

CHAPTER 2

LITERATURE REVIEW

The purpose of this chapter was to provide theoretical support for this study. Journals and books, proceedings from research meetings, private and public of Agricultural communication, Adoption process and Thailand government documents were used to provide a detailed representation of the relevant literature. This review of literature was divided into the following sections:

2.1 Concept and definition of communication **(based on communication theory)**

2.2 Theoretical concept of components of the communication process

2.3 Theoretical concept of media exposure behavior **(based on behavior theory)**

2.4 Theoretical concept of adoption process **(based on adoption theory)**

2.5 Concept of the sufficiency economy philosophy

2.6 Related studies.

2.6.1 Studies related to sufficiency economy

2.6.2 Studies related to communication process Communication elements and innovation adoption of farmers.

2.1 Concept and definition of communication

Concluded that communication was the message interchange through various communicative channels. This aimed to change a particular attitude or behavior of the message receiver. Based on the definitions of communication as cited, it can be seen that communication has 6 important components as follows (Phattanaphongsa, 1983):

1. Source or sender this may be an individual, a group of people, an organization, or an institution Effectiveness of the source, the ability in communication as well as knowledge, attitude, social and cultural system.

2. Message This can be a story or content which is sent to the receiver.

3. Channel This is the means to bring the message to the receiver.

4. Receiver This is the destination of the sender in which the

receiver will perceive the message through the five senses and then encoding the message. The effectiveness of the receiver depends on various factors such as communicative skill, attitude, and level of knowledge and social and cultural system. (Somphong, 2000)

5. Effect of message receiving this may be positive or negative effect or it may long term or short term effect.

6. Feedback this can be the reaction towards the obtained message. Thus, an individual or organization can be both the message sender and receiver at the same time.

Stated that communication is essential to daily life activities of human that needs for exchange of message, information, attitude, etc and this can be a mechanism for the occurrence of changes. (Dumrongkiattisak, 2002) Advancing technology is allowing ag communication experts to reach farm audiences in new and exciting ways in example farm internet. (Davis, et, & al, 2006)

2.2 Theoretical concept of components of communication process

Theorists on communication agreed that the most important method which can help Human achieve the goals in communication is to understand the elements and process of communication. This aims to find ways for the improvement on the correctness and accuracy in the communicative situations. (Berlo, 1960) classified important elements of the communicative process into an aspect: sender, message, channel, and receiver. These elements systematically work together and it cannot be communication if lacking of one of the elements. However communication strategies it have three biases were identified that created this situation: 1. a pro-technological-innovation bias, 2. a top-down message flow bias, and 3. an extension-practice bias that favored progressive (large) farmers. (Melkote & R, 1988)

1. Sender This refers to the beginner of communicative process who wants to send the message. This can be in the forms of speaking, writing, gestures, or other Symbols which can be interpreted. Generally, roles and duties of the sender must have clear purposes that he / she wants the receiver to follow him / her or just to inform the

receiver or even just to want him / her to answer. Besides, the attempt to understand the ability and readiness of the receiver by selecting appropriate channel is also one good characteristic of the sender on effective communication

2. Message This refers to the content or the text which the sender wants to convey to the receiver. the content can be sorted into two parts : the content and the code of the message. The message content refers to any story which has been formulated that the sender wants to communicate. There are two types of message content:

1. Fact This can be anything really exists in the world which can be proved that the content is true and correct.
2. Comment or opinion This can be anything that it cannot be proved that the content is really true and correct. This involves about belief, concept, observation, or diagnosis.

Message code refers to any signal or symbol such as spoken language, Written language, picture, and gesture that commonly understand by the two Parties (sender and receiver). Academicians on communication often state that the message code is a language which is conveyed to the receiver.

3. Medium or channel this can be the same thing but different perception. That is, medium is aimed to bring the message to the receiver be able to content with the receiver. It can be said that medium or channel means the carrier of the message to the receiver.

4. Receiver refers to a person of destination who receives the message from the sender and there decodes and interprets the message and finally gives feedback to the sender. Moreover stated that the communication in accordance with the model D.Kberlo

Which explains that major factors of communication are sender, message, channel and receiver needs skills and appropriate use in order to achieve the best outcome?

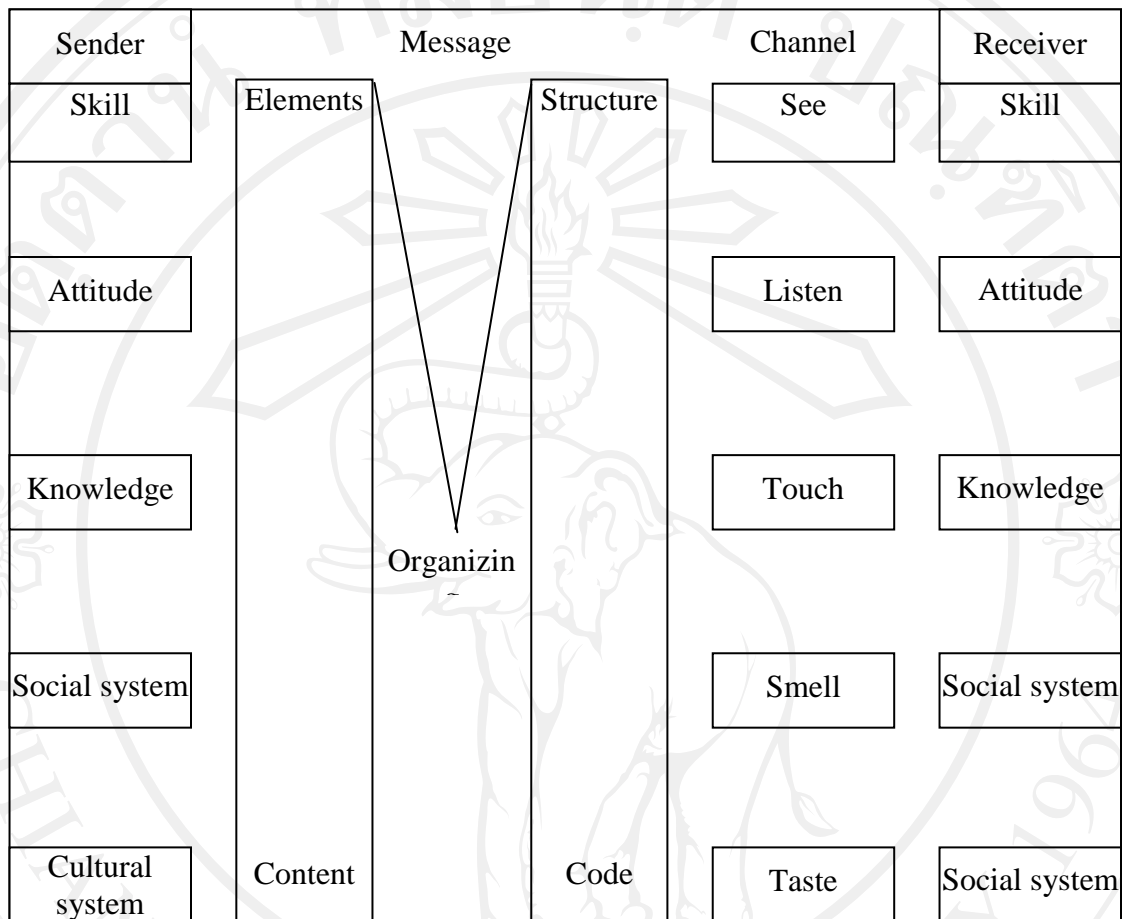


Figure 1: The communication model (Berlo, 1960)

2.3 Theoretical concept of media exposure behavior

Information is essential particularly when someone wants to make a decision. Information is an important factor used in decision – making. However, exposure to information does not mean that an individual perceives all information but he / she will perceive only the information is of useful to him / her

The process of message selection refers to the process that each message receiver selects to perceive the information for taking consideration due to some aspects of stimulation and the interpretation of the message (Benjarongkit, 1999) The driving forces

that cause an individual to select for the perception of information which is based on various aspects of basic qualifications are :

1. Component on mental aspect this means that an individual selects for the perception of information based on his / her attitude and background experience.
2. Component on social aspect and environment. Examples are family, culture, tradition and socio – demographic characteristics such as age, sex, domicile, educational attainment, and social status.

(Lerner, 1958) is the first person who investigated on the influence arisen from exposure to mass media of people in the Middle – East countries in 1958. He found that the local communities there had expanded until it was the urban community. This helped the development on literacy and a high level of educational attainment, resulting in an increase of exposure to mass media. Moreover, the expansion of mass media during that time helped alleviate the level of literacy rate

(Mc Comb & Lee, 1979) perceived that people who exposed to mass media because of the following needs:

1. Surveillance People want to follow the current situations and they want to observe things around them presented by mass media so that they will be up – to – date to what is happening.
2. Decision This is particularly on decision – making on daily life activities. Exposure to mass media can help an individual be able to determine his / her own opinion toward the situations happening around him / her
3. Discussion Exposure to information through mass media can help an individual have data for the discussion with other people.
4. Participation This aims to perceive information and to take participatory action in any situation that is happening

2.4 Theoretical concept of adoption process

(Roger & Shoemaker, 1971) stated that adoption process is the mental process of an individual begins with the initial stage of knowing or hearing about the new concept and ends with decision – making for adoption. This must go through the following stage

1. Awareness This is the initial stage that an individual begins to know new information or concept but lack of details because he / she has never heard or seen it before. The perception may occur accidentally or the extension of private or government official. This is an important stage since it is the first stage that an individual begins to perceive new information or concept. Thus, it should have motivation which can lead to the final stage – acceptance or refusal

2. Interest This is the stage that an individual is interested in the new concept and he / she tries to seek for its details by asking people who know about the new concept that he / she has perceived.

3. Evaluation This is the stage that an individual are studying details of the new concept and compare it to the existing one in order to find advantage and disadvantage. He / she may think that it should be tried or not

4. Trial In this stage, an individual does some trials in accordance with the new concept. This is aimed to check whether the new concept conforms to the current situations or not on the outcome will be as it is expected or not.

5. Adoption It is the final stage that an individual must make a decision to adopt the new concept in the case that he / she is satisfied with the outcome of trials.

Although the 5 stages as mentioned are related to one another like a chain, but each stage may be ignored. Then, an individual may refuse the new concept in one of the five stages anytime in the case that any stage does not make him / her be confidence. (Rogers, 1983) proposed a new concept or new theory which is the process on the decision whether to adopt the innovation (Innovation Decision Process). This can be divided into 5 stages as follow:

1. Knowledge This is the stage than an individual knows the innovation for the first time.
2. Persuasion An individual likes or dislikes the innovation.
3. Decision An individual must make a decision whether to adopt the innovation or not. In this stage, he / she may do trials on the innovation.
4. Implementation It is the stage that an individual implement the innovation
5. Confirmation It is the stage that an individual is seeking for Reinforcement to support his / her decision.

Rogers (1983) explained the characteristics of Innovation as follows:

1. Relative advantage means an individual who has adopted new concepts has considered and compared the new concept with the old one and he finds that the new concept is better. There are many ways to measure that which one is better such as based on economic aspect, we must find which one can give high profit. Convenience, satisfaction, honor, trust etc can be use as a criterion. It can be assumed that people see the importance and benefit of the new concepts and changes.
2. Compatibility This means that the new concept has the characteristic that conforms to the value of an individual, past experience, needs, culture, tradition, skills, etc.
3. Complexity The new concepts may be complex and is difficult to understand or to apply. This may take long time to make an individual to adopt the new concept.
4. Trial ability The new concept that has its characteristics contributed to the trial with a small limitation and without any obligation is likely to be adopted quickly. This is because an individual who does a trial feel that it is less risky.
5. Opervability The outcome of the new concept can be seen clearly and easily.

Advancement of understanding of knowledge about the sources, process and consequences of the adoption and diffusion of technology is inherently an interdisciplinary project. And then it is a central issue in social change an important research agenda in rural sociology (W.Ruttan, 1996)

Communication Channel Effecting the Adoption

1. Mass media like radio broadcast, television, journal, and other Printed materials have a high level of influence in the stage of awareness and interest since these media usually present up – to – date issues. Also, these media present various interesting issues very fast and conditionally.

2. Personnel media This includes friends, neighbors, relatives, community leaders, and academicians. These groups of people are around target people and they have a chance to talk to the target people. This is done by two – way communications which can talk the target group have a better understanding. (Kaewthep et al., 2005)

3. Government agencies These are government organizations such as the Department of Agricultural Extension, the Department of Agriculture, and government loan sources. These agencies play role in the encouragement and support target group in the stage, of assessment, trial and implementation.

4. Private agencies This includes private organizations, companies, state, etc. They play part of the role in the campaign, advertisement and public relations on the new things. Relationship between the methods of extension and the adoption of agriculturists The conclusion of a research on the adoption revealed the following stages as shown in the diagram below. (Lionberger & Gwin, 1982) Whatever The farmer acceptability and improved adoption of the technology will be influenced by the extent to which efforts are taken to meet these challenges. And the response on knowledge attitude and perception provides valuable inputs for further development and modification of the technology. (O.C.Ajayi, 2007)

Stages of the Adoption

Awaren	Interest	Evaluati	Trial	Adoptio
Provision of	Motivati	Assist on decision	Using innovatio	Building confidenc
<u>Type of information needs by</u>				
Notification about new technology	<ul style="list-style-type: none"> - Effective Operational style - Is it good? - Is it application? - It is beneficial to users? - How? 	<ul style="list-style-type: none"> - Just mental Effect on social and economic aspects - Decision of other people that can be trusted - Results of the trial in the community - Results of the 	<ul style="list-style-type: none"> - Application How? - How much? - When? 	<ul style="list-style-type: none"> - Results based on own experience and other's
<u>Important sources of information in</u>				
<ul style="list-style-type: none"> - Mass media - Neighbors - Staff - Government Agencies 	<ul style="list-style-type: none"> - Mass media - Neighbors - Staff - Government Agencies 	<ul style="list-style-type: none"> - Neighbors who are reliable - Other people who are reliable - Observation from the result of the trial in 	<ul style="list-style-type: none"> - Neighbors who have experience - Documents about how to practice - Module - Government officials 	<ul style="list-style-type: none"> - Own experience and observation

Figure 2: Sources of information needs and tasks to be done(Lionberger & Gwin, 1982)

2.5 Concept of the sufficiency economy philosophy

What is sufficiency economy?

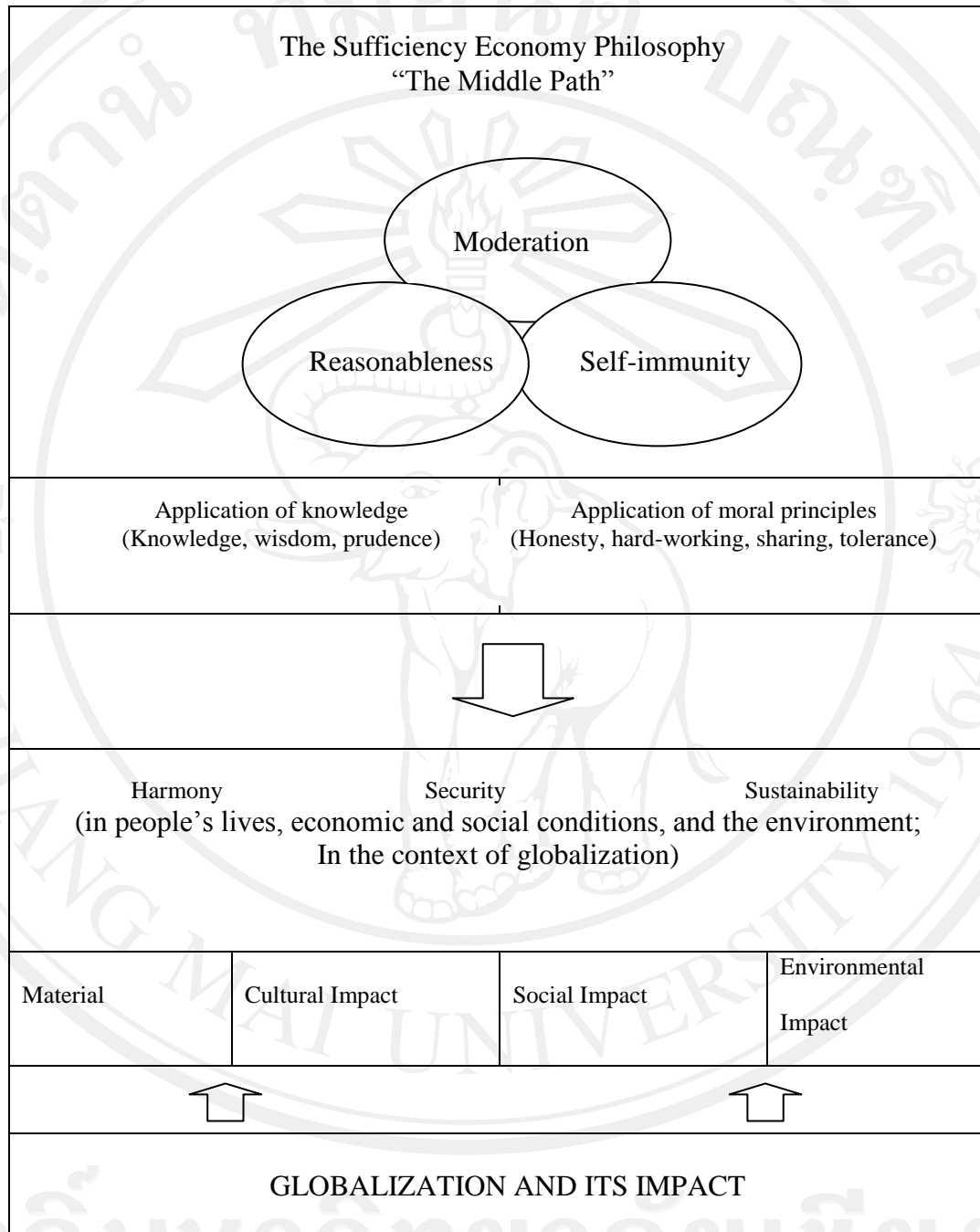
“Sufficiency Economy” is a philosophy that His Majesty the King of Thailand has initiated so as to be a guideline for daily life activities of The Thai people for more than 25 years. This has been initiated since the economic crisis in the country which was aimed to alleviate the poverty problem and to strengthen the sustainably economic stability in the age of globalization and changes. (Development., Committee, & 2004) This application is referred to as “The New Theory of Agriculture, which is consistent with the integrated-thematic Principles inherent in UNESCAP’s capstone approach to HRD(Human Resource Development) (Robert L. Curry & Sura, 2007) The Philosophy of sufficiency Economy

Sufficiency economy can be a philosophy that guides appropriate daily life activities of the Thai people of all levels, ranged from family, community and national levels. It is aimed to convince the country administration and development based on self – reliance. Sufficiency means moderation, reasoning, and need for immune that can help reduce impact arisen from the internal and external factors. This needs knowledge and carefulness for the application of academic knowledge in planning and implementation. Meanwhile, the spirit of the Thai people must be strengthen ; particularly among the government officials, theorists, and businessmen. Thai focuses on ethics, moral value, diligence, tolerance and industry. These things have been prepared to cope up with the rapid changes in materials, society, environment and culture

Conclusion of the Sufficiency Economy

Main concept

Sufficiency economy is s philosophy that guides appropriate daily life activities of all Thai people. This also includes the country development and administration should be in the intermediate way so as to cope up with the world progress in the age of globalization.



Source: Thongpakde (2007)

Figure 3. The Sufficiency Economy Philosophy Framework

The sufficiency concept consists of three main principles: moderation, reasonableness, and self-immunity systems. Figure 2 illustrates the Sufficiency Economy framework. The three rings represent the three principles of moderation, reasonableness and self-immunity together with the two conditions of knowledge and morality to achieve the three main principles. The knowledge condition requires thorough study of all available information and experience in order to make prudent decisions. The morality condition stresses integrity, trustworthiness, honesty and the hard-work of individuals. By practicing Sufficiency Economy, people would live in harmony and with security in a sustainable society and environment; and they would be able to tolerate and cope with all kinds of malign impacts of globalization.

The definition of three principles which are moderation, reasonableness and immunity, parallel with the conditions for morality and knowledge as follow:

Moderation means neutrality, being not too much or too little, not exploit such as appropriate production and consumption (Piboolsravut 2004; Sufficiency Economy Driving Subcommittee, 2007). UNDP (2007) notes that moderation means living in the middle path, emphasize a balanced and unambitious.

Reasonableness means decision with reasonableness, consider from related factors and the effect from the performances with cautiously. That also related to rationality in decision-making, which should incorporate relevant factors and their consequences for consideration. Reasonableness includes evaluation of the performances that effect to oneself, others, social, and environment. It includes accumulation of knowledge and experience, analytic ability, be farsighted, and have sympathy for others (Piboolsravut 2004; Sufficiency Economy Driving Subcommittee 2007; UNDP 2007).

Self-immunity means preparation for the arising from internal and external changes in the future and to meet the challenges arising from globalization and other changes (Thailand Knowledge Center 1999; Sufficiency Economy Driving Subcommittee 2007). Self-immunity is to have internal strength lead to a more resilient and be able to cope with rapid external changes (UNDP, 2007).

Sufficiency means moderation, reasoning and building of immune to prevent the impact that may arise from the internal and external factors. This must be dependent on knowledge, and carefulness in the application of academic knowledge to planning and implementation.(Development, 2007)

Sufficiency economy may be referred to moderate daily life activities which make people be happy and satisfied with what they are or have. That is, people or the community needs not to be rely on outsiders. The most important thing is that they can be self – reliance. They can make use of the resources that they have in their daily life activities.

1. Food
 - protein eg. soybean, chicken, ducks, fish, etc.
 - Energy eg. rice, taro, sugar cane, potato, etc.
 - Vitamin and mineral eg. vegetables and fruits

2. Clothing - Cotton, wool and silk
3. Accommodation - Houses and other structures
4. Medicine - Herbs eg. peppermint, lemon grass, basil, holy basil, sweet basil, ginger, garlic, etc.

In the case of daily life style which is in accordance with the philosophy of sufficiency economy can be sorted into 2 levels :

1. General people
2. Agriculturists

Sufficiency economy in the general people level

This is the ability to survive in the society without troubles or disturbance. People are not materialism and they have freedom in doing legal careers. They do activities that suit to their status and need and they can be self – reliance.

Sufficiency economy in the agriculturists level

This emphasizes on self – reliance and the agriculturists must use their knowledge and potential in the managerial administration of their land particularly on water sources. They must use the first step of the new theory of sufficiency economy to do agricultural activities which is the basis for sufficiency production. This is based on the exploitation of the existing natural resources. It can be seen that this can help reduce cost of production. Moreover, the now theory of sufficiency promotes the integration of farming which is beneficial to the local people. That is, local people are advised to grow field crops or vegetables, culture fish, and raise cattle in the same piece of land.

Variety of field crop production activities

rice – staple food of the Thai people

Pond – A source of water for field crops and aqua – culture

Vegetable – This is for household consumption and it helps reduce daily expenses

Herbs - It is food and medicinal plants

Perennial plant - It can be used as fire wood and part of the construction

Animal rearing - It is the source of protein and supplementary income

Ornamental plants - To beautify the environment and to generate supplementary income

Manure - To nourish the soil fertility and to maintain the balance of nature or environment

The activities that contribute to each other

Reading fish in the rice paddy - Rice yield is the fish feed

- Fish eat pests

- Fish feces is the fertilizer for rice

Growing vegetables and Chicken rearing - Chicken eat the remnant of vegetables

- Chicken feces is the fertilizer for vegetables

Utilization of resources in the field - animal feces is manure

- The remnant of leaves can be manure
- The remnant of vegetables can be fish feed
- Straw can be used for mushroom culture, manure, soil cover, and animal feed.

Using family labour for doing activities, reduce, expenses and generate supplementary income

- food processing and preservation eg. dried chili, pickled lime, sweet dried banana, salted egg, pickled garlic, and chili paste
- handicrafts eg. artificial flowers made from rubber, bamboo or banana tree, etc.

Earning a living in accordance with the concept of sufficiency economy can be practiced as follows :

1. Doing mixed farming as the initial stage of the sufficiency economy.
2. Growing various kinds of vegetable in order to reduce the expenses on food.
3. Using manure together with chemical fertilizer in order to reduce the expenses and to nourish the soil fertility.
4. Doing mushroom culture by making use of rice straw and felt over in the fields.
5. Growing fruit trees at the backyard.
6. Growing herbal plants to promote good health.
7. Rearing fish in the orchard ditch, rice paddy, and pond as protein food and for supplementary income.

8. Rearing 10 - 15 local chicken and egg - laying hens for household consumption by using rice bran, maize, and remnant of vegetables as its feed.

9. Making bio - gas from pig or cow feces for household energy.

10. Making bio - extracted matter from remnant of plants, fruits, and herb plants for using in the fields or rice paddy.

Earning a living in the form of sufficiency economy is in such a way that existing resources are utilized. This must be dependent on knowledge and potential which will make people are satisfied with their way of lives and happy. Beside, the surplus can be sold for supplementary income.

Sufficiency Economy

This holds the importance on self - reliance

1. Spirits

- You are dependent on yourself
- Having good awareness
- Creation of yourself and the country
- Having courteous mind and reconciliation
- Realize on common benefits

2. Society and Community

- Contribution to one another
- Building a strong community network

3. Natural resource and environment

- Wise management
- Aware of the importance of natural resources and environment
- Based on the basis of conservation and sustainable utilization

4. Technology

- Utilizing of appropriate local technology and modern technology and conform to the needs and environment
- Using folk wisdom

- Develop technology from our wisdom

5. Economy

- increase an income
- reduce expenses
- saving

Guidelines for earning a living in accordance with the concept of sufficiency economy

- Thrift Reduce expenses and extravagant life
- Honest earning a living
- Finding food before money
- Working for food before trading
- Folk wisdom and agricultural land is the social capital
- Apply knowledge and understanding in the daily life activities

Principles of sufficiency

1. Sufficiency for all family members and they must always help one another
2. Always think of sufficiency and be courteous to others
3. Sufficiency on environment. Conserve and nurture mixed farming can provide us food, money and good environment.
4. Strong community This can help solve various problems such as poverty and problems in social and environmental aspects.
5. Problems in sufficiency People grouping in their community should have learning activities for continual adaptation
6. Economical stability It people have no economical stability, many serious problems will arise such as stress, drug addictic, suicide, etc.

The application of the concept of sufficiency

Sufficiency on economic aspect

- reduce expenses and generate income
- careful planning
- having alternatives and do not be risky

- able to be self - reliance
- doing household account

Sufficiency on social aspect

- help one another
- unity and harmony
- strengthen the family and community

Sufficiency on a spirit

- having good awareness
- being courteousness and reconciliation
- realizing on common benefits
- being honest, tolerant and industrious

7. Related Researches

Related researches in this study were collected based on the following aspects :

1. Research paper related to socio - economic characteristics.
2. Research paper related to communicative factors and components of communication.
3. Research paper related to adoption.
4. Research paper related to the philosophy of sufficiency economy.

Research paper related to socio - economic characteristics.

1. Sex and media receptivity

Male and female have different media receptivity. Female takes more time in watching television and listening to the radio than male whereas male likes to read newspaper than female. In the case of the preference in TV programs, female prefers to watch soap opera whereas male prefers to watch sport and newswatch programs.

2. Age and media receptivity

Age is one aspect of the characteristics used in the analysis of a message receiver. Age is one factor making an individual be different from others in terms of opinions and behaviors. Generally, they are more idealism and impetuous than men of old age. On the

other hand, men of old age are usually more conservation, careful and pessimist than men of young age. These characteristics of men of old age arise from long life experience and social binding. It can be seen that men of young age prefer to consume mass media for entertainment whereas men of old age prefer to consume mass media for finding news and information rather than entertainment.

3. Education and media receptivity

There is a high level of relationship between education and media receptivity. Besides, it has a positive relationship between education and media receptivity in terms of information perception and matters concerning with public. However, it has a negative relationship in terms of the content on entertainment. Message receivers who have high educational attainment usually have printed media receptivity rather than those who have low educational attainment. It was found that message receivers who have low educational attainment usually prefer to listen to the radio. It was also found that people who have high educational attainment prefer to perceive news on information concerning public rather than those who have low educational attainment. Result of several researches also showed that the higher educational attainment people have, the higher level of interest in news, editorial article and educational column they also have.

4. Income and media receptivity

Income is one factor having the role that is almost similar to education. that is, there is a very high level of relationship between income and media receptivity. It can be observed that people having high educational attainment usually have higher income than those having low educational attainment. Thus, education and income are viewed as the social and economic status. People having high income usually prefer to consume printed media and non - entertainment news. As stated before that people having high income usually are those who have high educational attainment, they are pushed to learn more on up - to - date situations that may be beneficial to them in many aspects. However, people having low educational attainment and income prefer to watch television for entertainment and one reason is that they may have low skills in reading.

5. Religion and media receptivity

Religion is one factor effecting a message receiver in terms of attitude, value, and behavior of people who have different religions. Tanlaput (1995) as cited by Chawengsopak (1998 : p.51) claimed that perception is a process concerning with receptivity and message interpretation of each individual. Two people may perceive the same message in the some situation, but they may have different reaction or feedback. This might be because each one has different process on social context. Besides, the difference in the process of perception does not depend on the type of motivation which is in the form of information. Instead, it depends on the relationship between the motivation and environment. This also includes the internal condition of each individual such as family condition, groups of friends, obtained income and other types of media.

Research paper related to factors on communication Suwanwachokkasikit (1988 : pp.38-39) had conducted a study on Factors Effecting the Quality of the Agricultural Knowledge Program : a case study of Kasetsart University Radio Broadcast Station at Bangkhen. He found that farmers had a high level on perception agricultural knowledge through radio. Also, it was found that they had a moderate level of perception from television and newspaper and a low level of perception from movies. However, it is different from a study of Roenwong (2000 : p.47) who found that farmers perceived the information from the youth news journal and swine production from their neighbors most. Likewise, a study of Raenglearn (1997 : p.58) revealed that farmers growing sweet tamarind in Loei province perceived the information on the technology in sweet tamarind production from their nearest sources of information most.

Sripuek (2003 : abstract) conducted a study on the perception of knowledge about the effect of chemical application by personnel media of farmers who grew roses in Chiang Mai province. She found that the farmers perceived the knowledge from their neighbors who grew roses most. Besides, the farmers needed personnel media must be sincere and interested in solving the problem of the farmers. Also, they wanted personnel media to visit and provided them knowledge on the effect of chemical application.

Chaiphak (1981 : abstract) conducted a study on the role of media effecting the adoption of the new varieties of cotton of Lamtakong Self - Reliance Settlement members at Nakorn Ratchasima province. She found that personnel media had the role in the adoption of innovation toward the settlement members most compared to seminar and training media and cropping demonstration media, respectively. Besides, it was found that the farmers who adopted the innovation quickly and those who adopted it slowly had more frequency in mass media receptivity than personnel media.

Pariwattanasak (1982 : p.3) conducted a study on the efficiency in various type of promotion of the District Agriculture staff in Nakorn Ratchasima province. She found that most of them used the method of visiting at home or in the field as the main method. They also used the methods of crop growing demonstration, meeting for lecturing and group discussion. skill training, educational tour, and distribution of extension documents.

Phakdee (1982 : abstract) conducted a study on the role of media toward the adaptation of giant fresh water prawn of farmers in Kalasin province. She found found that personnel media had the highest level of role in the provision of knowledge, motivation, decision, and confirmation on decision of the farmers. There was a relationship between innovation adoptors and time span in the adaptation. It was found that the farmers having high educational attainment, economic status, and leadership characteristics were those who adopted the innovation quickly. Besides, they also had more frequency in mass media receptivity than personnel media.

Related Researches on Adoption

Bumrungkorn (1989 : p.65) conducted a study on factors related to adaptation and non - adoption of concepts of farmers in Pattani province. She found that the following of news and information of the farmers had a positive relationship with the adoption and non - adoption of concepts. The farmers who had a high level of news and information following had a higher technology to the concept adoption than those who had a low level of news and information following. Likewise, Pongsamran (1984 : p.88) conducted a study on the adoption and extension of agricultural technology through radio broadcast

of Kasetsart University of farmers in Ratchaburi province. He found that the farmers having a high level of frequency in listening to the radio adopted the extension program rather than those having a low level of frequency in listening to the radio program. This conformed to a study of Thongdaeng (1994 : p.85) on factors efficiency the adoption of Siamese neem substance using for controlling pests of farmers in Suphanburi province. She found that news and information perception of the farmers had a very high level of relationship with the adoption of Siamese neem substance using for controlling pests.

Suerdee et.al. (2004 : pp.114-116) conducted a study on the project of a communicative process for extension of the outcome of non - chemical farming. It was found that the communication in the form of external learning would occur to the farmers who were interested in the reduction or giving up using chemical. Thus, they sought to find an opportunity to learn through every channel that they could find. All of them reduced chemical using but they did not exchange their knowledge. The outcome extension through words - of - mouth also had a problem since it was not sure in the adoption of people in general. Besides, the farmers lacked of knowledge and confidence in non - chemical farming.

Pongaram (2006 : abstract) conducted a study on communicative factors effecting the reduction of giving up using chemicals of farmers in Pamok district, Angthong province. She found that the communicative factors effecting the reduction of chemical using were seminar and training, educational tour, television, academician, easy reading information, brochure, and demonstration, respectively.

The receptivity of agricultural news and information

Roekrai (1979 : p.24) explained that communication means the efficiency of critical reading and listening to the news and information as well as the ability in speaking and writing. This helps the nourishment of understanding between an individual and neighbours in order to create trust in the adoption of changes. Bumrungskorn (1989 :p.79) conducted a study on factors concerning with the innovation adoption and non - adoption of farmers in Pattani province. She found that there was a relationship between the news and information following and the innovation adoption of farmers. Phewngam

(1990 : p.100) conducted a study on factors effecting the innovation adoption of farmers in Kunua sub - district, Maeng district, Ratchaburi province. She found that the perception of drinking water was relater to the innovation adoption. Phocharaen (1985 :p.69) conducted a study on the adoption of the new plan of sowing rice cultivation of farmers in Singburi province. He found that there was a relationship between the news and information perception of the farmers and the adoption of sowing rice cultivation. However, this contrasted to a study of Laongam(1991 : p.99) on factors influencing the technology adoption of villagers in Technology village of the Ministry of Science, Technology, and Energy. He found that there was no relationship between the behavior on the perception of news or information through mass media (radio, television, newspaper) and the adoption of new technology.

Onsrinuch (1994 : p.160) conducted an analysis on factor influencing the adoption and non - adoption of cash crop growing. She classified the factors into 4 groups :

1. Social aspect - length of settlement (- 4.3), number of family members who are educated (+.26), number of family labors (+.25), and experience in cash crop growing.
2. Social aspect - household convenient facilities (+.46), level of economic status (+4.1), income before growing cash crop (+.40), index on using fertilizer for cropping (+.20), average annual income (+.18), loaning for agriculture (+.17), condition of saving per year (+.14), and area of land holding (+.13).
3. Physical aspect - frequency in cropping that was damaged by pests or diseases (-.28) and distance between water source to plantation area (-.26).
4. Organizational and informational aspect - perception of information about cropping (+.30)

Thongdeng (1994) conducted a study on factors effecting the adoption of the application of Siamese neem for controlling pests of farmers in Suphanburi. He found that the entire household income, size of agricultural area, Knowledge on the application of Siamese neem, information receptivity, and efficiency of Siamese neem substance were related to the adoption of the Siamese neem application for controlling pests of the farmers.

Phitchuanchom (2001) conducted the agricultural media receptivity of farmers in Chiang Mai. Results of the study revealed that the farmers received information from the media of the government agencies for 1.53 time per year on average which was less than those who received information from the media of private agencies. The media that. It was found that the farmers received the agricultural information through radio most which almost the same level as television. It was also found that television and radio media were the ones that fastest presented the agricultural information. Also, VDO was found to be the media that was easy to understand than other media. Meanwhile, it was found that the farmers could beneficially apply what they had been informed by seminar and training rather than other media. Base on the results of the hypothesis testing, it was found that there was a difference in media receptivity on personnel media, picture media and electronic media between farmers having social status and those having no social status.

Related Researches on the Philosophy of Sufficiency Economy

A study of Pholpathapi (2006 : p.38) on the presentation of guidelines for human development in order to have the characteristics in accordance with the philosophy of sufficiency economy ; and 3) present guidelines for human development in order to have the characteristics in accordance with the philosophy of sufficiency. This was a qualitative of research by using document research for the determination of desired characteristics of people. Field research was also conducted for analyzing sufficiency economy activities and community learning that really happened in the community. In - depth interview, participatory and non - participatory observation were used for data collection in three rural communities in the South Northeast and North of Thailand. Results of the study revealed the following :

1. The desired characteristics of people in accordance with the philosophy of sufficiency economy was classified into 3 aspects : 1) adequacy - be satisfied with own - potential and surrounding environment ; 2) reasoning - be careful and knowing cause and effect ; 3) having good immune - self - reliance based on social and economic aspects, taking consideration on long term effect, and ready for future changes.

2. Sufficiency economy activities of the community can be classified into 4 aspects : 1) activities for the creation of sufficiency in economy ; 2) activities for the creation of sufficiency in socialization ; 3) activities for the creation of sufficiency in surrounding environment ; and activities for the creation of sufficiency in spirit.

3. Community learning for human development in order to have characteristics in accordance with the philosophy of sufficiency economy. This comprises two form : learning for direct development and learning for the development of the system which support changes.

4. Guidelines for the development of the people in the community in order to have the characteristics of the philosophy of sufficiency economy. This can be sorted into 2 levels : 1) the development of knowledge and ethics of an individual who passes formal education or non - formal education and 2) the development of community in order to have the 4 aspects of the activities on sufficiency economy.

Thuengnak and Mekmoengtong (2007 : p.182) conducted a study on research and development of a case study on farmers who earn a living in accordance with the philosophy of sufficiency economy at Mahasarakham province. Results of the study was concluded below.

One important factor effecting farmers who successfully earn a living in accordance with the philosophy of efficiency economy was the act of getting moral support from concerned government agencies. The farmers believed that they would have will power when staff of concerned government agencies visited them. Another important factor was the creation of a model of success as an important core of the extension of the concept on sufficiency economy in successful earning a living of farmers. This is because the society needs validity and will be strengthened of members of the society of Mahasarakham province are encouranged to group themselves for knowledge exchange and the success in earning a living in accordance with the philosophy of sufficiency economy.

The sufficiency economy philosophy can be investigated in the following:

1. Guidelines for practice in accordance with the sufficiency economy philosophy (7 aspects)

1/ Sufficiency 2/ Thrift Reduce expenses and extravagant life 3/Honest earning a living 4/Finding food before money 5/Working for food before trading 6/Folk wisdom and agricultural land is the social capital 7./Apply knowledge and understanding in the daily life activities (Wiboonphong, 2006)

2. The sufficiency economy philosophy applied for daily life activities based on self-reliance (5 aspects) (Sahutaya, 2006)

This holds the importance on self - reliance

1. Spirits 2. Society and Community 3. Natural resource and environment
4. Technology 5. Economy

3. Basic concept on earning based on the sufficiency economy philosophy (10 aspects) as follows:

1. Doing mixed farming as the initial stage of the sufficiency economy.
2. Growing various kinds of vegetable in order to reduce the expenses on food.
3. Using manure together with chemical fertilizer in order to reduce the expenses and to nourish the soil fertility.
4. Doing mushroom culture by making use of rice straw and felt over in the fields.
5. Growing fruit trees at the backyard.
6. Growing herbal plants to promote good health.
7. Rearing fish in the orchard ditch, rice paddy, and pond as protein food and for supplementary income.
8. Rearing 10 - 15 local chicken and egg - laying hens for household consumption by using rice bran, maize, and remnant of vegetables as its feed.
9. Making bio - gas from pig or cow feces for household energy.
10. Making bio - extracted matter from remnant of plants, fruits, and herb plants for using in the fields or rice paddy. (Thoengnak & Mekmaengthong, 2007)

Basic factors on knowledge and understanding for daily life activities. (4 aspects)

1. Food - protein e.g. soybean, chicken, ducks, fish, etc.- Energy e.g. rice, tare, sugar cane, potato, etc. - Vitamin and mineral e.g. vegetables and fruits
2. Clothing - Cotton, wool and silk
3. Accommodation- Houses and other structures
4. Medicine - Herbs e.g. peppermint, lemon grass, basil, holy basil, sweet basil, ginger, garlic, etc.

2.6 Related Studies

2.6.1 Studies related to sufficiency economy

Charoenrat (2000) had found about the sufficiency community system after contacting the capitalist system that the community still maintained its subsistence farming. That is, people in the community produce rice and vegetables just enough for household consumption and food security. Meanwhile, they also grow other plants for selling its yields such as maize and chili. Besides, they raise cattle or livestock, search for bamboo shoot and mushroom or they sometimes are hired workers for supplementary income. Main conditions making the occurrence of sufficiency economy under the social and traditional structure include: 1) having its way of subsistence production connecting with the balance of production and consumption and 2) community potential being maintained to have power of various resource management. Besides, it was found that the existence of sufficiency economy in the community still have four supporting conditions as follows :

- 1) Free of interference from external factors and monetary trade system ;
- 2) Fertility of forest conditions ;
- 3) Appropriate technology ; and
- 4) Appropriate size of population.

However, the adjustment process for the existence of sufficiency economy still have problems in which local people must learn together for the development of fighting

methods to overcome these problems. Government agencies as helpers or supporters are able to play roles in the promotion and development of this potential. This can be done by determining policies contributing to the decentralization of power more than ever. Not only this, they must assist and support the community to be self - reliant by using diverse learning processes based on problem condition of each area. Various activities as mentioned are essential to be developed on the basis of social capital of the community.

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2.6.2 Studies related to communication process Communication elements and innovation adoption of farmers.

Research paper related to factors on communication

Sripuek (2003 : abstract) conducted a study on the perception of knowledge about the effect of chemical application by personnel media of farmers who grew roses in Chiang Mai province. She found that the farmers perceived the knowledge from their neighbors who grew roses most. Besides, the farmers needed personnel media must be

sincere and interested in solving the problem of the farmers. Also, they wanted personnel media to visit and provided them knowledge on the effect of chemical application.

Phakdee (1982 : abstract) conducted a study on the role of media toward the adaptation of giant fresh water prawn of farmers in Kalasin province. She found that personnel media had the highest level of role in the provision of knowledge, motivation, decision, and confirmation on decision of the farmers. There was a relationship between innovation adoptors and time span in the adaptation. It was found that the farmers having high educational attainment, economic status, and leadership characteristics were those who adopted the innovation quickly. Besides, they also had more frequency in mass media receptivity than personnel media.

Related Researches on Adoption

Bumrungrakorn (1989 : p.65) conducted a study on factors related to adaptation and non - adoption of concepts of farmers in Pattani province. She found that the following news and information of the farmers had a positive relationship with the adoption and non - adoption of the concepts. The farmers who had a high level of news and information following had a higher technology to the concept adoption than those who had a low level of news and information following. Likewise, Pongsamran (1984 : p.88) conducted a study on the adoption and extension of agricultural technology through radio broadcast of Kasetsart University of farmers in Ratchaburi province. He found that the farmers having a high level of frequency in listening to the radio adopted the extension program rather than those having a low level of frequency in listening to the radio program. This conformed to a study of Thongdaeng (1994 : p.85) on factors effecting the adoption of Siamese neem substance using for controlling pests of farmers in Suphanburi province. She found that news and information perception of the farmers had a very high level of relationship with the adoption of Siamese neem substance using for controlling pests.

Suerdee et.al. (2004: pp.114-116) conducted a study on the project of a communicative process for extension of the outcome of non - chemical farming. It was

found that the communication in the form of external learning would occur to the farmers who were interested in the reduction or giving up using chemical. Thus, they sought to find an opportunity to learn through every channel that they could find. All of them reduced chemical using but they did not exchange their knowledge. The outcome extension through words - of - mouth also had a problem since it was not sure in the adoption of people in general. Besides, the farmers lacked of knowledge and confidence in non - chemical farming.

Pongaram (2006 : abstract) conducted a study on communicative factors effecting the reduction of giving up using chemicals of farmers in Pamok district, Angthong province. She found that the communicative factors effecting the reduction of chemical using were seminar and training, educational tour, television, academician, easy reading information, brochure, and demonstration, respectively.

2.7 Theoretical Framework

(CONCEPTUAL FRAMEWORK OF THE STUDY)

This multi – correlation study will be analyzed by using multi – vitiate analysis as shown in the conceptual framework (Figure 4).

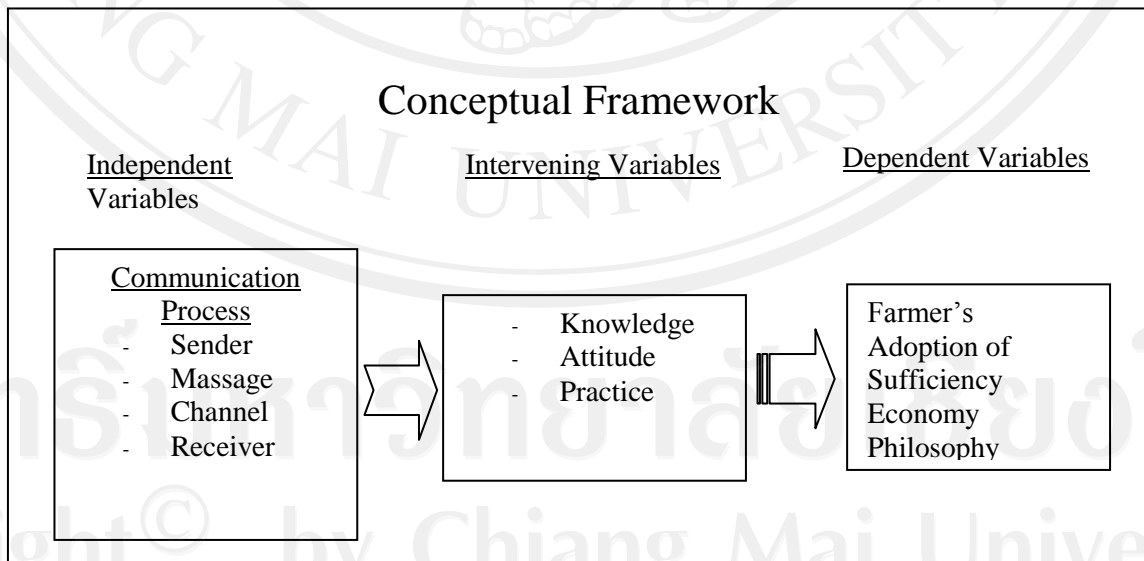


Figure 4: conceptual framework of the study

2.8 Summary of the literature review

Based on the review related literature about concept and communication theories and concept on components of communication, this study was viewed on variables of factors on communication. The communicative process (SMCR= Sender, Message, Channel, Receiver) and the characteristics of Innovation created knowledge, attitude, and behaviors to occur in target group (farmer in Chiang Mai province) which was dependent on variables of the concept in media receptivity behavior and some characteristics of an individual which was expected to have influence to the outcome of the expected relationship.

The concept on adoption process of The sufficiency economy philosophy was used to consider the variables (Knowledge, Persuasion, Decision, Implementation, Confirmation) which was expected to have relationship about various processes resulted from communicative factors and results of various researches.

The concept of The sufficiency economy philosophy was viewed on the philosophy itself, source, and knowledge and understanding from the application of the concept of the sufficiency economy philosophy of farmers. Also, collected examples were analyzed for the conclusion of concepts, measurable knowledge of The sufficiency economy philosophy and application done by target group.

As a whole, it was a relationship of variables which was expected to be happening. In the end Results of this study will show the communication process and the adoption process of The sufficiency economy philosophy among the farmers. Also, based on the review of related literature, conceptual base for my study was formulated.