (TAO), TAO representatives, leaders of farmers and concerned parties. Within the interview, the informants were random by snowball techniques which deployed sub-topics as a tool in collecting data (Borisutdhi, 2008; 2015).

Such survey result, the selected villages representing the study area were as follows: (1) the village with poor economic standing is Thung Luang Village, Village No. 10, Huay Tick Chu sub-district, Phu Sing district as in 2011 whose population had average income of 36,369 Thai Bath (THB)/person/year; (2) the village with fairly poor economic standing is Samrong Kao village, village No. 9, Bak Dong Su sub-district, Khun Han district as in 2011 whose population had average income of 42,073 THB/person/year; (3) the village with fairly good economic standing is Nong Koo village, village No. 5, Dhat sub-district, Wang Hin district, as in 2011, its people earned an average income of 45,241 THB/person/year; and (4). good economic village was selected to represent Kon Kam village, village No. 8, Kon Kam sub-district, Yang Chum Noi district, as in 2011, its people earned an average income of 50,042 THB/person/year, the (Si Sa Ket Office of the Community Development, 2012).

## 1.2 Categorizing types of farm household (FHH) to represent the informant's group

The study was conducted by observing the phenomenon and interviewing KIs such as village headmen, TAO representatives, community leaders, leaders of farmers and concerned parties, which during the interview, the KIs were selected by theoretical sampling according to the grounded theory study approach (Glaser and Strauss, 1967; Strauss and Corbin, 1998; Charmaz, 2006; Havanond, 1996; and Podhisita, 2013) and by using the sub-topics as a tool to collect the data (Borisutdhi, 2008; 2015).

Consequently, the FHH was categorized into types by using the triangulation technique. The results of the study within the 4 areas found that it can categorize FHH into major 3 types and 6 minor types as follows:

(1) the FHH which doing only as the only career (full-time farming), (2) the FHH which doing farming together with other employed career included (2.1) FHH which doing farming while employed for agriculture in the local area, (2.2) FHH which does farming while employed for agriculture outside the local area, (2.3) FHH which does farming while employed for agriculture both in the local and outside area, (2.4) FHH which does farming while employed other non-agricultural sector in the local area; and (3) FHH which does farming together with other non-employed occupation (such as entrepreneur, service, etc.). The result of this study was used as a foundation for further FHH study.

#### 2. Data collection

#### 2.1 Collecting FHH data level

The FHH representatives for each type: 3-4 FHHs per type, subtotaling 12-16 FHHs per village, grand totaling 48 households were selected. The FHHs and informants were selected by theoretical sampling and the data was collected according to the grounded theory study approach (Glaser and Strauss, 1967; Strauss and Corbin, 1998; Charmaz, 2006; Havanond, 1996; and Podhisita, 2013) by taking into consideration of different economic standing of each FHH by the triangulation technique. The informants were comprised of 52 farmers and their descendant 29 people whose age were between 10 - 25 years old (in the same age of youth farmers), totaling 81 peoples. By this part, the sub-topics were created as a tool in interviewing alongside with observation (Borisutdhi, 2008; 2015).

#### 2.2 Collecting village data to construct data saturation

Use of FHH study resulted as data based for creating sub-topics were decided to be a tool (Borisutdhi, 2008). The sub-group interview was reconducted in the in village to construct saturation which was similar to data collection in the FHHs level—the difference was the number. The informants are as follows: adult farmers who produced the main income of the household, amount 10 - 12 people per a village, totaling 46 people, and farmer's descendants aged 10 - 25 years, amount 5 - 10 people per village, totaling 28 people. They were selected by theoretical sampling and the data was collected according to the grounded theory study (Glaser and Strauss, 1967; Strauss and Corbin, 1998; Charmaz, 2006; Havanond, 1996; and Podhisita, 2013).

#### 3. Data analysis

The study was made between April 2012 and June 2013 by analyzing with (1) open coding, (2) axial coding, and (3) selective coding, accordingly as per the grounded theory study approach (Glaser and Strauss, 1967; Strauss and Corbin, 1998; Charmaz, 2006; Havanond, 1996; Podhisita, 2013 and Borisutdhi, 2015).

#### **Results and Discussion**

#### 1. General features of farmers' persistence in farming career

According to the persistence in farming career in the level of FHH as mentioned in the research methodology, it found that the FHH has 3 major types and can be categorized into 6 minor types. When studying at individually level, it found that persistence in farming career in the individually level can be categorized into 3 major types as well, it only changes the dimension from "FHH" to "individually farmers". In pursuant to the study, it found that in the study area of 4 villages, most farmers do farming together with employed career and other non-employed career, which tends to increase. The result of this study is "open coding" according to the grounded theory study approach.

Then the "axial coding" was constructs according to the grounded theory study approach on the general conditions in persistence in farming career of farmers. It found that the cause why FHH still remain in farming was not totally come from the household members who do a full-time farming or do farming as the only career but mostly the FHH members doing farming together with other employed and non-employed occupation. The result of this study is an approach framework leading to find other variables or factors contributing to persistence in farming career of farmers.

#### 2. Factors contributing to persistence in farming career of farmers

Factors contributing to persistence in farming career of farmers that was not patterned or conditions for entrance into farming as an occupation of farmers; but the behavior that occurs after farmers entranced into farming as an occupation. The study of this part has analyzed "open coding" and "axial coding" according to the grounded theory methodology approach. It found that the factors contributing to persistence in farming career of farmers were comprised of:

#### 2.1 State of Individuality factors

#### 1) Most age is in the middle-to-old range

Most age of farmers who settled persistence in farming were from the middle man or about 35 – 45 years up and it found that most of the old farmers whose age are more than 65 years stopped working as the main labor of the FHH due to they cannot do thing proficiently. Moreover, from the study of the 4 villages, it found that even though there were some people who graduated the compulsory education and entered directly into farming, most of them who decided to settle for persist in farming career had prior done other career and turned back to do farming. For this circumstance, these people had accumulated knowledge, social experience and occupation perspective, including that gained from earning for a living as the career capital; these contributed them to remain in farming career. The issue of age which most of them are in middle age to old age, it found that it affects most of them to do a full-time farming or do farming as the only career. However, the old people as a part of this have stopped farming activity since they had health problems.

#### 2) Not highly education level

Graduating from the compulsory education or not highly education levels a part contributing them to stay in farming career since they did not have much career choice; less opportunity to choose or enter to another occupation. Together with insufficient budget and no skills for other careers, these people permanently remain in agricultural section. Consequently, it also found that both people, who graduated from the compulsory education or little higher than compulsory education, and had done other career before turning back to do farming, commonly see that having a higher degree can clear the way to another career but they are not highly educated; they do not have much chance to do something else. This circumstance can be generally found in 4 study villages. The low level of education enables to persistence in farming career of farmers in the 6 minor types.

#### 3) High skilled in farming

People who are descendants of farmers, helping their parents or family since they were little causing their accumulated knowledge and skills to the extent that is referred as to expert in its field tends to attract their descendants into farming career and tends to stay in the farming career until present. This circumstance was generally found in the 4 study villages. As farming requires specific skills, knowledge and experiences, they were well understood of what they do. Mostly, it is the only farming career skill they

have or proficient by learning from actual experience, the FHH plays an important role in passing on this expertise. Even though the farming skills are different, the important transition is made directly from parents or family. The expertise in farming can ensure them rather than doing something else they are not accustomed. Therefore, farming career still persists when farmers are expert in farming. It also found that this circumstance was found in the study villages. The issue of expert in farming that enables to persistence in farming career of farmers is found in the farmers of 6 minor types.

#### 2.2 State of family factors

#### 1) Gratitude to the parents or ascendants and the family tie

Even though the parent who is farmer has many children, at least one of their children would take care of the parent; the most families do farming, their family members remain in farming career. However, even the members of some families do farming together with other career to earn more money to support the family, the family realizes that they are farmers and their family is farming family. From this study result, it points out that gratitude to parents and family tie making family warm was one factor contributing to persistence in farming career of farmers since their foundation were farming families. This circumstance was generally found in the 4 study villages. The issue of gratitude to parents or ascendants and family tie enable to persistence in farming career of farmers in all 6 minor types.

#### 2) Marriage to one who descendant farming family

After got married, especially marriage to one who descends farming family or have a background in farming, and both of them have a background in agriculture, this enables them to continue on farming career path. However, if either party, who is a descendant of farmers, while marriage, does something else for a living, the part of them would choose the secure occupation which is to remain in farming after a period of marriage. It found that this circumstance was generally found in every study village. The issue of marriage to one who has a background in agriculture enables to persistence in farming career of farmers in all 6 minor types.

#### 3) Owning the farmland or inheriting it from parent or ancestors

Having a farmland for more than 5 rai (1 hectare = 6.25 rai or 1 rai = 160 m<sup>2</sup>) per a FHH contributed them to remain in farming career. It does not mean that such FHH own 5 rai of farmland—this also included the land

belongs to their relatives who entirely do something else. Their relatives grant them right of possession or lease out the land for farming. According to the study, it found that a part of farmland is inherited from parents or ancestors. Some FHHs bought more lands for farming to meet their manpower and some of them bought it from their relatives who inherited it and wanted to sell it while some of them bought it from neighbors. Moreover, it also found that parents or ancestors purposing their descendant taking care of them while they are old gifted the farmland to their descendant as compensation. This was a conditional gift which means their descendant must carry on farming. However, it found that decreasing number of farmers are partially caused by limited farmland, especially inheritance of farmland from parents, which tends to decrease since number of population is increasing while the farmland area is limited. This circumstance was generally found in the 4 study villages. The issue of having the farmland or inheriting it from parent or ancestors enable to persistence in farming career of farmers in all 6 minor types.

### 4) Earning income from farming that is sufficient to their FHH living

Earning from farming is revealed specifically from selling agricultural products. Nevertheless, earning income from farming that is sufficient to their FHH living, it is a factor contributing to persistence in farming career of farmers. If they had good production, which was from having good soil and water resources, they earn good products and earn more from selling the products. It found that the village with good economic standing, mostly earning from farming, decided to remain in farming career while the village with poor economic standing, mostly earning from other non-farming career, decided to work in other area during the off-season of rice farming. The issue of earning income from farming that is sufficient to their FHH living enables to persistence in farming career of farmers in all 6 minor types.

# 5) Earning income from other careers that support farming and living of the FHH

In the village with good economic standing, there was a number of FHH which does only farming, and it found that in some FHH, their members do farming together with juggling to work in agriculture around the local area. At the villages with fairly good, fairly poor and poor economic standings, it found that during the end of rice wet season, which is the main activity of the FHH, their members turn to do other employed and service careers both local and outside the area so as to find the money to support the FHH's expenses such as paddy field tiller cost, rice fertilizers,

tuition fees of their children or other utilities or paying debt of the FHH, etc. In doing other career together with farming of the FHH's member, which they realizes are FHH and they FHH remain in farming career. This was found in all 6 minor types of farmers.

### 6) Having budget and being able to access to the source of financing for farming

Sources of money capital in farming was partially from selling the farm products, income from doing other career, and financing source. If they have enough budgets, it much helps with farming. If not, the FHH would borrow it from the financing source such as relativity, village or community funds, Bank for Agriculture and Agricultural Co-operatives and others. However, the villages with good, fairly good, fairly poor and poor economic standings all borrowed from the same source, but the ability to access to the financing source of each FHH was different according to each FHH economic base. Nevertheless, the FHH in the village with good economic standing usually access to the source of financing since there were existing capitals or mortgage securities. The issue of having budget and being able to access to the source of financing for farming enables to persistence in farming career of farmers in all 6 minor types.

#### 2.3 State of social factors

#### 1) Having the marketing place for selling farm products

The farming production of FHH was mostly objected for selling which is the source of FHH income. Most of farming focuses on their skill accustomed or experienced and has marketing channels for selling farm products, even the farmers wanted to sell at the higher price, but the price of products that determined by the market demand and they cannot setting price by themselves. Marketing channels; there were buyers come into the village to buy the product or there are places purchasing the products near the local. Moreover the farmer may use the mobile phone to inquire about the selling price from neighbors and different buyers. According to the study, it found that each village study site had buyers come into the village to buy the product or distributes it at the convenient place. If comparing with the past, it might state that any products can be sold, especially in the village with good economic standing as most of their selling was made by the traders. Having the marketing channel for selling farm product it affects the persistence in farming same product in the next year. Even though the selling price, sometimes or some seasons are low or ends up in loss, FHH remain in farming career by adapting their production. For example, they might reduce or extend the farmland, grow other alternative plants or plan to

produce what the market wants at the right time, etc. This study points out that the place of distribution affects the persistence in farming career more than the products they sell.

#### 2) Having neighbors who do similar farming activity

Most of farming families in the 4 study sites usually farming same products or do other similar non-farming careers. This is partially caused by the similar agricultural context and environmental factors so that they produce the same products; imitate or copy each other. They also had a chance to exchange knowledge on production and complementing each other in farming production. Having neighbors who do similar farming activity its factor contributing to persistence in farming career and had confidence in production even though each FHH has the production area and other farming factors are different

### 3) Owning enough manpower or machine in farming or being able to hire others

Manpower is necessary in farming and contributes to persistence in farming career of the FHH. The agricultural production, except from relying on in-FHH labor, in some cases, needs to hire more labors, especially when they need to hasten the production activities. If the community demand of employment is high, the labor wage is also high which most labor must have quality, intensive or delicateness. A number of farmer's descendant or younger people in the village during the end of the semester would work for hire which is mostly found in the village. This existing system met more in the village with good economic standing, on the other hand, for the village with fairly good, fairly poor and poor economic standings, the farmer's descendant or younger people would periodically work outside the village for both farming and non-farming sectors. However, in some farming activities in all study sites, the machine is deployed to help them while some activities require hiring labors in the community or neighboring area which has machine for service such as tractor, rice combine harvester, etc. Hiring is easier to make than the past since there are more farm machines for service which helps reduce production capital and ensure the quicker production.

### 4) Having public infrastructures convenient: electricity, communication and transportation

Electricity for farming as well as communication and transportation systems, which are more convenient than those of the past, are another factors contributing to persistence in farming career of farmer and it found that formerly houses were only in the residential area but now more houses are built on the farmland, this finding met in all study site. However, this causing might be a part of the residential area that is limited, while another part is that there are electricity, more convenient communication and transportation. The farmers not different, no matter where they live in the community or on the farmland outside the community, they can access to information from radio, television, mobile phone, and can travel to places by either a motorcycle or car. Additionally, the electricity also facilitates with the agricultural production, transaction or transport the products to market is more convenient. There are much use of electricity for farming activity in the village with good, fairly good, fairly poor and poor economic standings much to less, respectively. The most of electricity use for pump the water in off-rainy season. However, the village with poor economic standing, there is less use of electricity in farming since during the off-rainy season the FHH members would turn to do other career. For the transportation in each study site, it is not much different because the selling or products frequently take place within the community. For example, the traders travel to buy or reserve the horticulture products in the villages with good and fairly good economic standings, or there are distribution places for field crop products for the villages with poor and fairly poor economic standings.

If comparing with the past, having electricity, communication system and convenient transportation can more improve their living which enables to persistence in farming career. Moreover it helps reduce the gap between the rural and urban communities. Electricity brings about comforts to FHHs as they can get in touch with the one in other area easier, and some of it helps in farming such as knowing the information via radio, television, telephone and electricity use for farming, etc. The convenient transportation route is also needed in the same manner as the farmers use to travel for trade, transport their products to the market and consumers, etc. All of this relates to the living and farming of each FHH.

#### 2.4 State of agricultural resource factors

#### 1) Having farmland that is suitable for farming

Apart from having the farmland, having the suitable one for farming contributes them to the persistence in the farming career. However, the production of each kind of plant needs a different farmland with specific appropriateness. The farmers may have to improve the landscape and soil fertility that is suitable for each plant. According to the study, in the 4 study sites, there was also a rainy season rice farming whose process was not much different, but the yields per area unit of each FHH were different from the landscape and soil fertility was different. Other plant production,

especially, vegetables, the farmers also improve the landscape and soil fertility that is suitable for growing vegetables. To illustrate, in the villages with good and fairly good economic standings, they grow vegetables throughout the year where the soil fertility was continually improved to cultivation of each time. Moreover, in the village with good economic standing, they bought soils of termite mounds, one of soil fertility from natural to fill the soil surface for grow vegetables or shallots. They also lease the new suitable land to grow more vegetables or shallots. Having a suitable for farming would yield more products. Therefore, having suitable farmland and improve it for soil fertility and can do farming throughout the year and is another factor contributing to persistence in farming career of farmers.

### 2) Having water resources for farming throughout the year

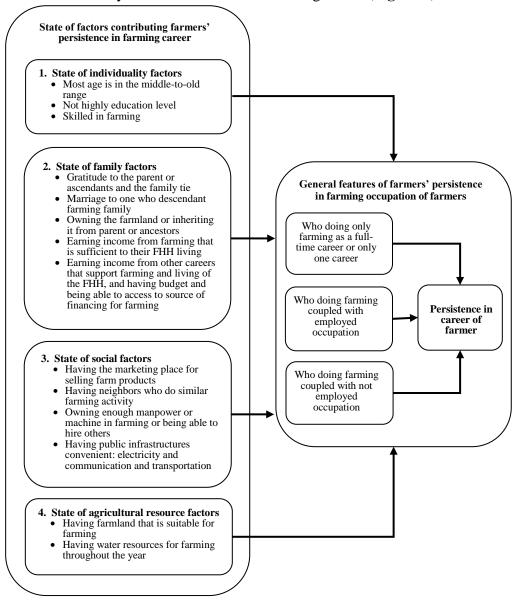
Having water resources for farming throughout the year is a parallel factor of having suitable farmland. This study found that, in the villages with good, fairly good and fairly poor economic standing, in the off-rainy season they had surface and subsurface water resources for farming. The villages with poor economic standing, it found that the soil resource was fertility suitable for growing rice and other economic plants, but they lacked of water resources during the off-rainy season. The people of this type of village must do something else during the rice rainy season or some of them access into another careers altogether and permanently left from farming sector. The study result points out that the water resources and can use it for farming throughout the year is an important factor contributing to the persistence in farming career of farmers.

### 3. Grounded theory proposition on factors contributing farmers' persistence in farming career

According to the study result above, it can create the grounded theory proposition on factors contributing farmers to persistence in farming career by "selecting coding" according to the grounded theory study approach.

The factors why the farmers remain in farming career it is caused by (1) the state of individuality, which is comprised of middle to old age, low education level and expert in farming; (2) the family factors, which are comprised of gratitude to parent or ascendants and the family tie, marriage to one who farming family, owning the farmland or inheriting it from parent or ancestors, earning income from farming that is sufficient to their household living, earning from other careers that support farming and living of the family, and having budget and being able to access to source of financing for farming; (3) the social factors, which are comprised of knowing the place of distribution, having neighbors who do farming,

owning enough manpower or machine in farming or being able to hire others, having electricity and communication and transportation convenient; and (4) the agricultural resource factors, which are comprised of having farmland that is suitable for farming, and having water resources. However, the general features of persistence in farming career of farmers are formed by the farmers who doing farming as a full-time career, and the farmers who doing farming together with other employed and non-employed jobs; these are the causes why the farmers remain in farming career (**Figure 1**).



**Figure 1** The proposition of grounded theory on factors contributing farmers' persistence farming in career

#### Discussion

As per the grounded theory proposition on factors contributing farmers' persistence in farming career, it found that remaining in farming career of FHH or members is from different enabling factors. According to the recent study, it sees that these factors affect the increase of farm workers in 6 provinces of the northeast Thailand such as Kalasin, Chaiyuphum, Mha Sarakam, Mukdahan, Loei and Si Sa Ket (Office of National Statistics, 2011).

The state of individuality factors, it sees that they're having middle-toold age, low education level and expert in farming had affected to decide to remain in farming career. In the case of age that corresponding with the report by Changpinyo and Cherdchuchai (2011) which reported that farming labors is decreasing and they are older, while being few numbers of the new generation and more of them tend to get out of farming sector.

The FHH enabling factor, it sees that they're having warmed family and income had affects to decide to remain in farming career. In case of family's desire which Lyubomisky et al. (2005) similarly mentioned that happiness is all human desire; it evaluates feeling and experience of each person that how much they admire their life in overall, and also in the case of income from farming that households receive were extremely varies affecting to the FHH member work as farmers coupled with other jobs more or less which Ayuwat and Pankham (2009) has similarly reported that migration of the younger people as FHH member is more than the older ones since the younger people have more chance to achieve their gold of migration. The primary goal is to earn at the highest rate.

The social enabling factors, it can see that they're having marketing place of distribution, who do farming, labor-related and public infrastructure had affects to decide to remain in farming career. In the case of labor-related sections and the use of technology in lieu of manpower in the production activity is the part of social enabling factors to remain in farming career, this part conforms to Satayasanguan (2002) reported that the use of machine and new agricultural technology is applied to resolve the shortage of farming labors. This had contributed to the persistence of rice culture in the community. Subsequently, Tapta, et al. (2012) has reported that the development of public infrastructure such as transportation and electricity raises the living quality of agricultural society to be more similar to the urban society.

The agricultural resource enabling factors, it can see that they're having suitable farmland and water resource sufficient that affects to decide to remain in farming career, this part conforms to the report by Changpinyo and Cherdchuchai (2011) and Cheunsurat (2010) who mentioned that having the suitable farmland and water resource sufficient to the agricultural production contributes the persistence in farming career of farmers.

#### **Conclusions and Recommendations**

According to the research question, after farmers entranced into farming as an occupation, what factors contributing to persistence in farming career of farmers. This answer found that, (1) The causes why the FHH remains in the farming career is not all of FHH members doing only farming as a full-time career or only one career, but mostly the FHH members doing farming together with other employed and non-employed occupation. (2) Moreover, this study found grounded theory that causes facilitating farmers persistence in farming career are from the following factors: (1) the state of individuality, which is comprised of middle-to-old age, low education level and expert in farming; (2) the family factors, which are comprised of gratitude to parent or ascendants and the family tie, marriage to one who farming family, owning the farmland or inheriting it from parent or ancestors, earning income from farming that is sufficient to their household living, earning from other careers that support farming and living of the family, and having budget and being able to access to source of financing for farming; (3) the social factors, which are comprised of knowing the place of distribution, having neighbors who do farming, owning enough manpower or machine in farming or being able to hire others, having electricity and communication and transportation convenient; and (4) the agricultural resource factors, which are comprised of having farmland that is suitable for farming, and having water resources.

Therefore, in promoting secureness in farming career for farmers or FHHs, the concerned authority should launch the agricultural and promotion policy that firstly focus to develop the FHH whose members (individual) do farming activities together with other occupation. In addition, supporting and encouraging the social factors that enable to farming career should also be done. The FHH with readiness, especially on agricultural resources, should be promoting them into secureness of doing farming, particularly in full-time farming. Nevertheless, the finding should be further study in positivism research in the target area in order to comprehensions the details of factor contributing farmers' persistence in farming career that is suitable for socio-economic contexts before the promotion project is actually an implementation in the target area.

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