

The Quality of Life of Rice Farmers in Chiang Rai Province

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Abstract— This research was aimed 1) to study the personal, economic and social conditions including additional factors of the rice farmers in Chiang Rai 2) to synthesize and find out which factors that influenced the quality of the lives of the farmers 3) to present a comparison on the quality of the lives of both of the organic type farmers and non-organic farmers in Chiang Rai. The population was 498 rice farmers in Chiang Rai, who were categorized into 2 groups : non-organic and Organic type farmers. The tool used to collect the data was an interview that had been tested for its accuracy and confidence. The data were analyzed with descriptive statistics : Percentage, Mean and Standard Deviation, the Pearson Correlation Coefficient and Path analysis. For the qualitative analysis, it was done through a content analysis. The findings showed that the factors that influenced the quality of the lives of the farmers in Chiang Rai were as :

1) For the non-organic farmers, the result revealed that a family factor paid the most direct influence on the quality of their lives being as high as 0.793 whereas the most influencing indirect variable on the quality of their lives was the social capital being equal to 0.420. The variable that had the most direct and indirect influence on the lives of the non-organic peasants was the family being 0.565, the second being the economy equal to 0.178.

2) For the organic type farmers, the findings showed that the network factor played the most important role to the quality of their lives with the value of 0.553. The variable having the indirect influence on the quality of their lives appeared to be the family with a value of 0.591. The variable that had the most direct and indirect influence on the lives of the organic type peasants was the health with the sum effect of 0.889, and the next one being the network equal to 0.553.

Keywords— Quality of life, farmers, organic rice growing, non-organic rice.

I. INTRODUCTION

AGRICULTURE in Thailand plays the most enormous influence on the economy of the country and of course it is to focus on the farmers, an always original and traditional occupation of this country, Thailand, and the rice is the country' staple food as well as the key exported product to the foreign countries [2]. On the other hand it could be said that the lives of the Thai people in the rural areas is based on this self-employed work, agriculture. In the past, the lifestyle appeared to be simple mostly relying on the hospitality and

generosity in the community and on a production system for household use or exchange of goods.

The so-called peasant society is regarded as one of many connections between the rural lives and the urban lives, which seems to be a social tradition as a folk or traditional society [19]. As time changed, the traditional society evolved to be a modern society. This is popularly called the green revolution.

The green revolution brings in the production technology : the use of machines, tractors, fertilizers, pesticides as well as commercial crops contributing to the adaptation of the peasants. There are more demands on the agricultural products from the markets pushing the farmers to have to produce huge amount of those products. (Changing from the small production for the household consumption or the daily sale for the single family to a gigantic commercial production for the whole country or for exportation leading to a big change in the labors or the workforce) [18].

The impact of such changes affects both the health and wellbeing of the farmers. The new agricultural trend relies on the markets. Due to the production for commerce, it has become the so-called monoculture, growing only one specific product. This requires not only the best species but also the shortest time in growing. But, the continuous use of the native plant species that becomes a disadvantage for such trend due to the reduction of genetic diversity and of course it affects the use of the lands for cultivation. The soil being used non stop faces the degradation and later leads to the farmers' increasing requirements for chemical use [6]. In response to the use of chemical fertilizers, the deterioration of soil fertility becomes really devastating and leads to the limitations of traditional crop growing. In the same time, the need to increase the amount of chemical fertilizers even prevails. With the wrong perception of the farmers on the use of the chemicals to remove the rice pests, diseases and insect infestations, it causes the mutations and resistance to the chemicals among those diseases and pests. Therefore, the farmers are forced to use stronger and more dangerous pesticides. Absolutely, many mutated species become harmful to humans and the environment [12]. The green revolution was established to be the answer for the commercial trend, so the farmers have only one choice growing only rice for the whole year (in 12 months, there will be both in-season rice and double-crop rice cultivation), The farmers inevitably grow more debts and more stress, but less time for themselves or recreation, and of course their health deteriorated [14].

However, from the National Economic and Social Development Plan No. 11 (2555-2559) [8]: the "quality of the lives of the farmers" is considered a serious matter that needs

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to be studied. Therefore, the researcher would like to study the quality of the lives of the farmers in Chiang Rai, who grow organic rice and those growing non-organic rice and present a comparison between the quality of their lives.

II. RESEARCH OBJECTIVES

This research focused on the quality of the lives of rice farmers in Chiang Rai through the following objectives:

1. To study the 8 factor cover personal, social and economic factors of the farmers in Chiang Rai.
2. To synthesize the factors that influence the quality of the lives of the farmers in Chiang Rai.
3. To present the results of the comparison between the quality of the lives of the organic farmers and the non-organic farmers in Chiang Rai.

III. HYPOTHESES

1. The hypothesis of the farmers who grow non-organic rice.

Factors : the family, the health, the economy, the society, the environment, the social capital, the local wisdom, the participation and the network have the influence on the quality of the lives of the farmers who grow non-organic rice as shown in the figure 1.

2. The hypothesis of the farmers who grow organic rice.

Factors : the family, the health, the economy, the society and the environment, the social capital, the local wisdom, the participation and the network have the influence on the quality of the lives of the farmers who grow organic rice as shown in the figure 1.

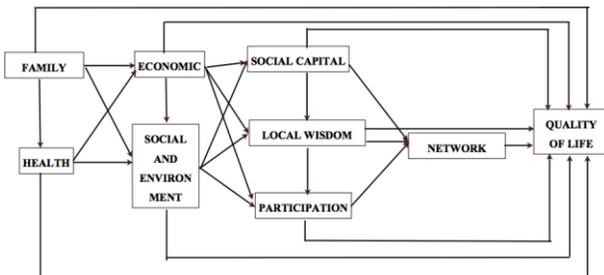


Fig. 1 The 8 Influencing factors affecting the quality of the lives of the farmers in Chiang Rai

IV. METHODS OF STUDIES AND RESEARCH STAGE.

The studies and the research on the quality of the lives of the farmers in Chiang Rai focused on a blend or mixed methods. It was a combination of a quantitative research and a qualitative research [13] to cover all the questions in this research. The methods of studies and researching process as follows.

Step 1 the researcher studied the data from the documents, and researching for the development of the lives of the peasants. To understand the lives of the farmers from the past to the present, the data were analyzed to get the information in improving the lives of the farmers leading to the true understanding in the nature of the present lives of the farmers. The period of the studies was one month.

Step 2 it was to focus on the problems on the quality of the lives of the 498 farmers in Chiang Rai. The tool to collect the information was a so-called participant observation with formal and informal questions when interviewing the representatives of the farmers as well as a group conversation. The descriptive statistics analysis included Percentage, Mean, Standard Deviation and the Pearson correlation coefficient. The period of studies was 10 months.

Step 3 an operative seminar for an opportunity to analyze the data from the questionnaire on the quality of the lives of the farmers in Chiang Rai was held. The samples were those from step 2. Path analysis was brought in to check the data from the step 1 and 2, which was a comparison between the quality of the lives of the organic farmers and the non-organic farmers. The period of studies was 2 months.

Step 4 it was to find out the suitability and feasibility of the quality of lives of the farmers in Chiang Rai, which was done through a focused group by 15 scholars involved in the local administrations. The descriptive statistics analysis included Percentage, Mean, Standard Deviation and the Pearson correlation coefficient. The findings would later be revised within the period of studies was 2 months.

V. RESEARCH RESULTS

The factors that influenced the quality of lives of the farmers in Chiang Rai.

A. The farmers who grew non-organic rice

The studies on the factors that influenced the quality of the farmers' lives in Chiang Rai found that :

1. the family factor influenced the quality of the farmers' lives, who grew non-organic rice the most with the total effect equal to 0.565.

2. the variable that had a direct influence on the quality of the lives of the non-organic farmers was the family being equal to 0.793, whereas the one with an indirect influence on the quality of their lives was the social capital with the total value being 0.420, followed by the health, the economy, the participation and the family with the total effects of 0.213, 0.187, 0.023, -0.161 and -0.228, respectively.

3. the factor that influenced both directly and indirectly on the lives of the peasants who grew non-organic rice was the family with a total value of 0.565, followed by the economy with the total effects of 0.178 as shown in the figure 2.

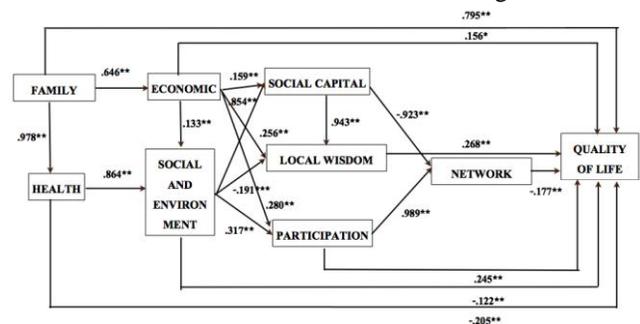


Fig. 2 showing the path coefficients in a linear relationship according to the hypothesis of the quality of lives of the non-organic farmers in Chiang Rai,

B. The farmers who grew rice with an organic process

The studies on the factors that influenced the quality of the farmers' lives in Chiang Rai found that :

1. the network factor directly influenced the quality of the lives of the organic farmers the most with the total effect equal to 0.553.

2. the variable that had a indirect influence on the quality of the lives of the organic farmers was the family being totally to 0.591, followed by the participation, the economy, the local wisdom, the health, the social capital, and the society and the environment with the total effects of 0.43, 0.29, 0.257, 0.237, 0.128 and 0.065 respectively.

3. the factor that influenced both directly and indirectly on the lives of the organic peasants was the health with a total value of 0.889, followed by the network with the total effect of 0.553 as shown in the figure 3.

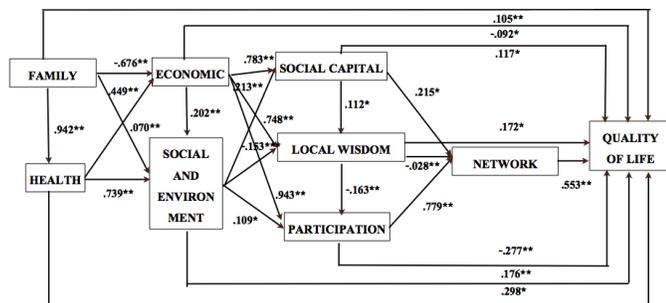


Fig. 3 showing the path coefficients in a linear relationship according to the hypothesis of the quality of lives of the organic farmers in Chiang Rai

VI. RESULT AND FINDING

This research on the quality of the lives of the farmers in Chiang Rai was designed to study the personal, economic and social conditions including additional factors of the farmers in the province. Then it was synthesized to find out which factors that influenced the farmers. Lastly, the results of the comparison was presented into 2 different categories : the organic type farmers and the non-organic type farmers. The next step was the researcher would like to pick up some interesting topics to make in a clearer discussion as :

1. Poverty : it is always the first problem issued in the country. Basically, because there are so many people or groups unable to grab or reach an access to the capital (money sources) in the system. The quality of the lives of the farmers will be good or not, it also depends so much on the finance and the economy. Therefore, it is so important to start developing the country with an effective way to handle this Poverty problem especially among the people in the low level. One approach is to expand opportunities for those people to have an access to the capital (money sources). This is believed to be the solution for the Poverty problem, which is well going along with a concept by Professor Dr. Muhammad Yunus, who won the Nobel prize on the world peace in 2006. It was focused on the poorest people in Bangladesh. There were more than 2 million every poor families there. The idea was put into

practice through the administration of Grameen Bank. The Grameen Bank The first bank that gave an opportunity to the people to borrow the money without requiring any collaterals or mortgages due to the belief that poor people might have no money, but do have honesty. This proved to be true from the low bad debt rates from those poor debtors, which were quite similar to those rates at many private banks around the world [20].

In short, the most effective way to improve the quality of the lives of the farmers in Chiang Rai was to promote and develop a network and establish cooperatives in the village as well as encouraging a participation of the people in the community to help one another. This started with the legal registration of a cooperative as a cooperation running the work legally. The next step was to develop it to become a financial institute of the community. That meant there needed to be money in through the depositions (savings) of the members, after that the money would be handed to the borrowers (the members) who had to show that they would use it for a vocational purpose or to pay the illegal debts they had created. Such financial institutes act like organizations for not only saving money but also for distributing it to such many prosperous useful results for the communities as to create many good social welfares, to develop more financial institutes for other communities, and lastly, it will be the most effective and everlasting improvement for the quality of the lives of the farmers in Chiang Rai. This concept goes along well with the preaching by The Dhammapitaka the □ Dist (PA Payutto) [16] saying that the everlasting development should have not only an everlasting goal but also a systematically operating community. Such idea also appears to be well blending with those of many strong Thai community financial institutes, Prachasan Saanpacdee [9], and Satja money saving group by teacher Chob Yodkaew, Satja money accumulating group by monk Subin Paneeto, SoonRuamNamJai of community bank in DokKamTai district by Mrs. Mukda Intasan, and so on. Those financial institutes were differently established but the objectives are the same.

2. From the studies on the farmers in Chiang Rai, it revealed that most of them did not want their children to grow in agriculture careers due to their insecurity. Many peasants worked hard to be able to effort to send their own children to study higher and have good degrees to work in good companies in big cities [10]. This is basically because the suffering memories told to one generation after another that agricultural careers are hard and make little money and farmers will never become well off not good as working in a company with good salaries or becoming a government official with a life time security. But, some of those children have an opposite idea. They want to do agricultural work. They don't want to work in an office. They want to be their own boss. They want to use their knowledge to develop their homelands. But, at the end, their parents will always fight them back or convince them to leave such ideas. They will say "a farmer has nothing but debts and yellow straws" [11]: "due to such ideas, there can be no more young bloods to continue to agricultural careers". This was proved to be true from the percentage of the number of the farmers both the non-organic type and the

organic type in this research. It showed that the average age of those non-organic ones was 51-60 years old equal to 87 percent, whereas the other group was 41-50 years old equal to 89 percent, which were considered high. And, it means that there will be fewer farmers in Thailand in the future, that there will be a need to hire workforce from another country. Therefore, it will be a good idea or not that we all in this country will work hard together to improve both the quality of the lives and the image of the farmers. So, the agricultural work will become honor and a proud job for the people to do.

If as it goes as said, the quality of the farmers will be better, which seems to be well along with Ladda Bunmalet [5] "the good quality of life of people can be seen from both the intangible and tangible sides. It has to start by raising the satisfaction and then the motivation and the inspiration in the career will be automatically driven to raise the level of satisfaction motivating that person.

3. The factor influencing the quality of the lives of the farmers in Chiang Rai from the studies showed :

The factor that the most influenced the quality of lives of the non-organic farmers in Chiang Rai appeared to be the family. This blended well with Vibool Kamchalem [17], "the quality of life can be as the life without difficulties being self-sustainable. It can be explained that the family lives in peace, good sanitary, self-sustainability, surrounded by green trees and vegetables, with morals, independent life, self-learning, well mental perception, in a society, sharing the rest to the others, with easy lifestyle, without extravagant desires, self problem-solving ability, careful life planning, having many kinds of green plants, with necessary items and enough amount of money to spend each day and highly self independence and lastly working with a All-in-one (integrated) agricultural job [15].

For the organic farmers, the factor found to play the most important role to their lives was the network. This was in agreement with the Exchange Theory, by Griengsak Jarenwongsak [4], "in the society, there are a lot of people with some relationship somehow according to their roles or jobs. In short, each person in the society has more than one role to play. However, the role he plays is defined not only by the role description or the social expectation but also by the relationship perceived by heart, and there will be an exchange between one another either physically or mentally [7], these days, such concepts are brought into the study of the social networks and the individual establishment in the integrated exchange networks. This is also blending well with the concept by Ethier Jason [1] : talking about the use of the social network in studying the markets (Marketing Research) [1], which in turn generate enormous profits for the business units because the study of social networks and the patterns of relationships will contribute to understanding the needs of the people (members) and lead to the development of products and services. That can be in line with the ideas from Martin Kilduff and Wenpin Tsai [3], who discussed the concepts of the social networking as "... The concept of the social networks has been used in the business community to strengthen the organization in the network as well as to create the bargaining power for

their organizations. As a result, the community is very powerfully competitive" [3].

VII. RESULT AND FINDING CONCLUSION

From the causative model, it revealed that

1. The causative model of the non-organic farmers revealed the family (FAM), the health (HEA), the economy (ECO), the society and the environment (SEF), the local wisdom (LOC), the participation (PAR) and the network (NET) as the direct factors to the quality of their lives. The farmers themselves added that they did not think the social capital (SOC) was the key to the quality of their lives.

2. The causative model of the organic farmers showed the family (FAM), the health (HEA), the economy (ECO), the society and the environment (SEF), the social capital (SOC), the local wisdom (LOC), the participation (PAR) and the network (NET) as the direct factors to the quality of their lives. The farmers themselves revealed that they believed all the factors were very important to the quality of their lives.

From the 2 equations having been studied, the models told us that all the synthesized variables : the family (FAM), the health (HEA), the economics (ECO), the society and the environment (SEF), the social capital (SOC), the local wisdom (LOC), the participation (PAR) and the network (NET), were all directly and indirectly influential to the quality of the farmers' lives in Chiang Rai. In short, the indirectly influential factors also had the parts in driving the others.

In conclusion, all the variables were significant to the quality of the farmers' lives in Chiang Rai. They would all drive and support one another so that the farmers would surely have happy sustainable lives in the future.

VIII. CONCLUSION

From the discussion presented previously, it showed that this study was not a perfect long-lasting research for a development of the quality of the lives of the farmers in all geographical locations. But it was just an example of a study on the quality of the non-organic and organic farmers' lives hoping to reveal the factors that influenced the quality of their lives. It would still need more development and more learning on the topic in the future. And of course, for the cases in other geographical locations, it would require a lot of adjustments and flexibilities as well as many of the local requirements or limitations, later in hope to come up with the most suitable solution for any individual case. Lastly, it would lead to the most sustainable and most successful method for the development of the quality of the lives of the farmers.

IX. FUTURE RESEARCH

There should be further studies on such other variables that had been left out from this research as the influence of the markets, the politics and the strength of the capability, etc. As in this research, only the family (FAM), the health (HEA), the economy (ECO), the society and the environment (SEF), the social capital (SOC), the local wisdom (LOC), the participation (PAR) and the network (NET) were put in for the synthesis to find out the direct and indirect influence towards

the quality of the lives of the farmers in Chiang Rai.

Therefore, it can be seen that there is still a lot of room for further studies on many other variables in order to create a better, more reliable and more practical solution for the development of the quality of the lives of the farmers in Chiang Rai.

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