

## Factors Affecting Sustainable Application of the Sufficiency Economy Philosophy of Households in Maha Sarakham Province

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### Abstract

The objectives of this research were 1) to study the general background information of household heads who participated in the sufficiency economy project in Maha Sarakham province, 2) to compare the characteristics of the two groups of household heads: the 'sustainable' group and the 'unsustainable' one, 3) to study the factors affecting household heads' sustainable application of the sufficiency economy philosophy after the end of the development project in Maha Sarakham province. The sample population consisted of 400 subjects obtained by using Multi-stage Sampling, and the instrument used in data collection for this study was an interview form, typical of a questionnaire, with 0.86 - 0.94 reliability for each factor. The statistics used in data analyses were Frequency, Percentage, Mean, Standard Deviation and *t*-test (Independent Samples), Stepwise Discriminant Analysis, and Canonical Correlation Analysis.

Findings of the study revealed that the majority of household heads are male (87.00%); their mean age is 49 years ( $\bar{x}$  = 49.38 S.D. = 6.09) with 41 - 50 years being the majority age group (38.50%); most of the respondents are married (94.50%); the educational level of the majority is elementary education (49.50%); their main practices based on the sufficiency economy reduced household expenses, e.g. planting home-grown vegetables such as hot peppers, eggplants, string beans, papayas, garlic, onion, galangal, coriander, mint, etc; animal husbandry & aquaculture such as raising frogs, catfish, black chickens, chickens of three hybrid species, crickets, etc; while sustainable sufficiency economy activities are those that raised family income such as raising frogs, catfish, black chickens, chickens of three hybrids, crickets, meat cows, milk cows, pigs, etc; including weaving local fabric materials and mushroom culture.

Regarding characteristics of the household heads of the 'sustainable' and 'unsustainable' groups, the study revealed that there are significant differences in the following 10 factors or aspects at the .05 level of statistical significance: number of visits by study groups or individuals, technical skills, job position or community role, importance of sufficient water resources, attitude toward the sufficiency economy philosophy, inspiration for success, knowledge sharing, enthusiasm in occupation, self-confidence, and level of learning achievement,

The factors affecting sustainable application or practice based on the sufficiency economy of household leaders in Maha Sarakham province at the .05 level of statistical significance are knowledge sharing, enthusiasm in occupation, attitude toward the sufficiency economy philosophy, number of visits by study group or individuals, level of learning achievement and importance of sufficient water resources. The six factors favorably affecting sustainable application of the sufficiency economy philosophy can be entered into a distribution equation with raw scores to predict probability of group membership as follows:

$$Y = - 24.11 + 0.56 (\text{knowledge sharing}) + 1.16 (\text{enthusiasm in occupation}) + 0.99 (\text{attitude toward the sufficiency economy philosophy}) + 0.35 (\text{number of visits by study groups or individuals}) + 0.10 (\text{level of learning achievement}) + 0.72 (\text{importance of sufficient water resources})$$

When this distribution equation is tested with the sample of 400 subjects to predict probability of the sustainable and unsustainable group membership, the prediction is 99.00% in accuracy.

**Keyword :** Sufficiency Economy Philosophy , Sustainable , Self-reliance

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## Introduction

### 1. Background and The importance of problem

As a result of leading the 1<sup>st</sup>-7<sup>th</sup> National Economics and Society Policy development (between 1961 – 1996), it had made Thai society become material driven and use neo foreign culture. Until the turn of the 8<sup>th</sup> national Economics and Society Policy development (between 1997 – 2001), the country's crisis had the state most changed to emphasize on developing human resource, emphasizing on self-reliance living sufficiently, emphasizing on building community network organization to become bottom up development, aiming to develop sustainably according to the sufficiency economy philosophy of His majesty the King and developing the country by emphasizing only on the needs of the people until the current 12<sup>th</sup> National Economics and Society Policy development.(Boontam, Damrongkittikul and Boonrahong, 2015)

Self – reliance is the way to support community or rural area development that the king supports self – reliance of majority the rural area people. Self-reliant activity must be done step by step, such as having something for consumption in the first place. When you are strong enough, you could construct higher economic status. Concepts and directions for country development; emphasizing the local community to adhere the Sufficiency Economy Philosophy, for the benefit to develop the country. Community solution by depending on oneself such as growing foods or inventing devices in daily life, is the system of Economy Sufficiency. Majority of Maha Sarakham province population are spending their life by consumerism; this is the cause of many problems, especially not having enough income to spend since most of people purchase money for buying things as basic factor like vegetables, though many kinds of vegetables they could grow by themselves.

Although Maha Sarakham province had adhered to the concept of rural development in the self – reliance style for provincial development for eliminating the problems of poverty, illness and

ingratitude; these problems still exist now (Maha Sarakham Governor Office, 2016). The community development office of Maha Sarakham province aims at driving the sufficiency economy philosophy in six dimensions which are 1) to decrease expenses, 2) increase income, 3) save up, 4) gain knowledge, 5) increase environment conservation, and 6) support each other. The Division of Community Development expands the sustainability by establishing the sufficiency economy village as a role model to 23 indicators which are the effects on the mind and the community, the economy knowledge gaining economy and natural resource. The villagers are developed into three levels: 1) having adequacy to consume, 2) having more than enough to consume, and 3) living properly (Office of Community Empowerment, 2017).

Maha Sarakham province has proceeded and developed the sufficiency economy villages from 2009-2015 and participation of 108 villages. 4,535 role model families applied the sufficiency economy philosophy to decrease outcome, increase income and saving. 63 villages were developed into having enough level, 36 village were in having more than enough level, and 9 villages were developed into the living properly level (The Community Development Office of Maha Sarakham province, 2017). In addition, 286 households in 6 villages were supported by Bank for Agriculture and Agricultural Co-operatives, and 1,122 households in 26 villages were supported by Thai Women Empowerment Funds. Therefore, 5,943 were involved in the developmental process in total (The Community Development Office of Maha Sarakham province, 2016).

The researcher has experience as an instructor in a bachelor degree in social sciences for local development, master degree in social sciences for development, and doctor of philosophy degree in strategy for regional development. All degrees emphasize local participation encouraging students to collect community data, created community plan, and transcribe knowledge for social development. Furthermore, Ph.D. Dissertations in the curriculum

were also conducted to apply sufficiency economy philosophy in community development. In addition, 20 works of the researcher during 2005-2015 were funded by the national institutions including Thai Health Promotion Foundation, The Thailand Research Fund, Office of Higher Education Commission, and National Research Council of Thailand. The content of the previous studies were also related to application of sufficiency economy to contribute self-reliance. To illustrate, the previous studies aimed to contribute dimension of decreasing outcome by toxic free vegetable growing, self-produced commodity, fish farming, frog farming, chicken farming, biochemical fertilizer producing, raising organic pigs, raising crickets, planting mushroom, onion, garlic, long bean, and other daily consuming vegetables, and decrease all vices etc. In terms of increasing income dimension, local people were encouraged to have cattle both for meat and milk; create local mats, loincloth, local textile, silk, glass farming, and organize local coordination, saving coordination, and local enterprises, etc.

The rationale of the current study was due to the experience of the researcher was participated in local development project in the last 10 years. It has been noticed that the level of self-reliance has been decreased with significant difference after the researcher and colleagues left the area. The preliminary study indicated that only 7-20 households could remain doing the supported activities under the sufficiency economy philosophy. The number was only 16.60 % of participating families at the start of the research projects.

Consequently, 10 years of community cooperation and development with the sufficiency economy philosophy resulted in unsustainability of local people way of living leading to rationales of the study. The current study, therefore, was conducted to contribute to grounded theory describing the reasons why people stop adhering to the philosophy and factors affecting people decision. The results of the study would be using as information for supporting policy to develop and improve the processes leading

to reapplication of the sufficiency economic philosophy contributing to the positive outcomes of community and national development in the future.

## 2. Purposes of the Study

2.1 To study the general background information of household heads who participated in the sufficiency economy the project in Maha Sarakham province

2.2 To compare the characteristics of the two groups of household heads: the 'sustainable' group and the 'unsustainable' one

2.3 To study the factors affecting household heads' sustainable application of the sufficiency economy philosophy after the end of the development project in Maha Sarakham province

## 3. Research Hypotheses

3.1 Characteristics of the the two groups of household heads: the 'sustainable' group and the 'unsustainable' one were different with significance at the level of .05.

3.2 The factors affecting sustainable application or practice based on the sufficiency economy of household leaders in Maha Sarakham province at the .05 level of statistical significance include participation of activity, economic happiness, knowledge of sufficiency economy philosophy, leadership of household heads, number of visits by study groups or individuals, mechanic ability, role or position in the community, importance of sufficient water resources, attitude toward the sufficiency economy philosophy, motivation, social contribution, knowledge sharing, enthusiasm in occupation, self-confidence, and level of learning achievement.

## 4. Scope of the study

4.1 The study took place in Maha Sarakham province.

4.2 Variables

**4.2.1 Independent variables are** 1) participation of activity, 2) economic happiness, 3)

knowledge of sufficiency economy philosophy, 4) leadership of household heads, 5) number of visits by study groups or individuals, 6) mechanic ability, 7) role or position in the community, 8) importance of sufficient water resources, 9) attitude toward the sufficiency economy philosophy, 10) motivation, 11) social contribution, 12) knowledge sharing, 13) enthusiasm in occupation, 14) self-confidence, and 15) level of learning achievement.

**4.2.2 Dependent variables** is household heads' sustainable application of the sufficiency economy philosophy including 1) sustainable group – those who participated of the sufficiency economy philosophy and remained practicing the philosophy and 2) unsustainable group – those who participated the philosophy but no longer applied in their lives.

## 5. Research Methodology

The current study applied the descriptive research approach emphasizing in explaining phenomena. Both quantitative and qualitative research methods were employed to indicate independent variables affecting sustainable application of the sufficiency economy philosophy after the end of developing projects. The main purpose of the study was to provide evidence contributing to theoretical hypothesis used to support empirical data in Maha Sarakham area.

### 5.1 Population and Sample

The current study had unit of analysis at individual level. Population were 5,943 household heads participated in the project of applying sufficiency economy philosophy. The sampling was selected by using Scott M. Smith method (Smith, 2015). 400 household heads were selected as the sample of the study.

### 5.2 Sampling Method

Multi-Stage sampling method was employed in the study. In the first stage, stratify sampling was employed by separating Maha Sarakham province into 13 districts. In second stage, simple random method took place by drawing 10 districts out of 13. In the third stage, 4 villages from each districts were

selected randomly. In the fourth stage, 10 household heads from each village- 5 from sustainable group and 5 from unsustainable group were selected by random sampling method. As a result, 400 participants were selected from Maha Sarakham area.

### 5.3 Data Collection

4 interviewers holding Ph. D. in strategy for regional development were employed to the area. The interviewers indicated sustainable and unsustainable groups, and collect data related to independent variables. The data were analyzed to answer the research questions.

### 5.4 Data Analysis

Frequency, Percentage, and Standard Deviation were used to response the first research purpose; independent sample *t*-test was used to response the second purpose of the study; and Discriminant Analysis, Stepwise Method, and Canonical Correlation Analysis were used to respond the third purpose of the study.

## 6. Results of the study

6.1 The analysis of general background information indicated that 87.00 % of the samples were male while 13.00% were female. The average age of the samples was 49 ( $\bar{x}$  = 49.38, S.D. = 6.09). The majority was between 41-50 years old, (38.50%), 51-60 years old (12.00%), and 20-30 years old (1.25%) respectively. In terms of marital status, 94.5 % of samples were married, 5.25 % were separated, while only 0.25 % were single. The majority of household heads' educational level was found at the primary school level (49.50%), secondary school or vocational certificate (24%), compulsory education (23.5%), high vocational certificate or diplomat (2.50), and bachelor degree or higher (0.50%) respectively.

The participants in both groups of sustainable and unsustainable participating as a result of government promoting of sufficiency economy philosophy mainly focusing on decreasing of outcome including backyard gardening such as chilies, eggplants, long beans, papayas, garlics, onions, galangals, celeries,

mints; small animal farming such as frogs, catfish, chicken, and crickets etc. Meanwhile, the cast of cattle was employed less than small animal farming.

It was found that the projects that household heads still practiced were activities that could cause income to the family such as farming of frogs, catfish, chicken, crickets, beef and milk cattle, pigs; local textile; and mushroom culture etc. In contrast, the activities that were unlikely to be practiced sustainably were related to decreasing of expense.

6.2 Regarding characteristics of the household heads of the 'sustainable' and 'unsustainable' groups, the study revealed that there were significant differences in the following 10 factors or aspects at the .05 level of statistical significance: number of visits by study groups or individuals, technical skills, job position or community role, importance of sufficient water resources, attitude toward the sufficiency economy philosophy, inspiration for success, knowledge sharing, enthusiasm in occupation, self-confidence, and level of learning achievement.

6.3 The analysis of factors affecting sustainable application or practice based on the sufficiency economy of household leaders in Maha Sarakham province found that of the 15 independent variables, 6 variables were found at the .05 level of statistical significance including knowledge sharing, enthusiasm in occupation, attitude toward the sufficiency economy philosophy, number of visits by study group or individuals, level of learning achievement, and importance of sufficient water resources respectively. The six factors favorably affecting sustainable application of the sufficiency economy philosophy can be entered into a distribution equation with raw scores to predict probability of group membership as follows:

$$Y = -24.11 + 0.56 (\text{knowledge sharing}) + 1.16 (\text{enthusiasm in occupation}) + 0.99 (\text{attitude toward the sufficiency economy philosophy}) + 0.35 (\text{number of visits by study groups or individuals}) + 0.10 (\text{level of learning achievement}) + 0.72 (\text{importance of}$$

sufficient water resources)

When this distribution equation is tested with the sample of 400 subjects to predict probability of the sustainable and unsustainable group membership, the prediction is 99.00% in accuracy.

## 7. Discussion

Of the 15 independent variables, 6 variables were found at the .05 level of statistical significance including knowledge sharing, enthusiasm in occupation, attitude toward the sufficiency economy philosophy, number of visits by study group or individuals, level of learning achievement, and importance of sufficient water resources respectively. The results of the study were discussed as follow.

### 7.1 Knowledge Sharing

The variable was found as the most affecting factor related to sustainability of the activities within sufficiency economy philosophy promoted to the local people. This could be interpreted that the more household heads came to participate knowledge sharing, the more they tended to remain practicing activities promoted in the projects. In contrast, the household leaders who less come to participate the process of knowledge sharing tended to practice activities within the philosophy without sustainability.

The result of the study is related to the study of Phongsuwan (2010) which indicated that participation of local people in knowledge sharing process is one of the most affecting factors to success in sufficiency economy philosophy. Similarly, the result of the study supports the study of Nakkhain (2010) which found that promoting of community participation such as sufficient community contest and knowledge sharing activity to other communities was the key factor to project success. Moreover, Phansawang (2009) also found the similar result as it was found that study trips from other communities contribute the process of knowledge sharing which is the factor to achieve goals of sufficiency economy philosophy. In addition, the studies of Wantaya (2008) and Kedsri (2010) also indicated the importance of

knowledge sharing as an important factor leading to success of sufficiency economy philosophy.

It could be noticed that visiting of other communities is one of the important factors contributing to knowledge sharing. To explain, the more other communities come to visit the village, the more opportunities the villagers have to practice or presentation and knowledge transfer. This activates activity involvement consecutively and leads to sustainability later on.

#### 7.2 Enthusiasm in Occupation

The result of the study revealed that enthusiasm in occupation was the second from six variables that affects sustainability of activities within the projects to promote sufficiency economy philosophy. It could be interpreted that the more enthusiasm in occupation the household heads were, the more sustainable the activities seemed to be. In contrast, the household heads with less enthusiasm in occupation could lead family to practice less activities within projects related to the philosophy.

Adisorn Loasapan, Maha Sarakham province, Pai Soisaklang, Burirum province, Khumdueng Phasi, Burirum province -three out of four local philosophers agreed in the same directions. The local philosophers indicated that enthusiasm in occupation is the important factor leading to success in sufficiency economy philosophy projects after the period of project or workshop take place. Moreover, the data collectors also noticed and analyzed the characteristics of household heads of sustain and unsustain groups. It was indicated that there are obvious differences between the groups. The household heads in the sustain group showed the characteristics of agility, cheerfulness, learning ability, pride of occupation, and interest in finding new knowledge. In contrast, the household leaders in the unsustainable group showed characteristics of general local people. However, the comparison between the household leaders and their relatives found that the household heads who joined and participate in the sufficient economy philosophy

projects tended to change behaviors in the positive way.

#### 7.3 Attitude toward the Sufficiency Economy Philosophy

The third affecting factor to sustainability of activities within the projects to promote sufficiency economy philosophy was attitude toward the sufficiency economy philosophy. It could be interpreted that the more positive attitude toward the sufficiency economy philosophy the household heads had, the more sustainable activities seemed to be. Contrastively, the household leaders with less positive attitude toward the philosophy tended to decrease practicing the activities related to the projects in long term.

The result of the study is related to Boonchom (2009) and Werapatarakul's (2015) study which indicated that local people attitude toward the sufficiency economy philosophy is an important factor affecting the success of projects. Similarly, the result of the study also supports Law's study (2010) which suggested that attitude towards the sustainability development is the key factor leading to sustainable development. Moreover, all four local philosophers also indicated that attitude toward the sufficiency economy philosophy is the important for success of projects both between and after the practicum in the area.

The phenomena could be explained by the experience of the household leaders to participate the projects within the sufficiency economy philosophy. Decreasing expense and increasing income activities might establish positive attitude toward the sufficiency economy philosophy among household leaders. The success in promoting the philosophy led to better quality of life in terms of income, happiness, and sufficiency. As a result, the activities are practiced with sustainability among the sustainable group.

#### 7.4 Number of Visits by Study Group or Individuals

The number of visits by study group or individuals was indicated as the fourth of six variables that affect sustainability of activity promoted in the

project within sufficiency economy philosophy. It could be interpreted that the more groups or individuals visited the village, the more sustainable activities seemed to be. Contrastively, the villagers with less visits by group or individuals tended to decrease practicing the activities related to the projects in long term.

The result of the study supports the previous studies indicating that coordination, participation, and visit of group and individuals outside the village play an important role in supporting the success of the project within the sufficiency economy philosophy (Nakkhain, 2010; Pansawang, 2009; Wantaya, 2008).

This could be explained that the number of visits by study group or individual could direct the activation of activities in the community. Demonstration of activities within the philosophy would encourage the villagers to get compliment and pride in presenting their communities. Therefore, the number of visits by study group or individuals becomes the factor affecting sustainability of the projects within the sufficiency economy philosophy in long term.

#### 7.5 Level of Learning Achievement

The fifth variable was found as the level of learning achievement of participants of projects within the sufficiency economy philosophy. It could be interpreted that the better household heads could learn in the projects, the more sustainable activities seemed to be. The intelligence of local people, therefore, becomes one of the key factors leading to the success of the project within the sufficiency economy philosophy. People with better cognitive process could learn, adapt, and apply knowledge to the real practice. This leads to the success of activities both during and after the period of project promotion.

#### 7.6 Importance of Sufficient Water Resources

The last variable found to affect sustainability of activities within projects to promote sufficiency economy philosophy was important of water resources sufficiency. It could be interpreted that in the more sufficient water resource the areas

has, the more sustainable activities seemed to be. In contrast, the people in areas with less sufficient water resource tended to decrease practicing the activities related to the projects in long term. The result of the study support Wantaya (2008) which indicated that water resource is the key factor to contribute success of the sufficiency economy philosophy projects.

To explain, majority of activities within the sufficiency economy philosophy projects such as farming of frogs, catfish and the backyard gardening request water supply as the key factor. Therefore, in order to sustain such activities, water supply could be a thing that cannot be cut off.

## 8. Recommendations

8.1 The result of the study indicated that enthusiasm in occupation and attitude toward the sufficiency economy philosophy were the factors positively affecting the sustainability of the projects within the sufficiency economy philosophy. It could be seen that these psychological factors play a great role in promoting community development. Therefore, governmental unit in all levels should support the projects to encourage local people to realize the importance of the philosophy to the processes of local development.

8.2 The number of visits by group or individual and knowledge sharing are the two coordinating factors. It could be interpreted that coordination among communities and people participation could lead to sustainability of the project. Therefore, government units should support projects that provide people opportunities to visit other communities and share their knowledge. For example, the sufficiency economy village contest could be held, and winners and runner ups could be rewarded. The contest could be practiced in all governmental level to encourage knowledge sharing which was proved to be a key factor to contribute community development.

8.3 It was found in the result of the study that water resource was the factor positively affect affecting the sustainability of the projects within the

sufficiency economy philosophy. The areas with sufficient water resource tend to maintain the activities within the projects to promote the sufficiency economy philosophy. Consequently, governmental unit in all level should set projects in the annual plan to provide sufficient water resource for community. This would lead to success of the sufficiency economy philosophy both during and after the projects.

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