CHAPTER 4

RESULTS OF THE STUDY

The research on "Communication Process and Adoption of Sufficiency Economy Philosophy by Farmers in Chiang Mai Province" was an analysis of the data primarily gained from the sampling group of 375 farmers to answer the 4 objective (research questions) as follows:

The objectives of this study were included the following:

1. To investigate learning condition on the philosophy of sufficiency economy through the communication process of farmers in Chiang Mai province ;
2. To find out levels of knowledge, attitude, and the adoption of sufficiency economy philosophy of the farmers ;
3. To find factors effecting the adoption of the philosophy of sufficiency economy of the farmers; and
4. To synthesize guidelines for the preparation of an appropriate communication process effecting the adoption of sufficiency economy of the farmers.

Specifically, this research aimed to investigate the following: demographic characteristics of the farmers; information receptivity conditions of the farmers on the concept of sufficiency economy philosophy; knowledge, attitudes and practice; communication factors related to the level of adoption,. Results of analyses are presented in Tables together with description. Besides, results of the research are discussed within the scope of collected data.

The questionnaire was applied as an instrument in collecting data. The data gained was then analyzed by a computer program SPSS for Windows. And the summary of the said analysis was presented by using descriptive tables which were divided into 6 parts as follows:

Part 1 General socio-economic background of farmer and families

Part 2 The behaviors on information receptivity of the Sufficiency economy philosophy

Part 3 The levels of knowledge, attitude, and the adoption of sufficiency economy philosophy of the farmers

Part 4 Factors effecting the adoption of the philosophy of sufficiency economy by the farmers

Part 5 Synthesize guidelines for the preparation of an appropriate communication process effecting the adoption of sufficiency economy of the farmers

Part 6 The Qualitative information about the sufficiency economy philosophy of the farmers

Details of results of the research are as follows:

Part 1 General socio-economic background of farmer and families

Gender

Table 2. Shows that most of the farmers were male (92.53%) and the rest (7.4%) were female.

Table 2 Number and percentage of the farmers classified based on gender

n=375

Gender	Number	Percentage
Male	347	92.53
Female	28	7.47
Total	375	100.00

Age

The farmers were 51 years old on average (S.D. = 10.13), youngest was 21 whereas oldest was 89 years old. About one-third of the farmers (37.33%) were 51-60 years old. Those having the age range of 41-50 years old comprised 32.80 percent. Only 15.45 percent was 61 years old and above and 14.40 percent was not more than 40 years old.

Table 3 Number and percentage of the farmers classified based on age

n=375

Age (year)	Number	Percentage
40 and below	54	14.40
41 - 50	123	32.80
51 - 60	140	37.33
61 and above	58	15.47
Total	375	100.00

Average age = 51.19 S.D. = 10.13

Lowest = 21 Highest = 89

Marital Status

Most of the farmers (86.13%) were married and followed by single (5.60%), widowed (5.33%), and divorced (2.93%), respectively. (Table 4)

Table 4 Number and percentage of the farmers classified based on marital status

n=375

Marital Status	Number	Percentage
Single	21	5.60
Divorced	11	2.93
Married	323	86.13
Widowed	20	5.33
Total	375	100.00

Educational attainments

Almost two0thirds of the farmers (65.07%) were element school vocational certificate graduates (8.00%), below elementary school graduates (5.60%), bachelor's degree graduates (4.00%), and higher vocational certificate for equivalent (2.13%), respectively. The rest (5.87) did not go to school. (Table 5)

Table 5 Number and percentage of the farmers classified based on educational attainment

n=375

Educational attainments	Number	Percentage
Did not go to school	22	5.87
Lower than elementary school	21	5.60
Elementary school	244	65.07
Lower secondary school	35	9.33
Upper secondary school/ vocational certificate	30	8.00
Higher vocational certificate/ equivalent	8	2.13
Bachelor's degree	15	4.00
Total	375	100.00

Household Member

It was found that the farmers had 4 household members on average (S.D. = 1.22); the lowest was 1 and the highest was 8 people. Almost two-thirds (64.27) of the farmers had 3-4 household members. This was followed by 5-6 household members (21.87%) and 1-3 household members (11.20%). Only 2.67 percent had 7 household members and above. (Table 6)

Table 6 Number and percentage of the farmers classified based on a number of household members

n=375

Number of household members	Number	Percentage
1 - 2 people	42	11.20
3 - 4 people	241	64.27
5 - 6 people	82	21.87
7 and above	10	2.67
Total	375	100.00

$\bar{x}$ = 3.88 S.D. = 1.22

Lowest = 1 Highest = 8

Number of Agricultural workforce

The farmers had 2 agricultural workforce on average (S.D. = 0.73); the lowest was 1 and the highest were 5 people. Almost two-thirds of the farmers (65.87%) had 2 agricultural workforces. This was followed by 1 (18.40%), 3 (11.20 %), and 4 agricultural workforce and above (4.53%), respectively.

Table 7 Number and percentage of the farmers classified based on a number of agricultural workforce

Number of agricultural workforce	Number	Percentage
1 person	69	18.40
2 persons	247	65.87
3 persons	42	11.20
4 persons and above	17	4.53
Total	375	100.00

$\bar{x}$ = 2.03 S.D. = 0.73

Lowest = 1 Highest = 5

Main Occupation

Table 8 shows that almost one-half of the farmers (42.40%) grew rice as their main occupation. This was followed by orcharding (36.27%) crop planting (8.80%) animal husbandry (3.47%)hired workers (3.20%), and fisheries (0.53%), respectively. The rest (5.33%) did other careers, e.g. government official, state enterprise employee, company employee, etc.

Table 8 Number and percentage of the farmers classified based on main occupation

n=375

Main occupation	Number	Percentage
Rice growing	159	42.40
Orcharding	136	36.27
Crop planting	33	8.80
Fisheries	2	0.53
Animal husbandry	13	3.47
Hired worker	12	3.20
Others	20	5.33
Total	375	100.00

Incomes Earned from Main Occupation

It was found that the farmers had an average monthly income for 6,196 baht (S.D. = 8,064.85); the lowest was 1,000 and the highest was 80,000 baht per month. More than one-third of the farmers (39.20%) had a monthly income for 3,000 baht and below. This was followed by 3,001-6,000 baht (37.60%) more than 9,000 baht (14.13%), and between 6,001-9,000 baht (9.07%), respectively. (Table 9)

Table 9 Number and percentage of the farmers classified based on incomes earned from main occupation

n=375

Income earned from main occupation	Number	Percentage
3,000 baht and below	147	39.20
3,001 - 6,000 baht	141	37.60
6,001 - 9,000 baht	34	9.07
9,001 and above	53	14.13
Total	375	100.00

$\bar{x}$ = 6,196.00 baht S.D. = 8,064.85 baht

Lowest = 1,000 baht Highest = 80,000 baht

Supplementary Occupation

Almost one-fourth of the farmers (24.53%) did orcharding. This was followed by hired worker (12.27%), animal husbandry (10.93%), crop planting (10.67%), rice growing (8.80%), fisheries (1.87%), and others (13.60%), e.g. trading and handicraft, etc. Only 17.33 percent did not have supplementary occupation. (Table 10)

Table 10 Number and percentage of the farmers classified based on supplementary occupation

n=375

Supplementary occupation	Number	Percentage
None	65	17.33
Rice growing	33	8.80
Orcharding	92	24.53
Crop planting	40	10.67
Fisheries	7	1.87
Animal husbandry	41	10.93
Hired worker	46	12.27
Other	51	13.60
Total	375	100.00

Incomes Earned form Supplementary Occupation

It was found that the farmers had an average monthly income for 3,368.27 baht; the lowest was 0 and the highest was 50,000 baht. More than one-half of the farmers (39.47%) had a range of a monthly income for 2,001-4,000. This was followed by 2,000 baht and below (21.07%), 4,001-6,000 baht (37.60%), and more than 6,000 baht (8.53%), respectively. Besides, 17.33 percent did not have supplementary occupation (Table 11)

Table 11 Number and percentage of the farmers classified based on incomes earned form supplementary occupation

n=375

Incomes earned from supplementary occupation (baht/month)	Number	Percentage
None	65	17.33
2,000 baht and below	79	21.07
2,001 - 4,000 baht	148	39.47
4,001 - 6,000 baht	51	13.60
6,001 and above	32	8.53
Total	375	100.00

$\bar{x}$ = 3,368.27 baht S.D. = 4,286.54 baht

Lowest = 0 baht Highest = 50,000 baht

Experience in Sufficiency Farming

It was found that the farmers had been doing sufficiency farming for 7.21 years on average ($\bar{x}$ = 8.07); the highest was 50 and the lowest was having no experience n sufficiency farming. Less than one-half of the farmers (41.87%) had 1 – 5 years of experience in sufficiency farming. This was followed by 6 – 10 years (22.40%), 11 – 15 years (7.20%), 16-20 years (6.13%), and more than 20 than 20 years (16.53%), respectively. (Table 12)

Table 12 Number and percentage of the farmers classified based on experience in sufficiency farming

n=375

Years of experience in sufficiency farming	Number	Percentage
None	62	16.53
1 - 5 years	157	41.87
6 - 10 years	84	22.40
11 - 15 years	27	7.20
16 - 20 years	23	6.13
21 years and above	22	5.87
Total	375	100.00

$\bar{x}$ = 7.21 years S.D. = 8.7 years

Lowest = 0 years Highest = 50 years

Training on the Concept of Sufficiency Farming

Table 12 show that the farmers had attended the training on the concept of sufficiency farming for 2.51 times on average ($\bar{x}$ = 4.14), the lowest had lowest attended the training. About one-third of the farmers (35.73) used to attend the training on the concept of sufficiency farming for 1-2 times. This was followed by 3-4 times (12.53%), more than 8 times (6.67%), 5-6 times (5.87%), and 7-8 times (4.00%), respectively. One-third of the farmers had lowest attended the training on the concept of sufficiency farming.

Table 13 Number and percentage of the farmers classified based on the training on sufficiency training

n=375

The training on the concept of sufficiency training	Number	Percentage
None	132	35.20
1 - 2 times	134	35.73
3 - 4 times	47	12.53
5 - 6 times	22	5.87
7 - 8 times	15	4.00
8 times and above	25	6.67
Total	375	100.00

$\bar{x}$ = 2.51 times S.D. = 4.14 times

Lowest = 0 times Highest = 50 times

Study Tour on the Concept of Sufficiency Farming

It was found that the farmers had experienced that educational tour on the concept of sufficiency farming for 1.7 times on average (S.D. = 3.28); the highest was 40 times and the

Table 14 Number and percentage of the farmers classed based on the educational tour on the concept of sufficiency farming

n=375

Study tour on the concept of sufficiency farming	Number	Percentage
None	172	45.87
1 times	68	18.13
2 times	53	14.13
3 times	22	5.87
4 times	13	3.47
5 times	21	5.60
6 times and above	26	6.93
Total	375	100.00

$\bar{x}$ = 1.78 times S.D. = 3.28 times

Lowest = 0 times Highest = 40 times

Part 2 The behaviors on information receptivity of the Sufficiency economy philosophy

An analysis of information receptivity of the farmers on the concept of sufficiency economy philosophy in accordance with components of the communication process: sender, message, and receiver. The researcher had determined criteria for considering the levels of information receptivity of the farmers on the concept of sufficiency economy philosophy of reach item. This was based on an average weight mean score and the determination of the score criteria as follows:

An average mean score of	1.00 – 1.49	=	Lowest
An average mean score of	1.50 – 2.49	=	Low
An average mean score of	2.50 – 3.49	=	Moderate
An average mean score of	3.50 – 4.49	=	High
An average mean score of	4.50 – 5.00	=	Highest

Information receptivity on the concept of sufficiency economy philosophy

Based on components of the communication process, it was fond that the farmers had a moderate level of information receptivity on sufficiency economy philosophy ($\bar{x}$ = 2.77), Based on each component of the communication process, the following were also found at a moderate level: message content ($\bar{x}$ = 3.34), sender ($\bar{x}$ = 2.80), receiver ($\bar{x}$ = 2.79), and communication channel ($\bar{x}$ = 2.55), respectively (Table 14)

Sender

It was found that the farmers received the information about the concept of sufficiency economy philosophy through a sender at a moderate level ($\bar{x}$ = 2.80). Regarding its details, the following were found at a moderate level ($\bar{x}$ = 2.50-3.45): community leaders ($\bar{x}$ = 3.31), neighbors ($\bar{x}$ = 3.12), relatives ($\bar{x}$ = 2.83), and

agricultural academicians/concerned personnel (= 2.66), respectively. However,, receiving information about the concept of the sufficiency economy philosophy through traders was found at a low level ($\bar{x}$ =2.06). (Table 15)

Message

It was found that the farmers received the information about the concept of the sufficiency economy theory at a moderate level ($\bar{x}$ = 3.34). Regarding its details, they received it at a moderate level of all items ($\bar{x}$ = 2.50-3.49) in terms of: moral ($\bar{x}$ =3.45), reasonableness ($\bar{x}$ =3.40), moderacy ($\bar{x}$ = 3.35), meaning and importance of sufficiency economy ($\bar{x}$ = 3.35), middle path ($\bar{x}$ = 3.29), and immunity ($\bar{x}$ = 3.21), respectively. (Table 15)

Communication Channel

It was found that the farmers had a moderate level of information receptivity on the concept of sufficiency economy through various communication channel ($\bar{x}$ = 2.55). Looking into its details of the receptivity, mass ($\bar{x}$ = 2.72) and group ($\bar{x}$ = 2.51) were found at a moderate level whereas an individual was found at a low level ($\bar{x}$ = 2.42) based on the consideration of the farmers' information receptivity on the concept of the sufficiency economy philosophy based on each question, the following were found:

1. Individual contacts The famers had a moderate level of information receptivity on the concept of sufficiency economy ($\bar{x}$ = 2.63). Based on communication channel, the following were found at a low level: home visit ($\bar{x}$ = 2.47), telephone contact ($\bar{x}$ = 2.44), and personal letter ($\bar{x}$ =2.14), respectively. (Table 15)

2. Group contacts The farmers had a moderate level of the information receptivity on the concept of sufficiency economy through the following channels: meeting ($\bar{x}$ = 2.84), village tower broadcast ($\bar{x}$ = 2.82), lecture ($\bar{x}$ = 2.51,

training ($\bar{x}$ = 2.53), and agricultural fair ($\bar{x}$ = 2.51). The following channels were found at a low level: discussion ($\bar{x}$ = 2.36), contest ($\bar{x}$ = 2.29), and educational tour ($\bar{x}$ = 2.24), respectively. (Table 15)

3. Mass contacts The farmers had a moderate level of the information receptivity on the concept of sufficiency economy through the following channels: television ($\bar{x}$ = 3.47), radio ($\bar{x}$ = 3.29), and advertisement ($\bar{x}$ = 2.74). However, leaflet and internet were found at a low level ($\bar{x}$ = 2.45, and 1.66, respectively). (Table 15)

Receiver

It was found that the farmers had a moderate level of the information receptivity on the concept of sufficiency economy ($\bar{x}$ = 2.79). Regarding its details n each question, the following were found at a moderate level: acceptance ($\bar{x}$ = 2.90), Early Majority ($\bar{x}$ = 2.85), Late Majority ($\bar{x}$ = 2.83), Laggard ($\bar{x}$ = 2.73), and Innovator ($\bar{x}$ = 2.64), respectively. (Table 15)

Table 15 No. percentage, and mean for the levels of the farmer information receptivity on the concept of the sufficiency economy theory

(n = 375)

Components of the communication process (SMCR)	Level of the receptivity frequency					Mean	S.D.	Description
	Highest	High	Moderate	Low	Lowest			
1. Sender								
1. Agricultural academician/concerned personnel	8 (2.13)	69 (18.40)	158 (42.13)	69 (18.40)	71 (18.93)	2.66	1.05	Moderate
2. Neighbor	14 (3.73)	108 (28.80)	171 (45.60)	72 (19.20)	10 (2.67)	3.12	0.85	Moderate
3. Community leader	19 (5.07)	139 (37.07)	165 (44.00)	44 (11.73)	8 (2.13)	3.31	0.82	Moderate
4. Relative	12 (3.20)	66 (17.60)	164 (43.73)	112 (29.87)	21 (5.60)	2.83	0.89	Moderate
5. Trader	8 (2.13)	31 (8.27)	85 (22.67)	104 (27.73)	147 (39.20)	2.06	1.07	Low
Total						**2.80**	**0.63**	**Moderate**

Table 15 No. percentage, and mean for the levels of the farmer information receptivity on the concept of the sufficiency economy theory (Continued)

(n = 375)

Components of the communication process (SMCR)	Level of the receptivity frequency					Mean	S.D.	Description
	Highest	High	Moderate	Low	Lowest			
2. Message								
1. Meaning and importance of sufficiency economy	27 (7.20)	142 (37.87)	148 (39.47)	53 (14.13)	5 (1.33)	3.35	0.86	Moderate
2. Middle	12 (3.20)	143 (38.13)	168 (44.80)	45 (12.00)	7 (1.87)	3.29	0.79	Moderate
3. Moderateness	24 (6.40)	132 (35.20)	175 (46.67)	38 (10.13)	6 (1.60)	3.35	0.81	Moderate
4. Reasonableness	25 (6.67)	154 (41.07)	151 (40.27)	36 (9.60)	9 (2.40)	3.40	0.84	Moderate
5. Immunity	16 (4.27)	129 (34.40)	162 (43.20)	54 (14.40)	14 (3.73)	3.21	0.88	Moderate
6. Knowledge wisdom	25 (6.67)	135 (36.00)	153 (40.80)	50 (13.33)	12 (3.20)	3.30	0.90	Moderate

Table 15 No. percentage, and mean for the levels of the farmer information receptivity on the concept of the sufficiency economy theory (Continued)

(n = 375)

Components of the communication process (SMCR)	Level of the receptivity frequency					Mean	S.D.	Description
	Highest	High	Moderate	Low	Lowest			
7. Moral	39 (10.40)	146 (38.93)	145 (38.67)	36 (9.60)	9 (2.40)	3.45	0.89	Moderate
Total						3.34	0.68	Moderate
3. Channel								
3.1 Individual contacts								
1. Home visit	13 (3.47)	49 (13.07)	105 (28.00)	141 (37.60)	67 (17.87)	2.47	1.04	Low
2. Office contact	7 (1.87)	75 (20.00)	119 (31.73)	119 (31.73)	55 (14.67)	2.63	1.02	Moderate
3. Personal Letter	11 (2.93)	35 (9.33)	83 (22.13)	113 (30.13)	133 (35.47)	2.14	1.09	Low
4. Telephone contact	19 (5.07)	57 (15.20)	95 (25.33)	103 (27.47)	101 (26.93)	2.44	1.18	Low
Total						**2.42**	**0.91**	**Low**

Table 15 No. percentage, and mean for the levels of the farmer information receptivity on the concept of the sufficiency economy theory (Continued)

(n = 375)

Components of the communication process (SMCR)	Level of the receptivity frequency					Mean	S.D.	Description
	Highest	High	Moderate	Low	Lowest			
3.2 Groups contacts								
1. Meeting	12	81	152	96	34	2.84	0.97	Moderate
	(3.20)	(21.60)	(40.53)	(25.60)	(9.07)			
2. Lecture	8	77	132	109	49	2.70	1.01	Moderate
	(2.13)	(20.53)	(35.20)	(29.07)	(13.07)			
3. Contest	6	43	95	141	90	2.29	1.01	Low
	(1.60)	(11.47)	(25.33)	(37.60)	(24.00)			
4. Agricultural fair	4	54	131	125	61	2.51	0.96	Moderate
	(1.07)	(14.40)	(34.93)	(33.33)	(16.27)			
5. Discussion	7	51	92	145	80	2.36	1.02	Low
	(1.87)	(13.60)	(24.53)	(38.67)	(21.33)			
6. Village news broadcast tower	18	91	117	103	46	2.82	1.08	Moderate
	(4.80)	(24.27)	(31.20)	(27.47)	(12.27)			

Table 15 No. percentage, and mean for the levels of the farmer information receptivity on the concept of the sufficiency economy theory (Continued)

(n = 375)

Components of the communication process (SMCR)	Level of the receptivity frequency					Mean	S.D.	Description
	Highest	High	Moderate	Low	Lowest			
7. Study tour	11	44	77	135	108	2.24	1.08	Low
	(2.93)	(11.73)	(20.53)	(36.00)	(28.80)			
8. Exhibition	9	36	94	144	92	2.27	1.01	Low
	(2.40)	(9.60)	(25.07)	(38.40)	(24.53)			
9. Training	7	64	109	135	60	2.53	1.01	Moderate
	(1.87)	(17.07)	(29.07)	(36.00)	(16.00)			
Total						**2.51**	**0.79**	**Moderate**
3.3 Mass contacts								
1. Printed media (newspaper, journal, news letter, leaflet)	13	61	161	94	46	2.74	0.99	Moderate
	(3.47)	(16.27)	(42.93)	(25.07)	(12.27)			
2. Radio	23	163	101	77	11	3.29	0.96	Moderate
	(6.13)	(43.47)	(26.93)	(20.53)	(2.93)			
3. Television	38	177	101	40	19	3.47	0.99	Moderate
	(10.13)	(47.20)	(26.93)	(10.67)	(5.07)			

Table 15 No. percentage, and mean for the levels of the farmer information receptivity on the concept of the sufficiency economy theory (Continued)

(n = 375)

Components of the communication process (SMCR)	Level of the receptivity frequency					Mean	S.D.	Description
	Highest	High	Moderate	Low	Lowest			
4. Advertisement document	12	48	99	154	62	2.45	1.01	Low
	(3.20)	(12.80)	(26.40)	(41.07)	(16.53)			
5. Internet	12	19	33	75	236	1.66	1.05	Low
	(3.20)	(5.07)	(8.80)	(20.00)	(62.93)			
Total						2.72	0.71	Moderate
As a whole for the communication channel						**2.55**	**0.68**	**Moderate**
4. Receiver								
1. Innovator	13	50	155	104	53	2.64	0.99	Moderate
	(3.47)	(13.33)	(41.33)	(27.73)	(14.13)			
2. Early Adopter	13	79	165	93	25	2.90	0.93	Moderate
	(3.47)	(21.07)	(44.00)	(24.80)	(6.67)			
3. Early Majority	14	75	157	97	32	2.85	0.96	Moderate
	(3.73)	(20.00)	(41.87)	(25.87)	(8.53)			

Table 15 No. percentage, and mean for the levels of the farmer information receptivity on the concept of the sufficiency economy theory (Continued) (n = 375)

Components of the communication process (SMCR)	Level of the receptivity frequency					Mean	S.D.	Description
	Highest	High	Moderate	Low	Lowest			
4. Late Majority	15	69	162	97	32	2.83	0.96	Moderate
	(4.00)	(18.40)	(43.20)	(25.87)	(8.53)			
5. Laggard	14	65	148	102	46	2.73	1.01	Moderate
	(3.73)	(17.33)	(39.47)	(27.20)	(12.27)			
Total						-	-	-
As a whole for the communication process						2.77	0.56	Moderate

*Legend:

Scale Limits		Descriptive Equivalents
4.50- 5.00	=	Highest
3.50- 4.49	=	High
2.50- 3.49	=	Moderate
1.50- 2.49	=	Low
1.00- 1.49	=	Lowest

Part 3 The levels of knowledge, attitude and the adoption of sufficiency economy philosophy of the farmers

3.1) Knowledge

Results of the study on knowledge about the concept of sufficiency economy philosophy based on the consideration of questions/answers (agree/disagree), it covered 7 aspects: 1) meaning and importance of sufficiency economy, 2) middle path, 3) moderacy, 4) reasonableness, 5) immunity, 6) knowledge, and 7) moral.

Meaning and Importance of Sufficiency Economy

Findings showed that most of the farmers (96.27%) chose to answer 'Agree' on the aspects of moderacy in livelihood, middle path, self sufficiency as well as family and community, self-reliance. This was followed by the questions. On sufficiency economy about the concern in assets and natural resources together with the three conditions: diligence, tolerance, and saving (94.40%); a guideline leading to the potential in self-reliance, reduction of risks in farming using moderacy, reasonableness, good immunity, knowledge, tolerance, and unity (94.40%); agricultural careers focusing on moderacy, self-reliance, and sustainable security (94.40%); meanwhile, most of the farmers (73.07%) choose to answer 'Disagree' on the aspect of farmers are not able to do sufficiency economy farming if they have less than 15 rai of farm land (Table 16)

Middle path

It was found that most of the farmers (96.00%) choose to answer 'Agree' on the statement "In case of a product has various prices to be chosen, a farmer should buy it in which its price does not make him has increased debts. This was followed by the middle path issue "The middle path means doing anything which is not too little or too much and it makes us is happy without disturbing others." (94.40%); "A farmer does no spend money beyond his financial status" (90.93%); and "The middle path for agricultural career can be achieved by do not grow only one kind of in order

to reduce risks of diseases and insects. Besides, growing many kinds of crops can earn more supplementary income." (89.60%) However, most of the farmers (66.67%) choose to answer 'Disagree' on "A farmer must keep himself away form others and does anything by himself." (Table 16)

Moderation

It was found that most of the farmers (92.80%) choose to answer 'Agree' on "A farmer should not invest a too big project; it should begin with a small one can be expanded when it is successful." However, most of the farmers choose to answer 'Disagree' on "When holding a religious ceremony such as ordination and cremation ceremonies, it must be a big one." (77.87%); "In order to make others not to look down a farmer as out-of-date, the farmer has to go shopping at big department stores or travel in various places by getting a loan from loan sources." (75.20%); and "A farmer should have all convenience facilities at home like others." (67.20%), respectively (Table 16)

Reasonableness

It was found that most of the farmers (92.53%) choose to answer 'Agree' on "Reasonableness refers to any careful action must be reasonable based on concerned factors and expected outcomes." This was followed by "A farmer should do an agriculture career with good principles, information, knowledge, and intellect as a basis of good jobs." (92.27%); "A farmer should do activities with principles, not based on his emotion." (92.00%); and "Although there are little yields, a farmer needs not to waste time for finding for finding its causes. He just only adds some more fertilizer." (62.13%), respectively. (Table 16)

Immunity

Most of the famers (93.60%) choose to answer 'Agree' on "Having good immunity in the body means preparing readiness for an effect and various changes

that may occur in the future." This was followed by "In daily life activities, it should have a systematic plan on energy saving and expenses on fuel, tap water, electricity, and telephone." (93.33%); "In doing a career, it must have an investment plan, data investigation, and feasibility study before making a decision for the investment." (93.07%); "Having good immunity in the body means preparing readiness for an effect and various changes that may occur in the future." (92.00%); and "A farmer should prepare a household account showing incomes, expense, debts, and an annual budget plan in order to control expenses and prevent debts." (92.00%) respectively. However, most of the farmers (73.07%) choose to answer 'Disagree' on "If any farmer has a fire extinguisher, first aid box, and important telephone numbers, this means that he is coward." (Table 16)

Knowledge wisdom

Most of the farmers (97.33%) choose to answer 'Agree' on "A farmer should update various changes occurring rapidly in order to cope with various situations that may arise in the future or may have an effect on his career/livelihood." This was followed by "News/information knowledge and reading can make a farmer be up-to-date and can find a way for career development." (93.33%); "If a farmer is interested in knowledge finding, he should produce something for household using such as producing dishwashing liquid." (91.47%); "If a farmer has adequate knowledge for his career, he needs not to seek for more knowledge such as training and pursuing study." (67.47%); and "Farming is not a complicate activity, so a farmer needs not to have knowledge in various aspects. If only the government support him on capital and marketing, he can be successful in his career." (65.07%), respectively. (Table 16)

Moral

Most of the farmers (94.93%) choose to answer 'Agree' on "If all farmers practice Dhamma, join social activities, make merit and do not take advantage of others, everybody in their village will be happy and live in the village

harmoniously and peacefully." This was followed by "Having moral means honesty, tolerance, industry, and not be greedy." (92.00%); "If a farmer has no chance to be a leader, he should.

be a good follower, modest, and express his opinions based on correct reasons, data, and principles." (91.47%)' "Having good moral includes a farmer will not sell his agricultural yields if he finds that there is chemical contamination." (89.07%); and "A farmer should device plots into two parts: the plant plot using chemicals is for sales and the plant plot not using chemicals is for household consumption." (61.60%), respectively. (Table 16)

Based on the answering scores used for the evaluation of the level of knowledge in the concept of sufficiency economy philosophy, it was found that the farmers had knowledge and understanding about it for 78.16 percent. For it details, the farmers had knowledge in moral most (85.81%). This was followed by reasonableness (84.73%), knowledge (82.93%), immunity (81.96%), meaning and importance of sufficiency economy (81.28%), middle path (80.85%), and moderation (43.13%), respectively. (Table 17)

Table 16 No. and percentage of the knowledge in sufficiency economy of the farmers.

(n = 375)

Statements	Answer			
	Agree		Disagree	
	No.	(%)	No.	(%)
Meaning and importance of sufficiency economy				
1. The sufficiency economy refers to a moderate livelihood, middle path, adequacy for self, family, and community. Besides, it must be self-reliant, not be dependent on external factors.	361	(96.27)	14	(3.73)
2. The sufficiency economy consists of: concerning about assets and natural resources with the conditions on diligence, tolerance and savings	354	(94.40)	21	(5.60)
3. The sufficiency economy is a guideline for the ability to be self-reliant. This includes reduction of risks in agricultural careers by placing the importance on moderation, reasonableness, immunity, knowledge, tolerance, and unity.	354	(94.40)	21	(5.60)
4. The philosophy of sufficiency economy places the importance on the agricultural careers focusing on adequacy (moderation), self-reliance, and sustainability security.	354	(94.40)	21	(5.60)
5. A farmers is not able to do sufficiency economy farming if he has less than 15 rai of land.	101	(26.93)	274	(73.07)
Middle Path				
1. In case of a product has various prices to be chosen, a farmer should buy it in which its price does not make him has increased debts.	360	(96.00)	15	(4.00)

Table 16 No. and percentage of the knowledge in sufficiency economy of the farmers (Continued)

(n = 375)

Statements	Answer			
	Agree		Disagree	
	No.	(%)	No.	(%)
2. The middle path means doing anything which is not too little or too much and it makes us be happy and without disturbing to others.	354	(94.40)	21	(5.60)
3. The middle path in expenditure is that a farmer does not spend money beyond his financial status.	341	(90.93)	34	(9.07)
4. The middle path for agricultural careers can be achieved by does not grow only one kind of crops in order to reduce risks of diseases and insects. Besides, growing many kinds of crops can earn more supplementary incomes.	336	(89.60)	39	(10.40)
5. To follow the middle path concept, a farmer must keep himself away from others and does anything by himself.	125	(33.33)	250	(66.67)
Moderation				
1. A farmer should not invest a too big project; it should begin with a small one and can be expanded when it is successful.	348	(92.80)	27	(7.20)
2. A farmer should have all convenience facilities at home like others.	123	(32.80)	252	(67.20)
3. In order to make others not to look down a farmer as out-of-date, the farmer has to go shopping at big department stores or travel in various places by getting a loan from loan sources.	93	(24.80)	282	(75.20)

Table 16 No. and percentage of the knowledge in sufficiency economy of the farmers (Continued)

(n = 375)

Statements	Answer			
	Agree		Disagree	
	No.	(%)	No.	(%)
4. When holding a religious ceremony such as ordination and cremation ceremonies, it must be a big one.	83	(22.13)	292	(77.87)
Reasonableness				
1. Reasonableness refers to any careful action must be reasonable based on concerned factors and expected outcomes.	347	(92.53)	28	(7.47)
2. A farmer should do an agricultural career with good principles, information, knowledge, and intellect as a basis of good jobs.	346	(92.27)	29	(7.73)
3. A farmer should do activities with principles, not based on his emotion.	345	(92.00)	30	(8.00)
4. Although there are little yields, a farmer needs not to waste time for finding its causes. He just only adds some more fertilizer.	233	(62.13)	142	(37.87)
Immunity				
1. Saving is the construction of immunity so that we can spend money when havening a financial problem or failure in a career.	351	(93.60)	24	(6.40)
2. In daily life activities, it should have a systematic plan on energy saving and expenses on fuel, tap water, electricity, and telephone	350	(93.33)	25	(6.67)
3. In doing a career, it must have an investment plan, data investigation, and feasibility study before making a decision for the investment.	349	(93.07)	26	(6.93)

Table 16 No. and percentage of the knowledge in sufficiency economy of the farmers (Continued)

(n = 375)

Statements	Answer			
	Agree		Disagree	
	No.	(%)	No.	(%)
4. Having good immunity in the body means preparing readiness for an effect and various changes that may occur in the future.	348	(92.80)	27	(7.20)
5. A farmer should prepare a household account showing incomes, expenses, debts, and an annual budget plan in order to control expenses and prevent debts.	345	(92.00)	30	(8.00)
6. If any farmer has a fire extinguisher, first aid box, and important telephone numbers, this means that he is coward.	101	(26.93)	274	(73.07)
Knowledge wisdom				
1. A farmer should update various changes occurring rapidly in order to cope with various situations that may arise in the future or may have an effect on his career/livelihood.	365	(97.33)	10	(2.67)
2. News/information knowledge and reading can make a farmer be up-to-date and can find a way for career development.	350	(93.33)	25	(6.67)
3. If a farmer is interested in knowledge finding, he should produce something for household using such as producing dishwashing liquid	343	(91.47)	32	(8.53)
4. If a farmer has adequate knowledge for his career, he needs not to seek for more knowledge such as training and pursuing study.	253	(67.47)	122	(32.53)

Table 16 No. and percentage of the knowledge in sufficiency economy of the farmers (Continued)

(n = 375)

Statements	Answer			
	Agree		Disagree	
	No.	(%)	No.	(%)
5. Farming is not a complicate activity, so a farmer needs not to have knowledge in various aspects. If only the government support him on capital and marketing, he can be successful in his career.	244	(65.07)	131	(34.93)
Moral				
1. If all farmers practice Dhamma, join social activities, make merit and do not take advantage of others, everybody in their village will be happy and live in the village harmoniously and peacefully.	356	(94.93)	19	(5.07)
2. Having moral means honesty, tolerance, industry, and not be greedy.	345	(92.00)	30	(8.00)
3. If a farmer has no chance to be a leader, he should be a good follower, modest, and express his opinions based on correct reasons, data, and principles.	343	(91.47)	32	(8.53)
4. Having moral includes a farmer will not sell his agricultural yields if he finds that there is chemical contamination.	334	(89.07)	41	(10.93)
5. A farmer should divide the plant plots into 2 parts: the plant plot using chemicals is for sales and the plant plot not using chemicals is for household consumption.	231	(61.60)	144	(38.40)

Table 17 Score, mean, percentage of knowledge of the sufficiency economy philosophy

(n = 375)

knowledge, attitude, and farmer adoption of the sufficiency economy philosophy	Score of knowledge			$\bar{x}$	S.D.	Percentage
	Total score	Highest	Lowest			
1. Moral	5	5	0	4.29	0.89	85.81
2. Reasonableness	4	4	0	3.39	0.70	84.73
3. Knowledge wisdom	5	5	1	4.15	0.95	82.93
4. Immunity	6	6	1	4.92	0.77	81.96
5. Meaning and importance of sufficiency economy	5	5	2	4.06	0.64	81.28
6. Middle path	5	5	0	4.04	0.76	80.85
7. Moderation	4	4	0	1.73	1.10	43.13
Total	34	34	14	26.58	3.45	78.16

3.2) Attitude

Three aspects were analyzed for finding the level of opinions towards the concept of sufficiency economy: 1) consciousness of the sufficiency economy philosophy; 2) awareness of the sufficiency economy philosophy, and needs for the sufficiency economy philosophy. The levels of the farmers' opinion about the sufficiency economy philosophy were determined as shown below.

Legend:

Scale Limit		Descriptive Equivalents
1.00 - 1.49	=	Strongly disagree (SD)
1.50 - 2.49	=	Disagree (D)
2.50 - 3.49	=	Moderately agree (MD)
3.50 - 4.49	=	Agree (A)
4.50 - 5.00	=	Strongly agree (SA)

Opinion about the Sufficiency Economy Philosophy

As a whole, the farmers agreed to the opinion about the concept of sufficiency economy philosophy ($\bar{x}$ = 4.08). Based on its details, the following were found at a moderate level of an agreement: consciousness of the sufficiency economy philosophy ($\bar{x}$ = 4.13); awareness of the sufficiency economy philosophy ($\bar{x}$ = 4.08); and needs for the sufficiency economy philosophy ($\bar{x}$ = 4.03), respectively. (Table 18)

Consciousness of the Sufficiency Economy philosophy

It was found that the farmers agreed to the consciousness of the sufficiency economy philosophy at a moderate level ($\bar{x}$ = 4.13). Based on its details, the following were agreed by the farmers: One principle is to utilize resources for a highest benefit ($\bar{x}$ = 4.26); To practice the philosophy of sufficiency economy, it need to have diligence, consciousness, and tolerance ($\bar{x}$ = 4.23); The philosophy of sufficiency economy focuses on honesty; ($\bar{x}$ = 4.15); Adoption of the philosophy will make us have a better life ($\bar{x}$ = 4.09); The concept of the philosophy can be applicable

immediately and easily if you know the method ($\bar{x}$ = 4.07); and be self-reliant and not dependent on external factors. ($\bar{x}$ = 3.99), respectively. (Table 18)

Awareness of the Sufficiency Economy Philosophy

It was found that the farmers agreed to the awareness of the sufficiency economy ($\bar{x}$ = 4.08). Based on it details, the following (all items) were agreed by the farmers: To be self-reliant, local wisdoms and technology should be used appropriately ($\bar{x}$ = 4.11); Generating incomes by the reduction of production costs ($\bar{x}$ =4.09); It needs to have a careful planning to apply the philosophy of sufficiency economy ($\bar{x}$ = 4.08); Based on the current economy, were can deal with it if we help one another and with moderation ($\bar{x}$ = 4.07); and we need not to be rich but can be self-reliant ($\bar{x}$ = 4.02), respectively. (Table 18)

Needs for the Sufficiency Economy Philosophy

It was found that the farmers agreed to the need s for the sufficiency economy philosophy ($\bar{x}$ = 4.03). Based on its details, the following were much by the farmer: you want to integrate various activities on your farm land, e.g. plant cultivation and animal husbandry ($\bar{x}$ = 4.07); you want to reduce your expenses and find other activities by making use of your resources for supplementary income generating ($\bar{x}$ = 4.05); You want to apply the philosophy to daily life activities ($\bar{x}$ = 4.04); you want to apply the philosophy because it is an activity which you are your own boss ($\bar{x}$ = 4.00); and you want to have a moderate life and it needs not to be rich ($\bar{x}$ = 3.98), respectively. (Table 18)

Table 18 No. percentage, mean and levels of opinions toward the sufficiency economy philosophy as an information receiver (Continued)

(n = 375)

The sufficiency economy philosophy	Level of opinions					$\bar{x}$	S.D.	Description
	SA	A	M	D	SD			
1. Consciousness: The philosophy of sufficiency economy								
- The philosophy of sufficiency economy focuses on honesty.	101 (26.93)	241 (64.27)	25 (6.67)	6 (1.60)	2 (0.53)	4.15	0.65	A
- To practice the philosophy of sufficiency economy, it needs to have diligence, sense, and tolerance	131 (34.93)	206 (54.93)	32 (8.53)	6 (1.60)	0 (0.00)	4.23	0.67	A
- Be self-reliant and not dependent on external factors.	83 (22.13)	231 (61.60)	41 (10.93)	14 (3.73)	6 (1.60)	3.99	0.79	A
- This concept can be applicable immediately and easily if you know the method.	97 (25.87)	220 (58.67)	47 (12.53)	10 (2.67)	1 (0.27)	4.07	0.71	A
- Adoption of the philosophy will make us have a better life.	88 (23.47)	243 (64.80)	34 (9.07)	10 (2.67)	0 (0.00)	4.09	0.65	A
- One principle is to utilize resources for a highest benefit.	131 (34.93)	211 (56.27)	31 (8.27)	2 (0.53)	0 (0.00)	4.26	0.62	A
Total						**4.13**	**0.48**	**A**

Table 18 No. percentage, mean and levels of opinions about the sufficiency economy philosophy as an information receiver (Continued)

(n = 375)

The sufficiency economy philosophy	Level of opinions					$\bar{x}$	S.D.	Description
	SA	A	M	D	SD			
2. Realization: The philosophy of sufficiency economy								
- To be self-reliant, local wisdoms and technology should be used appropriately.	93 (24.80)	236 (62.93)	40 (10.67)	6 (1.60)	0 (0.00)	4.11	0.64	A
- It needs to have a careful planning to apply the philosophy of sufficiency economy.	94 (25.07)	225 (60.00)	51 (13.60)	3 (0.80)	2 (0.53)	4.08	0.68	A
- Based on the current economy, we can deal with it if we help one another and with moderation	92 (24.53)	225 (60.00)	51 (13.60)	7 (1.87)	0 (0.00)	4.07	0.67	A
- We need not to be rich but can be self-reliant	100 (26.67)	203 (54.13)	54 (14.40)	17 (4.53)	1 (0.27)	4.02	0.79	A
- Generating incomes by the reduction of production costs	97 (25.87)	231 (61.60)	32 (8.53)	14 (3.73)	1 (0.27)	4.09	0.71	A
- Having a household account	102 (27.20)	213 (56.80)	47 (12.53)	12 (3.20)	1 (0.27)	4.07	0.74	A

Table 18 No. percentage, mean and levels of opinions about the sufficiency economy philosophy as an information receiver (Continued)

(n = 375)

The sufficiency economy philosophy	Level of opinions					$\bar{x}$	S.D.	Description
	SA	A	M	D	SD			
Total						**4.08**	**0.51**	**A**
3. Needs : The philosophy of sufficiency economy								
- You want to apply the philosophy to daily life activities	90 (24.00)	220 (58.67)	55 (14.67)	10 (2.67)	0 (0.00)	4.04	0.70	A
- You want to have a moderate life and it needs not to be rich	93 (24.80)	211 (56.27)	44 (11.73)	25 (6.67)	2 (0.53)	3.98	0.83	A
- You want to apply the philosophy because it is an activity which you are your own boss	76 (20.27)	233 (62.13)	56 (14.93)	10 (2.67)	0 (0.00)	4.00	0.68	A
- You want to integrate various activities in your farm land, e.g. plant cultivation and animal husbandry or fisheries	95 (25.33)	222 (59.20)	49 (13.07)	8 (2.13)	1 (0.27)	4.07	0.70	A

Table 18 No. percentage, mean and levels of opinions about the sufficiency economy philosophy as an information receiver (Continued)

(n = 375)

The sufficiency economy philosophy	Level of opinions					$\bar{x}$	S.D.	Description
	SA	A	M	D	SD			
- You want to reduce expenses and find other activities by making use of your resources for supplementary income generating.	95 (25.33)	220 (58.67)	47 (12.53)	11 (2.93)	2 (0.53)	4.05	0.74	A
Total						**4.03**	**0.52**	**A**
Level of opinion about the sufficiency economy philosophy						**4.08**	**0.43**	**A**

*Legend:

Scale Limits		Descriptive Equivalents	Needs for the Sufficiency Economy Philosophy
1.00- 1.49	=	Strongly disagree (SD)	Least
1.50- 2.49	=	Disagree (D)	Less
2.50- 3.49	=	Moderately agree (M)	Moderate
3.50- 4.49	=	Agree (A)	Much
4.50- 5.00	=	Strongly agree (SA)	Most

3.3) The adoption

An analysis of the level of the adoption of the concept of sufficiency economy philosophy was done with 6 aspects as follows: 1) self – practice, 2) principles of self – reliance; 3) doing career in accordance with the concept of sufficiency economy; 4 basic factors of livelihood; 5) agricultural livelihood; and 6) adoption. The levels of the farmer adoption of the concept of the sufficiency economy were determined as shown below.

*Legend:

Scale Limits		Descriptive Equivalents
1.00- 1.49	=	Awareness
1.50- 2.49	=	Interest
2.50- 3.49	=	Evaluation
3.50- 4.49	=	Trial
4.50- 5.00	=	Adoption

Adoption of the Sufficiency Economy Philosophy

As a whole, there was an Trial level based on the 6 aspects as mentioned above ($\bar{x}$ = 4.0). Based on its details the following were found: the Trial level on self – practice ($\bar{x}$ = 3.63); the Trial level on principles of self-reliance ($\bar{x}$ = 3.64); the Trial level on adoption ($\bar{x}$ = 3.85); and the Decision level on doing careers in accordance with sufficiency economy basic factors livelihood, and agricultural livelihood ($\bar{x}$ = 2.70, 3.23, and 3.33, respectively) (Table 18)

Self-practice in accordance with the Sufficiency Economy Philosophy

As a whole, it was found that the farmers were at the Trial level ($\bar{x}$ = 3.63). Based on the details of self-practice in accordance with the sufficiency economy, the following were found at the action taking level: having consciousness, intellect and application of knowledge and understanding for the application of daily life activities ($\bar{x}$ = 3.78); doing careers with honesty ($\bar{x}$ = 3.76); Thrift – expenses reduction ($\bar{x}$ = 3.61); Using local wisdoms and land as the capital ($\bar{x}$ = 3.59); Using 3 adequacy livelihood, eating, and using ($\bar{x}$ = 3.59); Giving the priority of food producing and followed by trading ($\bar{x}$ = 3.55); and Focusing on food seeking rather than money ($\bar{x}$ = 3.52), respectively. (Table 19)

Principles of Self-reliance in accordance with the Sufficiency Economy Philosophy

As a whole, it was found that the farmers were at the Trial level ($\bar{x}$ = 3.64). Based on the details of the principles of self-reliance in accordance with the sufficiency economy philosophy, the following were found at the Trial level: (Table 19)

Spirit ($\bar{x}$ = 3.70) - Realize on common benefits ($\bar{x}$ = 3.71) and be self-reliant ($\bar{x}$ = 3.68)

Social life and community ($\bar{x}$ = 3.57) - construct networks ($\bar{x}$ = 3.57) and help one another ($\bar{x}$ = 3.57)

Natural resources and environment ($\bar{x}$ = 3.70) – Environmentally friendly farming ($\bar{x}$ = 3.70)

Technology using ($\bar{x}$ = 3.56) – use local technology ($\bar{x}$ = 3.56) and develop technology from our wisdoms ($\bar{x}$ = 3.55)

Economy ($\bar{x}$ = 3.68) – have savings, capital accumulation and be able to pay depths. ($\bar{x}$ = 3.69), have and increase income earned from the agricultural sector ($\bar{x}$ = 3.68) and reduce expenses ($\bar{x}$ = 3.68)

Doing careers in Accordance with the Sufficiency Economy Philosophy

As a whole, it was found that the farmers accepted the career doing in accordance with sufficiency economy philosophy careers doing in accordance with sufficiency economy philosophy at the Decision level ($\bar{x}$ = 270). Based on its details, it was found that the farmers were at the Trial, level on growing vegetable to reduce food expenses ($\bar{x}$ = 3.69) and using compost and fermented manure together with chemical fertilized ($\bar{x}$ = 3.53). Doing mixed farming ($\bar{x}$ = 3.43) and growing fruit trees, back yard garden and trees which its trunk and stems can be utilized ($\bar{x}$ = 2.79), and growing herbal plants for health promotion ($\bar{x}$ = 2.51) were found at a Decision level. The following were found at an Interest level: rearing native chickens and egg-laying hens ($\bar{x}$ = 2.42), culture fish in rice fields or ponds as a protein source and for supplementary incomes ($\bar{x}$ = 2.32), producing bio-extracted substance form vegetable fruit herbal plant refuse so that it can be used in the fields ($\bar{x}$ = 2.19), mushroom culture using rice straw and by-products ($\bar{x}$ = 2.19), and producing bio-gas from vegetable/fruit refuse so as to be a house hold energy source ($\bar{x}$ = 1.94), respectively (table 19)

Basic factors for Livelihood in Accordance with the Sufficiency Economy philosophy

As a whole, it was found that the farmers were at the Decision level ($\bar{x}$ = 3.23). Based on its details, having enough clothing but not be extravagant ($\bar{x}$ = 3.75) and producing food adequately for family members and the surplus can be sold ($\bar{x}$ = 3.58) were found at an Trial level. Growing herbal plants was found at a Decision

level. However, housing and housing for cattle or livestock's should be made from bamboo, coconut tree and the roof should be made from teak wood leaves, nipa leaves, or vetiver grass was found at an Interest level. ($\bar{x}$ = 2.46) (Table 19)

Agricultural Livelihood in Accordance with the Sufficiency Economy Philosophy

As a whole, it was found that the farmers had accepted basic factors for their livelihood in accordance with the sufficiency economy philosophy at the Decision stage ($\bar{x}$ = 3.33). Based on its details, it was found that the farmers had accepted the agricultural livelihood in accordance with the sufficiency economy at the Trial stage ($\bar{x}$ = 3.57) in terms of expenses reduction by growing vegetables as a hobby making a warm family. The following were found at the Decision stage:

- An increase of incomes by using household resources and utilization of spare time: ornamental plant producing ($\bar{x}$ = 3.33), animal husbandry and bean sprout/mushroom culture ($\bar{x}$ = 3.31), food preservation/processing and handicraft ($\bar{x}$ = 3.30), respectively.
- Opportunity expansion: developing self-potential, family and community preparing various careers with others ($\bar{x}$ = 3.25), children have an opportunity in education ($\bar{x}$ = 3.26), grouping for market finding, a capital source, and networks construction for sustainable careers ($\bar{x}$ =3.24).

Adoption of the Sufficiency Economy Philosophy

As a whole, it was found that the farmers had adopted the sufficiency economy philosophy at the Trial step ($\bar{x}$ = 3.85). Based on its details, it was found that the farmers had adopted the sufficiency economy at the Trial stage in all items as follows: (Table 19)

- Economic sufficiency ($\bar{x}$ = 3.79): being self-reliance ($\bar{x}$ = 3.82); reducing expenses and generating incomes ($\bar{x}$ = 3.81); careful planning ($\bar{x}$ = 3.79);

not risky but have an alternative ($\bar{x}$ = 3.78); and preparing a household account ($\bar{x}$ =3.77), respectively.

- Social sufficiency ($\bar{x}$ = 3.90): community unity ($\bar{x}$ = 3.91) and helping one another ($\bar{x}$ = 3.89).

- Spiritual sufficiency ($\bar{x}$ = 4.00)

- Expenditure reduction Growing vegetables such as chili could be a hobby making family members stay together ($\bar{x}$ = 3.57) .This was at the Decision stage ($\bar{x}$ = 2.50-3.49)

- An increase of incomes This could be done by using household resources and utilizing square time ($\bar{x}$ = 3.31) , i.e. flowering shoot and ornamental plant production ($\bar{x}$ = 3.33), animal husbandry/fisheries, bean sprout culture, mushroom culture ($\bar{x}$ = 3.31), and food preservation/processing, handicrafts ($\bar{x}$ = 3.30), respectively.

- Opportunity extension Developing self-potential as well as family and community by coordinating in occupation creation suited to existing resources ($\bar{x}$ = 3.25) ,i.e. children have high education ($\bar{x}$ = 3.26), forming a group for finding markets, capital sources, and networks for sustainable careers ($\bar{x}$ = 3.24), respectively.(Table 19)

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
1. Self-practice								
1. Three adequacy (livelihood, eating, using)	172 (45.87)	41 (10.93)	41 (10.93)	77 (20.53)	44 (11.73)	3.59	1.51	Trial
2. Thrift-expenses reduction	155 (41.33)	63 (16.80)	43 (11.47)	84 (22.40)	30 (8.00)	3.61	1.41	Trial
3. Doing careers with honesty	179 (47.73)	54 (14.40)	47 (12.53)	64 (17.07)	31 (8.27)	3.76	1.41	Trial
4. Focusing on food seeking rather than money	132 (35.20)	79 (21.07)	55 (14.67)	69 (18.40)	40 (10.67)	3.52	1.40	Trial
5. Giving the priority of food producing and followed by trading	146 (38.93)	69 (18.40)	47 (12.53)	71 (18.93)	42 (11.20)	3.55	1.44	Trial
6. Using local wisdoms and land as the capital	156 (41.60)	50 (13.33)	56 (14.93)	85 (22.67)	28 (7.47)	3.59	1.41	Trial
7. Using consciousness, intellect or knowledge in daily life activities	169 (45.07)	70 (18.67)	43 (11.47)	69 (18.40)	24 (6.40)	3.78	1.35	Trial

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
Total						**3.63**	**1.25**	**Trial**
2. Self-reliance Principles								
1. Sprit						**3.70**	**1.38**	**Trial**
- Be self-reliant	157	74	44	67	33	3.68	1.39	Trial
	(41.87)	(19.73)	(11.73)	(17.87)	(8.80)			
- Realize on common benefits	159	77	41	68	30	3.71	1.38	Trial
	(42.40)	(20.53)	(10.93)	(18.13)	(8.00)			
2. Social life and community						**3.57**	**1.36**	Trial
- Help one another	132	90	44	76	33	3.57	1.37	Trial
	(35.20)	(24.00)	(11.73)	(20.27)	(8.80)			
- Construct networks	132	92	45	74	32	3.58	1.36	Trial
	(35.20)	(24.53)	(12.00)	(19.73)	(8.53)			
3. **Natural Resources and Environment**						3.70	1.31	Trial
- Environmentally friendly farming	143	88	59	58	27	3.70	1.31	Trial

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
	(38.13)	(23.47)	(15.73)	(15.47)	(7.20)			
4. Technology Using						**3.56**	**1.35**	Trial
- Use local technology	132	81	53	83	26	3.56	1.35	Trial
	(35.20)	(21.60)	(14.13)	(22.13)	(6.93)			
- Develop technology form out	133	79	55	79	29	3.55	1.36	Trial
wisdoms	(35.47)	(21.07)	(14.67)	(21.07)	(7.73)			
5. Economy						**3.68**	**1.24**	**Trial**
- Have an increased income earned	137	88	61	72	17	3.68	1.27	Trial
from the agricultural sector	(36.53)	(23.47)	(16.27)	(19.20)	(4.53)			
- Reduce expenses	137	85	65	73	15	3.68	1.26	Trial
	(36.53)	(22.67)	(17.33)	(19.47)	(4.00)			
- Have savings, capital accumulation	137	83	72	67	16	3.69	1.25	Trial
and be able to pay debts	(36.53)	(22.13)	(19.20)	(17.87)	(4.27)			
Total						**3.64**	**1.14**	**Trial**

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
3. Doing Careers in Accordance with the Philosophy of Sufficiency Economy								
1. Do mixed farming	134 (35.73)	57 (15.20)	52 (13.87)	100 (26.67)	32 (8.53)	3.43	1.42	Evaluation
2. Grow vegetables to reduce food expenses	168 (44.80)	48 (12.80)	59 (15.73)	74 (19.73)	26 (6.93)	3.69	1.39	Trial
3. Use compost and fermented manure	141 (37.60)	60 (16.00)	57 (15.20)	89 (23.73)	28 (7.47)	3.53	1.39	Trial
4. Mushroom culture using rice straw and by products	19 (5.07)	22 (5.87)	63 (16.80)	178 (47.47)	93 (24.80)	2.19	1.04	Interest
5. Grow fruit trees, back yard garden, and trees which its trunk and stems can be utilized	59 (15.73)	64 (17.07)	65 (17.33)	115 (30.67)	72 (19.20)	2.79	1.36	Evaluation

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
6. Grow herbal plants for health promotion	35	56	62	135	87	2.51	1.26	Evaluation
	(9.33)	(14.93)	(16.53)	(36.00)	(23.20)			
7. Culture fish in rice fields of ponds as a protein source and for supplementary incomes	31	37	58	145	104	2.32	1.21	Interest
	(8.27)	(9.87)	(15.47)	(38.67)	(27.73)			
8. Rear native chickens and egg-laying hens	45	39	57	120	114	2.42	1.34	Interest
	(12.00)	(10.40)	(15.20)	(32.00)	(30.40)			
9. Produce bio-gas from vegetable/fruit refuse so as to be a household energy source	14	18	43	158	142	1.94	1.01	Interest
	(3.73)	(4.80)	(11.47)	(42.13)	(37.87)			
10. Produce bio-extracted substance from vegetable, fruit, herbal plant refuse that it can be used in the fields	26	35	50	138	126	2.19	1.20	Interest
	(6.93)	(9.33)	(13.33)	(36.80)	(33.60)			

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
Total						**2.70**	**0.71**	**Evaluation**
4. Basic factors for Livelihood								
1. Produce food adequately for family members and the surplus can be sold	134 (35.73)	86 (22.93)	49 (13.07)	76 (20.27)	30 (8.00)	3.58	1.36	Trial
- Exchange food with neighbors or community members								
2. Clothing	156 (41.60)	84 (22.40)	47 (12.53)	60 (16.00)	28 (7.47)	3.75	1.34	Trial
- Have enough clothing but not be extravagant								
3. Housing	66	35	54	69	151	2.46	1.52	Interest
- Housing and housing for cattle or livestock's should be made from bamboo, coconut tree, betel tree,								

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
and the roof should be made from teak wood leaves nipa leaves, or vitiver grass	(17.60)	(9.33)	(14.40)	(18.40)	(40.27)			
4. Medicine - Grow herbal plants such as ginger, turmeric, babbler's bill leaf, basil, sweet basil, lemon grass, kaffir lime, garlic, etc.	104 (27.73)	61 (16.27)	54 (14.40)	100 (26.67)	56 (14.93)	3.15	1.46	Evaluation
Total						**3.23**	**0.98**	**Evaluation**
5. Agricultural Livelihood								
1. Reduce expenses : grow vegetables as a hobby making a warm family - Grow vegetables in the residential area or a container	127 (33.87)	91 (24.27)	65 (17.33)	52 (13.87)	40 (10.67)	3.57	1.36	Trial

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
2. Increase an income by using household resources and utilize spare time						3.31	1.35	Evaluation
- Food preservation or processing and handicraft producing	102 (27.20)	82 (21.87)	58 (15.47)	94 (25.07)	39 (10.40)	3.30	1.37	Evaluation
- Ornamental plant producing	104 (27.73)	83 (22.13)	57 (15.20)	93 (24.80)	38 (10.13)	3.33	1.37	Evaluation
- Animal husbandry, bean sprout and mushroom culture, etc.	101 (26.93)	85 (22.67)	56 (14.93)	94 (25.07)	39 (10.40)	3.31	1.37	Evaluation

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
3. Opportunity expansion – develop self potential, family and community by preparing various careers with others.						3.25	1.40	Evaluation
- Children have an opportunity in education	107 (28.53)	71 (18.93)	58 (15.47)	90 (24.00)	49 (13.07)	3.26	1.43	Evaluation
- Grouping for market finding, a capital source, and networks construction of sustainable careers	101 (26.93)	72 (19.20)	63 (16.80)	95 (25.33)	44 (11.73)	3.24	1.39	Evaluation
Total						**3.33**	**1.20**	**Evaluation**
6. Adoption of the sufficiency economy philosophy								
1. Economic sufficiency						3.79	1.24	Trial
- Reduce expenses and generate incomes	153 (40.80)	93 (24.80)	49 (13.07)	65 (17.33)	15 (4.00)	3.81	1.25	Trial

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
- Careful planning	152	86	55	69	13	3.79	1.25	Trial
	(40.53)	(22.93)	(14.67)	(18.40)	(3.47)			
- Not risky but have an alternative	151	87	57	65	15	3.78	1.25	Trial
	(40.27)	(23.20)	(15.20)	(17.33)	(4.00)			
- Be self-reliant	152	97	48	63	15	3.82	1.24	Trial
	(40.53)	(25.87)	(12.80)	(16.80)	(4.00)			
- Prepare a house hold account	151	87	53	68	16	3.77	1.27	Trial
	(40.27)	(23.20)	(14.13)	(18.13)	(4.27)			
2. Social sufficiency						3.90	1.20	Trial
- Help one another	156	104	45	56	14	3.89	1.21	Trial
	(41.60)	(27.73)	(12.00)	(14.93)	(3.73)			

Table 19 No., percentage, and mean of the level of the sufficiency economy adoption. (Continued)

(n = 375)

The sufficiency economy philosophy	Level of the adoption					$\bar{x}$	S.D.	Description
	Adoption	Trial	Decision	Interest	Awareness			
- Community unity	160 (42.67)	105 (28.00)	41 (10.93)	55 (14.67)	14 (3.73)	3.91	1.21	Trial
3. Spiritual Sufficiency	180 (48.00)	86 (22.93)	54 (14.40)	39 (10.40)	16 (4.27)	4.00	1.19	Trial
Total						**3.85**	**1.10**	**Trial**
Total level of the adoption of sufficiency economy philosophy						**3.39**	**0.83**	**Evaluation**

*Legend:

Scale Limits		Descriptive Equivalents
1.00- 1.49	=	Awareness
1.50- 2.49	=	Interest
2.50- 3.49	=	Evaluation
3.50- 4.49	=	Trial
4.50- 5.00	=	Adoption

Part 4 To find factors effecting the adoption of the philosophy of sufficiency economy of the farmers

Results of an analysis of factors having a relationship with the adoption of the concept of sufficiency economy philosophy of the farmers

The multiple regression analysis was used in this study to find a relationship between dependent variable and independent variables. Also, the direction of a relationship among the variables was indicated. The following were the determination of the variables used for the relationship analysis:

Dependent variable (Y)

The level of the adoption of the philosophy of sufficiency economy to practice

Independent variables (X)

1. Personal characteristics
2. Components of the communication process
   - Sender
   - Message content
   - Communication channel
   - Receiver
3. Knowledge about the philosophy of sufficiency economy
4. Attitude toward the philosophy of sufficiency economy
5. Practice of the philosophy of sufficiency economy (Experience in farming in accordance with the philosophy of sufficiency economy)

Based on the investigation of the dependent and the independents variables, it was found that the group of farmers having 7.21 years on average of experience in farming in accordance with the philosophy of sufficiency economy had a moderate level of the perception of the sufficiency economy philosophy. The variables were sorted based on components of the communication process. That was, the level of the news or information perception through 5 variables as follows: academicians/concerned personnel ($\bar{x}$ = 2.66), neighbors ($\bar{x}$ = 3.12), community leaders ($\bar{x}$ = 3.31), relatives ($\bar{x}$ = 2.83), and traders ($\bar{x}$ = 2.06). The levels of news or information perception through the variable on message content ($\bar{x}$ = 3.34); communication channels: an individual or sender ($\bar{x}$ = 2.42), group ($\bar{x}$ = 2.51), and mass media ($\bar{x}$ = 2.72);

receivers: clever and confident ($\bar{x}$ = 2.64), wait and see ($\bar{x}$ = 2.90), and uncertainty ($\bar{x}$ = 2.85). The farmers had an average mean score of their knowledge about the philosophy of sufficiency economy for 25.67. Their attitude toward the philosophy was at an "agreement" level ($\bar{x}$ = 4.08). Details are shown in Table 20

Table 20 Mean and standard deviation of the variables used for an analysis

Variables	$\bar{x}$	S.D.
1. The level of the adoption of the philosophy of sufficiency economy to practice (level)	3.39	.830
2. Experience in farming in accordance with the philosophy of sufficiency economy (year)	7.21	8.073
3. Sender – academicians/concerned personnel (level)	2.66	1.049
4. Sender – neighbors (level)	3.12	.851
5. Sender – community leaders (level)	3.31	.825
6. Sender – relatives (level)	2.83	.894
7. Sender – traders (level)	2.06	1.068
8. Message content (level)	3.34	.681
9. Communication channel – an individual (level)	2.42	.912
10. Communication channel – group (level)	2.51	.790
11. Communication channel – mass media (level)	2.72	.707
12. Receiver – Innovator (level)	2.64	.995
13. Receiver – Early Adopter (level)	2.90	.925
14. Receiver – Early Majority (level)	2.85	.963
15. Knowledge about the philosophy of sufficiency economy (score)	25.64	3.411
16. Attitude toward the philosophy of sufficiency economy	4.08	.432

Regarding the investigation of a relationship between each pair of the independent variables, it was found that none pair have a relationship of more than 0.80 which would have a problem in a relationship among the independent variables (multicollinearity) going

against the hypothesis which directed the multiple regression analysis technique (Prasitratthasin, 2001). Details are shown in Table 21.

The relationship testing between the independent variable and the dependent variables could be separated into sub-equations as follows:

Equation 1. Factors having a relationship with levels of the adoption of the philosophy of sufficiency economy to practice of the farmers.

Where

a = Constant value

b1…b15 = Coefficient correlation value

Dependent variable Y = Levels of the adoption of the philosophy of sufficiency economy to practice (level)

Independent variable X_1 = Sender – academicians/concerned personnel (level)

X_2 = Sender – neighbors (level)

X_3 = Sender – Community leaders (level)

X_4 = Sender – relatives (level)

X_5 = Sender – trader (level)

X_6 = Message content (level)

X_7 = Communication channel – an individual (level)

X_8 = Communication channel – group (level)

X_9 = Communication channel – mass communication (level)

X_{10} = Receiver – clever and confidents (level)

X_{11} = Receiver – wait and see (level)

X_{12} = Receiver – uncertainty (level)

X_{13} = Knowledge about the philosophy of sufficiency economy (score)

X_{14} = Attitude about the philosophy of sufficiency economy (level)

X_{15} = Experience in farming in accordance with the philosophy of sufficiency economy (year)

Table 21 The coefficient correlation values between the independent and the dependent variables

	Y	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15
Y	1.000	.052	.113*	.084	-.076	-.308**	.198**	-.037	-.041	.150**	.034	.016	-.056	.057	.259**	.152**
X1		1.000	.269**	.137**	.261**	.215**	.204**	.256**	.358**	.286**	.236**	.185**	.189**	-.115*	.063	.024
X2			1.000	.439**	.501**	.254**	.357**	.248**	.212**	.309**	.252**	.300**	.211**	.004	.071	.103*
X3				1.000	.388**	.223**	.276**	.256**	.273**	.341**	.188**	.220**	.165**	.000	-.072	.052
X4					1.000	.507**	.253**	.266**	.239**	.302**	.244**	.244**	.239**	-.087	.111*	.046
X5						1.000	.206**	.329**	.320**	.238**	.319**	.234**	.241**	-.139**	.019	-.013
X6							1.000	.421**	.368**	.430**	.394**	.360**	.309**	.031	.174**	.149**
X7								1.000	.628**	.514**	.424**	.402**	.322**	.055	-.054	.005
X8									1.000	.592**	.457**	.420**	.350**	-.030	-.124*	.004
X9										1.000	.486**	.400**	.301**	.021	.011	.039
X10											1.000	.515**	.467**	.000	.083	.056
X11												1.000	.594**	-.111*	.078	-.051
X12													1.000	-.125*	.127*	.071
X13														1.000	-.049	.174**
X14															1.000	.096
X15																1.000

* A statistical significant level at 0.05 **A statistical significant level at 0.01

Based on the coefficient correlation analysis between the dependent variable: the adoption of the philosophy of sufficiency economy to practice and the independent variables: personal characteristics, components of the communication process, knowledge and attitude toward the philosophy by using Enter method, it was found that F value was equivalent to 9.316, Sig. 0.000 (Table 22). This meant that there was at least 1 independent variable having a relationship with dependent variable (linear). For the multiple coefficient of determination, it was found that R^2 was equivalent to 0.280. This meant that all of the independent variables could explain the variation of the dependent variable for 28.00 percent (The level of the adoption of the philosophy of the sufficiency economy to practice).

Six out of 15 independent variables had a statistically significant relationship with the dependent variable at 0.05 or below. This comprised the independent variables having a positive relationship with 4 variables: 1) the level of news or information perception; 2) the level of attitude toward the philosophy of sufficiency economy; 3) years of experience in farming in accordance with the philosophy of the sufficiency economy and 4) Communication channel – mass communication (level) There were 2 independent variables having a negative relationship with the dependent variable: 5) the level of news or information perception through traders; 6) the level of news or information through the uncertainty receiver type group. All variables could be written as the following equation:

$$Y = 0.922 + 0.043X_1 + 0.080X_2 + 0.092X_3 - 0.062X_4 - 0.279X_5 + 0.183X_6 - 0.046X_7$$
(1.760) (1.088) (1.440) (1.724) (-1.105) (-6.508**) (2.689**) (-0.805)

$$- 0.059X_8 + 0.217X_9 + 0.031X_{10} + 0.018X_{11} - 0.113X_{12} - 0.005X_{13} + 0.452X_{14}$$
(-0.839) (2.985**) (0.628) (0.318) (-2.238*) (-0.415) (4.985**)

$$+ 0.010X_{15}$$
(2.036*)

Where sig. t $\leq$ the significance level at 0.05

Table 22 An analysis of multiple regression of the level of the adoption of the philosophy of sufficiency economy to practice and personal characteristics/components of the communication process

Variables	Coefficient Correlation value	t-value	Sig.
Constant value	.922	1.760	.079
1. Sender – academicians/concerned personnel (level)	.043	1.088	.278
2. Sender – neighbors (level)	.080	1.440	.151
3. Sender – community leaders (level)	.092	1.724	.085
4. Sender – relatives (level)	-.062	-1.105	.270
5. Sender – traders (level)	-.279	-6.508	.000**
6. Message content (level)	.183	2.698	.007**
7. Communication channel – an individual (level)	-.046	-.805	.421
8. Communication channel – group (level)	-.059	-.839	.402
9. Communication channel – mass media (level)	.217	2.985	.003**
10. Receiver – clever and confident (level)	.031	.628	.531
11. Receiver – wait and see (level)	.018	.318	.751
12. Receiver – uncertainty (level)	-.113	-2.238	.026*
13. Knowledge about the philosophy of sufficiency economy (score)	-.005	-.415	.678
14. Attitude toward the philosophy of sufficiency economy	.452	4.895	.000**
15. Experience in farming in accordance with the philosophy of sufficiency economy (year)	.010	2.036	0.43*
R^2 = 0.3724 SEE = 0.665 F = 19.581 Sig. F = 0.000			

Remark * A statistical significant level at 0.05

Hypothesis testing

Hypothesis

H_o : There is not any variable having a statistically significant relationship or explains the variation of the level of the adoption of the philosophy sufficiency economy to practice of the farmers.

Based on the afore equation, there were 6 variables having a statistically significant relationship with the dependent variables at 0.05 or below (Table 22). Thus, the hypothesis could be proved that there were factors having a relationship with the adoption f the philosophy of sufficiency economy to practice of the farmers or it rejected H_o

Direction and the level of a relationship could be explained as follows:

1. When there was one level of the change in the perception of the concept of the sufficiency economy philosophy through the traders, it would cause the change in the level of the adoption in the opposite direction at 0.279

2. When there was one level of the change in the perception of the concept of the sufficiency economy philosophy on content, it would cause the change in the level of the adoption of the philosophy in the same direction at 0.183

3. When there was one level of the change in the perception of the concept of the sufficiency economy philosophy through the mass communication, it would cause the change in the level of the adoption of the philosophy in the same direction at 0.217

4. When there was one level of the change in the perception of the concept of the sufficiency economy philosophy through the uncertainty type group, it would cause the change in the level of the adoption in the opposite direction at 0.113

5. When there was one level of the change in the attitude toward the concept of the sufficiency economy philosophy through, it would make the change in the same direction of the level of the adoption of the philosophy to practice at 0.452

6. When there was the change for 1 year of experience in farming in accordance with the philosophy of sufficiency economy, it would cause the change in the level of the adoption of the philosophy in the same direction at 0.010

Part 5 Synthesize guidelines for the preparation of an appropriate communication process effecting the adoption of sufficiency economy of the farmers

A construction of path diagram of various factors

When finding an influence among various factors, it needs to act hypotheses based on an analysis of a relationship between factors, theories, and experience of the researcher. The relationships among variables must be in the same direction. The following are hypotheses of this study:

H1a : Level of the adoption of the sufficiency economy concept based on the component the communication process on message sender (S) having a positive effect on the practice of the philosophy of sufficiency economy (PR).

H1b : Level of the adoption of the sufficiency economy concept based on the component of the communication process on communication process on message (M) having a positive effect on the practice of the philosophy of sufficiency economy (PR).

H1c : Level of the adoption of the sufficiency economy concept based on the component of the communication process on communication channel (C) having a positive effect on the practice of the philosophy of sufficiency economy (PR).

H1d : Level of the adoption of the sufficiency economy concept based on the component of the communication process on message receiver (R) having a positive effect on the practice of the philosophy of sufficiency economy (PR).

H2a : The level of sufficiency economy concept perception based on a component of the communication process on the sender (S) having a positive effective on the knowledge about the philosophy of sufficiency economy (KN).

H2b : The level of sufficiency economy concept perception based on a component of the communication process on the message (M) having a positive effect on the knowledge about the philosophy of sufficiency economy (KN).

H2c : The level of sufficiency economy concept perception based on a component of the communication process on the communication channel (C) having a positive effect on the knowledge about the philosophy of sufficiency economy (KN).

H2d : The level of sufficiency economy concept perception based on a component of the communication process on the receiver (R) having a positive effect on the knowledge about the philosophy of sufficiency economy (KN).

H2f : Practice in accordance with the philosophy of sufficiency economy (PR) has a positive effect on the knowledge about the philosophy of sufficiency economy (KN).

H3a : The level of sufficiency economy concept perception based on a component of the communication process on the sender (S) having a positive effect on the attitude about the philosophy of sufficiency economy (AT).

H3b : The level of sufficiency economy concept perception based on a component of the communication process on the message (M) having a positive effect on the attitude about the philosophy of sufficiency economy (AT).

H3c : The level of sufficiency economy concept perception based on a component of the communication process on the communication channel (C) having a positive effect on the attitude about the philosophy of sufficiency economy (AT).

H3d : The level of sufficiency economy concept perception based on a component of the communication process on the receiver (R) having a positive effect on the attitude about the philosophy of sufficiency economy (AT).

H3e : Practice in accordance with the philosophy of sufficiency economy (PR) has a positive effect on opinions (attitudes) about the philosophy of sufficiency economy (AT).

H4a : The level of sufficiency economy concept perception based on a component of the communication process on the sender (S) having a positive effect on the adoption about the philosophy of sufficiency economy (AD).

H4b : The level of sufficiency economy concept perception based on a component of the communication process on the message (M) having a positive effect on the adoption about the philosophy of sufficiency economy (AD).

H4c : The level of sufficiency economy concept perception based on a component of the communication process on the channel (C) having a positive effect on the adoption about the philosophy of sufficiency economy (AD).

H4d : The level of sufficiency economy concept perception based on a component of the communication process on the receiver (R) having a positive effect on the adoption about the philosophy of sufficiency economy (AD).

H4e : Practice in accordance with the philosophy of sufficiency economy (PR) has a positive effect on the adoption of the philosophy of sufficiency economy

H4f : Knowledge about the philosophy of the sufficiency economy (K) had a positive effect on the adoption of the philosophy of sufficiency economy (AD).

H4g : An adoption about the philosophy of the sufficiency economy (A) had a positive effect on the adoption of the philosophy of sufficiency economy (AD).

Based on the hypotheses of this study, a path way model of all factors can be illustrated as shown below

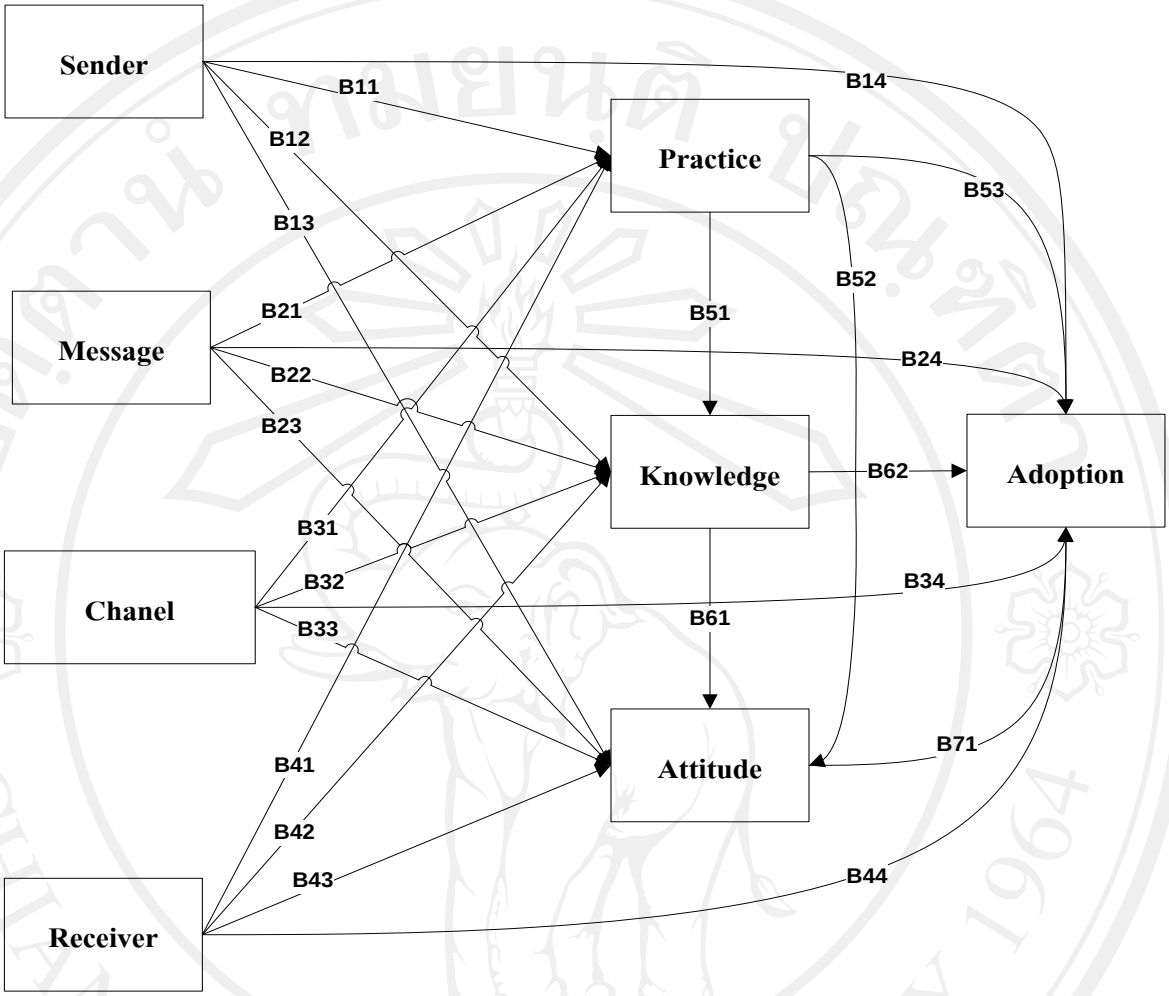

Figure 6 A path way model on the adoption of the concept of sufficiency economy

Based on Figure 6, there are 7 factors sorted into cause variables and result variables

Cause variables (external) are components of the communication process (SMCR)

- Sender
- Massage
- Channel
- Receiver

Internal variables include:

- Practice
- Knowledge
- Attitude

Result variable: the level of the adoption of the philosophy of sufficiency economy (AD=Adoption).

This can be used to formulate the structural equation for finding path coefficient as follows:

$$PR = \beta_{11}S + \beta_{21}M + \beta_{31}C + \beta_{41}R \quad (1)$$

$$KN = \beta_{11}S + \beta_{21}M + \beta_{31}C + \beta_{41}R + \beta_{51}PR \quad (2)$$

$$AT = \beta_{12}S + \beta_{22}M + \beta_{32}C + \beta_{41}R + \beta_{51}PR + \beta_{61}KN \quad (3)$$

$$AD = \beta_{11}S + \beta_{21}M + \beta_{31}C + \beta_{41}R + \beta_{52}PR + \beta_{62}KN + \beta_{71}AT \quad (4)$$

1) Correlation among various variables

Finding the correlation value among variables to analyze the relationships among the variables whether it is appropriate cause variables and result variables or not.

Table 23 Mean, standard deviation, and co-efficient correlation among the variables in the model

Variables	$\bar{X}$	S.D.	S	M	C	R	PR	KN	AT	AD
S (sc8)	2.80	0.63	1.000	0.379**	0.490**	0.448**	0.058	-0.109*	0.059	-0.056
M (sc7)	3.34	0.68		1.000	0.460**	0.438**	0.149**	0.038	0.173**	0.199**
C (sc6)	2.55	0.68			1.000	0.567**	0.015	-0.003	-0.083	0.009
R (sc5)	2.79	0.78				1.000	0.049	-0.089	0.110*	-0.050
PR (sc4)	7.21	8.03					1.000	0.176**	0.092	0.151**
KN (sc3)	78.16	10.16						1.000	-0.023	0.068
AT (sc2)	4.08	0.43							1.000	0.259**
AD (sc1)	3.39	0.83								1.000

Remarks ** Significance level at 0.01

* Significance level at 0.05

Based on Table 22, the following were found:

1) Level of the adoption of the sufficiency economy concept based on the component of the communication process on content (message: M) had a significant relationship in the same direction (a positive effect) with the practice in accordance with philosophy of sufficiency economy (PR) at 0.01

2) The level of the sufficiency economy concept perception based on a component of the communication process on the sender (S) had an opposite

direction of the relationship (negative effect) with the knowledge about the philosophy of sufficiency economy (KN) with the significance level at 0.01

3) Practice in accordance with the philosophy of sufficiency economy (PR) had a significant relationship in the same direction (a positive effect) with knowledge about the philosophy of sufficiency economy at 0.05

4) The level of the sufficiency economy concept perception based on a component of the communication process on the message (M) had the same direction of a relationship (positive effect) with the attitude about the philosophy of sufficiency economy (AT) with the significance level at 0.01

5) The level of the sufficiency economy concept perception based on a component of the communication process on the receiver (R) had the same direction of a relationship with the attitude about the philosophy of sufficiency economy (AT) with the significance level at 0.05

6) The level of the sufficiency economy concept perception based on a component of the communication process on the message (M) had the same direction (positive effect) with the adoption of the philosophy of sufficiency economy (AD) with the significance level at 0.01

7) Practice in accordance with the philosophy of sufficiency economy (PR) had a significant relationship in the same direction (a positive effect) with knowledge about the philosophy of sufficiency economy (AD) at 0.05

8) The attitude about the philosophy of sufficiency economy (A) had the same direction of a relationship (positive effect) with the adoption f the philosophy of sufficiency economy (AD) with the significance level at 0.01

2) Hypotheses testing and path way of various variables

Multiple Regression and stepwise were used for the computation for finding the standard co-efficient regression among various variables. Before the analyses were conducted, relationships among the variables had been tested to avoid the problem of multicolinearity by using variance inflation factor (VIF). Results are shown in Table 23.

Table 24 Results of variable relationships testing in the model by using the variance inflation factor (VIF)

Result variable	Cause variable	VIF
PR - Knowledge	S - Sender	1.427
	M - Massage	1.379
	C - Channel	1.734
	R - Receiver	1.629
KN - Knowledge	S - Sender	1.428

Result variable	Cause variable	VIF
	M - Massage	1.409
	C - Channel	1.742
	R - Receiver	1.629
	PR – Practice	1.027
AT – Attitude	S – Sender	1.448
	M - Massage	1.415
	C - Channel	1.752
	R - Receiver	1.646
	PR – Practice	1.061
	KN - Knowledge	1.064
AD - Adoption	S - Sender	1.451
	M - Massage	1.465
	C - Channel	1.847
	R - Receiver	1.673
	PR – Practice	1.065
	KN - Knowledge	1.065
	AT - Attitude	1.095

Finding showed that the VIF values of all independent variables in less than 10. This implied that there was no multicollinearity problem. This could further analyze multiple regressions. Results of the hypotheses testing are presented in Table 23

Table 25 Results of the hypotheses testing of the model as a whole.

** Significance level at 0.01 * Significance level at 0.05

Result variable	Cause variable	β	t-value	Results
H1a	S -----> PR	0.384	0.489	Reject
H1b	M -----> PR	2.049**	2.869	Accept
H1c	C -----> PR	-0.983	-1.235	Reject
H1d	R -----> PR	0.076	0.111	Reject
H2a	S -----> KN	-2.256*	-2.319	Accept

Table 25 Results of the hypotheses testing of the model as a whole.

Result variable	Cause variable	β	t-value	Results
H2b	M -----> KN	1.091	1.221	Reject
H2c	C -----> KN	1.468	1.486	Reject
H2d	R -----> KN	-1.619	-1.918	Reject
H2e	PR -----> KN	0.224**	3.478	Accept
H3a	S -----> AT	0.031	0.768	Reject
H3b	M -----> AT	0.135**	3.617	Accept
H3c	C -----> AT	-0.184**	-4.458	Accept
H3d	R -----> AT	0.087*	2.451	Accept
H3e	PR -----> AT	0.003	1.126	Reject
H3f	KN -----> AT	-0.001	-0.451	Reject
H4a	S -----> AD	-0.162*	-2.119	Accept
H4b	M -----> AD	0.272**	3.817	Accept
H4c	C -----> AD	0.097	1.227	Reject
H4d	R -----> AD	-0.180**	-2.702	Accept
H4e	PR -----> AD	0.011*	2.143	Accept
H4f	KN -----> AD	0.001	0.352	Reject
H4g	AT -----> AD	0.470**	4.808	Accept

Based on Table 4, results of the hypotheses testing can be concluded as follows:

The H1a hypothesis was rejected: The level of the adoption of the sufficiency economy concept based on the component of the communication process an message sender (S) did not have an effect on practice of the philosophy of sufficiency economy (PR).

The H1b hypothesis was accepted: The level of the adoption of the sufficiency economy concept based on the component of the communication process on content (message: M) had a positive effect on practice of the philosophy of sufficiency economy (PR).

The H1c hypothesis was rejected: The level of the adoption of the sufficiency economy concept based on the component of the communication process

on content (message: M) had positive effect on proactive of the philosophy of sufficiency.

The H1d hypothesis was rejected: The level of the adoption of the sufficiency economy concept based on the component of the communication process on message receiver (R) did not have an effect on practice of the philosophy of sufficiency economy (PR).

The H2a hypothesis was accepted; that was, the level of the sufficiency economy concept perception based on a component of the communication process on the sender (S) had a negative effect on knowledge about 0.05

The H2b hypothesis was rejected; that was, the level of the Sufficiency economy concept perception based on a component of the communication process on the message (M) had no positive effect on knowledge about the philosophy of sufficiency economy (KN).

The H2c hypothesis was rejected; that was, the level of the sufficiency economy concept perception based on the receiver (R) had no positive effect on knowledge about the philosophy of sufficiency economy (K).

The H2e hypothesis was accepted: The level of the adoption of the sufficiency economy concept had a positive effect on the knowledge about the philosophy of sufficiency economy (KN) with a significance level t 0.01

The H3a hypothesis was rejected; that was, the level of the sufficiency economy concept perception based on the sender (S) had no positive effect on the attitude about the philosophy of sufficiency economy (A).

The H3b hypothesis was accepted; that was, the level of the sufficiency economy concept perception based on the message (H) had a positive effect on the attitude about the philosophy of sufficiency economy (A) with the significance level at 0.01

The H3c hypothesis was accepted; that was, the level of the sufficiency economy concept perception base on the communication channel (C) had a negative effect on the attitude about the philosophy of efficiency economy (A) with the significance level at 0.01

The H3d hypothesis was accepted; that was, the level of the sufficiency economy concept perception based on the receiver (R) and a positive effect on the attitude about the philosophy of sufficiency economy (A) with the significance level at 0.05

The H3e hypothesis was rejected: The level of the adoption of the sufficiency economy concept (PR) did not have an effect on the opinions (attitudes) about the philosophy of sufficiency economy (AT)

The H3f hypothesis was rejected; that was, the knowledge about the philosophy of sufficiency economy (KN) had no positive effect on the attitude about the philosophy of sufficiency economy (AT)

The H4a hypothesis was accepted; that was, the level of sufficiency economy concept perception based on the sender (S) had a negative effect on the adoption of the philosophy of sufficiency economy (AD) with the significance level at 0.01

The H4b hypothesis was accepted; that was, the level of the sufficiency economy concept perception based on the message (M) had a positive effect on the adoption of the philosophy of sufficiency economy (AD) with the significance level at 0.01

The H4c hypothesis was rejected; that was, the level of the sufficiency economy concept perception based on the communication channel had no positive effect on the adoption of the philosophy of sufficiency economy (AD)

The H4d hypothesis was accepted; that was, the level of the sufficiency economy concept perception based on the receiver (R) had a negative effect on the adoption of the philosophy of sufficiency economy (AD) with the significance level at 0.01

The H4e hypothesis was accepted: The level of the practice in accordance with the sufficiency economy concept (PR) had a positive effect on the adoption of the philosophy of sufficiency economy (AD) at a significance level at 0.01

The H4f hypothesis was rejected; that was, knowledge about the sufficiency economy concept perception (K) and no positive effect on the adoption of the philosophy of sufficiency economy (AD)

The H4g hypothesis was accepted; that was, the attitude on the philosophy of sufficiency economy (A) had a positive effect on the adoption of the philosophy of sufficiency economy (AD) with the significance level at 0.01

The obtained coefficient regression value was the path coefficient of the form determined as the structural equation1, 2, and 3. This could be

Rewritten as follows:

$$PR = 0.384S + 2.049^{**}M - 0.983C + 0.076R \quad (5)$$

$$(R = 0.163,\ R^2 = 0.027,\ F = 2.525,\ Sig.F = 0.041$$

$$KN = -2.256^{*}S + 1.091M + 1.468C - 1.619R + 0.224^{**}PR \quad (6)$$

$$(R = 0.245,\ R^2 = 0.060,\ F = 4.717,\ Sig.F = 0.000$$

$$AT = 0.031S + 0.135^{**}M - 0.184^{**}C + 0.087^{*}R + 0.003PR - 0.001KN \quad (7)$$

$$(R = 0.295,\ R^2 = 0.087,\ F = 5.853,\ Sig.F = 0.000$$

$$AD = -0.162^{*}S + 0.272^{**}M + 0.097C - 0.180^{**}R + 0.011^{*}PR + 0.001KN + 0.470^{**}AT \quad (8)$$

$$(R = 0.375,\ R^2 = 0.141,\ F = 8.606,\ Sig.F = 0.000$$

Based on thee hypotheses in this study, the path way model of all factors could be illustrated as shown below.

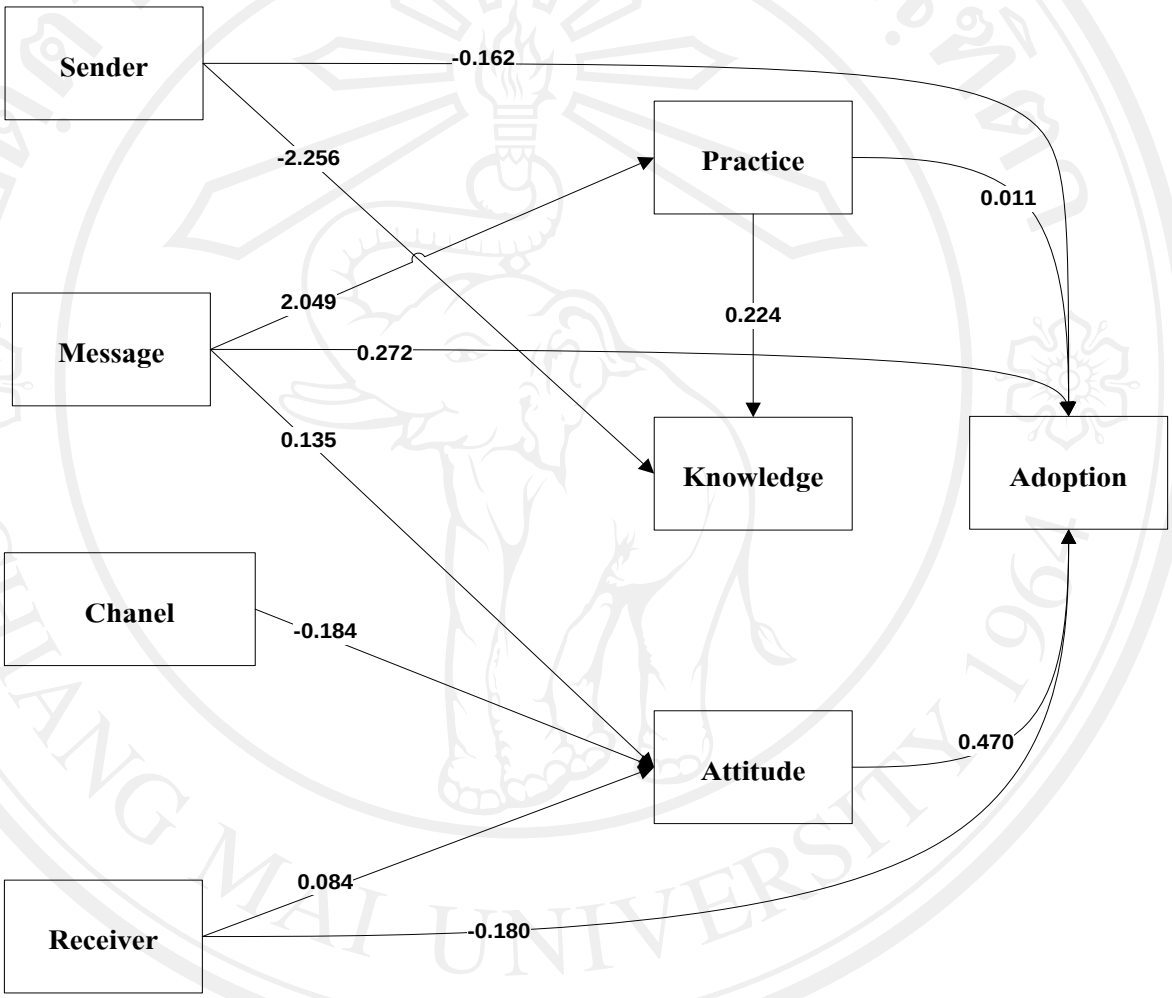

Figure 7 A model of path way on the adoption of the sufficiency economy concept

The conformity testing of the relationship model based on the hypotheses and the Empirical data comprised the indication of a single vale possibility of the identification model and the validation of the model as follow:

1) Testing the identification by using the LISREL program. This was because results of the analysis would give a number of desired parameters to needed for an estimation of the value and observable variables. The following were conditions:

1.1) Necessary condition is a number of parameters having an unknown value which must be less than or equivalent to a member number in the

variance matrix/co-variance of the sample group (Variance-Covariance Matrix). It could be said that the model indicated the value properly when $t < \frac{1}{2}$ (NI) (NI+1) where the needed parameters had estimated 28 values (t=28) and 7 observable variables (NI = 7) When substitute in the equation, it was found that this was consistent with the rule, implying that the model could indicate properly.

1.2) Sufficient condition One-way relationship rule (recursive rule) was used. In this case, parameters in the matrix consistency with the sufficient condition. It could be concluded that the model in this study could estimate the parameter value.

2) Validation of the model It was the evaluation of the correctness of the model or it examined the harmony between the fact and the model. This was the examining of the validation of the model.

Based on the examining of the validation of the model, as a whole, it was found that the model had consistency with data. When considered the value of AGFI < 0.94, however, it was found that the model had no consistency with the data. For RFI < 0.90, it meant that the model (based on the theory) had no consistency with the fact. This meant that the model still had no consistency with the Empirical data Thus, the model needed to be improved to be appropriate with the data (Table 26).

Table 26 The consistency statistical values of the model of relationships in accordance with the hypotheses and the Empirical data of the model based on the hypotheses

Statistics Used for measuring the conformity	**Criterion**	**Obtained value**	**Description**
RMSEA	(RMSEA < 0.05)	0.062	Inconsistent
GFI	GFI > 0.90	0.997	Pass
AGFI	AGFI > 0.90	0.942	Pass
RMR	RMR near 0	0.017	Pass
NFI	NFI >0.90	0.992	Pass
IFI	IFI >0.90	0.995	Pass
RFI	RFI >0.90	0.885	Inconsistent

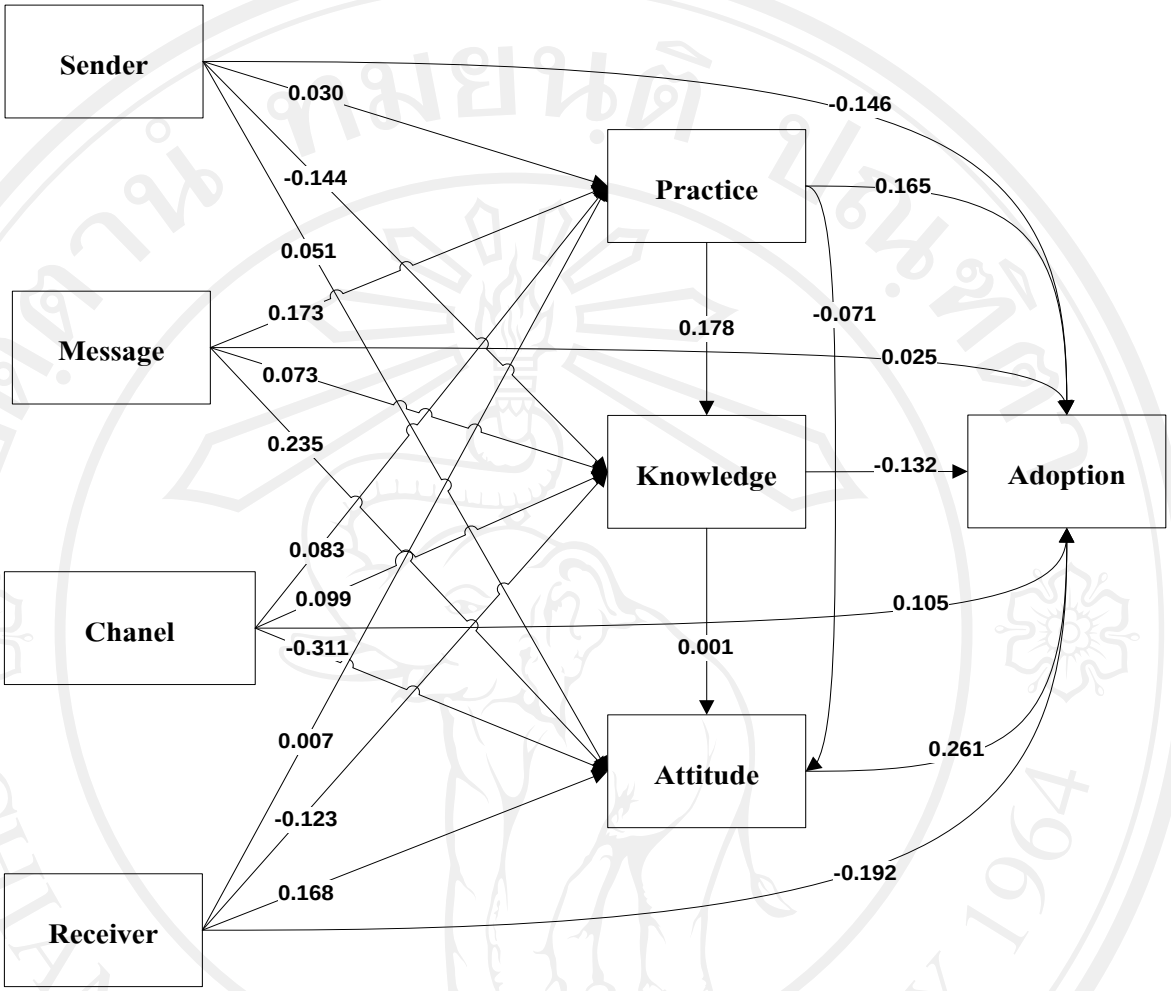

Figure 8 The path way model on a completed adoption of the philosophy of the sufficiency economy

Trimming model

When it was found that the relationship model based on the hypotheses is not consistent with the Empirical data, the model must be trimming to be consistent with the Empirical data Unnecessary connecting lines were deleted until the model was consistent with the Empirical data based on the statistical significance and the substantive significance.

Based on the significance, t-value must be considered in which the connection line had the statistical value at more than 1.96. This is considered to be a statistical significance level at 0.05 or below. In the case that it is lower than 1.96, it was considered to have no statistical significance and the connection lines should be deleted. For the substantive significance, it must be based on the coefficient value of the path way. This is, the connecting lines having the standard coefficient value which is more than 0.08, it is considered as substantive significance. (Table 27)

Table 27 The standard coefficient value and the statistical value of external cause variables and internal cause variables for the completed model based on the hypotheses

Cause variables	β	A guideline	t-value	A guideline
S -----> PR	0.030	delete	0.496	delete
M -----> PR	0.173	maintain	2.893	maintain
C -----> PR	-0.083	maintain	-1.242	delete
R -----> PR	0.007	delete	0.108	delete
S -----> KN	-0.141	maintain	-2.353	maintain
M -----> KN	0.073	delete	1.229	delete
C -----> KN	0.099	maintain	1.507	delete
R -----> KN	-0.123	maintain	-1.928	delete
PR -----> KN	0.178	maintain	3.509	maintain
S -----> AT	0.051	delete	0.869	delete
M -----> AT	0.235	maintain	4.012	maintain
C -----> AT	-0.311	maintain	-4.786	maintain
R -----> AT	0.168	maintain	2.668	maintain
PR -----> AT	-0.071	delete	-1.393	delete
KN -----> AT	0.000	delete	0.003	delete
S -----> AD	-0.146	maintain	-2.573	maintain
M -----> AD	0.225	maintain	3.939	maintain
C -----> AD	0.105	maintain	1.634	delete
R -----> AD	-0.192	maintain	-3.153	maintain
PR -----> AD	0.139	maintain	3.382	maintain
KN -----> AD	0.012	delete	0.253	delete

Cause variables	β	A guideline	t-value	A guideline
AT -----> AD	0.261	maintain	5.226	maintain

Goodness of fit measures of the model

After trimming the model structure, the goodness of fit measure of the improved model were evaluated. This aimed to examine the appropriateness of the model. The statistical values used for the evaluation were the following:

The RMSEA statistical index = 0.049 which was less than 0.05, implying that, as a whole, the structural model conformed to the population.

The GFI statistical values (0.991) and the AGFI statistical value (0.966). It was found that the model could be applicable to the data because it could well explain the variance and co-variance.

The RMR statistical value = 0.022 (<0.05). It could be explained that the model could be applicable to the data. This was due to the difference of the values of the variance matrix and the co-variance of the sample/the variance matrix and the co-variance which were the significance of the model.

The NFI statistical value = 0.981 which was more than 0.90. It could be explained that the structural model could well fit to the data. Considering it with the IFI statistical value (0.993), and the RFI statistical value (0.946) which were more than 0.90, it could be explained that the co-variance value obtained from the estimation of the parameter value the structural model could produce the co-variance value of the sample. (Table 28)

Table 28 The consistence statistical value of the relationship model based on the hypotheses and the Evidence of the improved model based on the hypotheses

The statistics used for measuring the consistency	Criterion	Obtained value	Result
RMSEA	RMSEA < 0.05	0.031	Consistent
GFI	GFI > 0.90	0.992	Consistent
AGFI	AGFI > 0.90	0.973	Consistent
RMR	RMR near 0	0.022	Consistent
NFI	NFI >0.90	0.981	Consistent

Table 28 The consistence statistical value of the relationship model based on the hypotheses and the Evidence of the improved model based on the hypotheses

The statistics used for measuring the consistency	Criterion	Obtained value	Result
IFI	IFI >0.90	0.993	Consistent
RFI	RFI >0.90	0.946	Consistent

Results of the computing by using the LISREL program for the improvement of the path way model are shown in Table 29. It was found that the standard coefficient value was more than 0.08 and the t-value was more than 1.96. The coefficient value of the improved standard model had a statistical significance and a substantive significance. (Table 29)

Tables 29 The standard coefficient value and the statistical value of the external cause variables and the internal cause variables for the improved model based on the hypotheses. (Continued)

Variable cause	β	A guideline	t-value	A guideline
S -----> PR	--		--	
M -----> PR	0.149	maintain	2.922	maintain
C -----> PR	--		--	
R -----> PR	--		--	
S -----> KN	-0.130	maintain	-2.169	maintain
M -----> KN	--		--	
C -----> KN	0.119	maintain	1.847	maintain
R -----> KN	-0.107	maintain	-1.712	maintain
PR -----> KN	0.187	maintain	3.721	maintain
S -----> AT	--		--	
M -----> AT	0.230	maintain	4.010	maintain

Tables 29 The standard coefficient value and the statistical value of the external cause variables and the internal cause variables for the improved model based on the hypotheses. (Continued)

Variable cause	β	A guideline	t-value	A guideline
C -----> AT	-0.291	maintain	-4.651	maintain
R -----> AT	0.178	maintain	2.887	maintain
PR -----> AT	--		--	
KN -----> AT	--		--	
S -----> AD	-0.105	maintain	-1.931	maintain
M -----> AD	0.214	maintain	3.943	maintain
C -----> AD	--		--	
R -----> AD	-0.179	maintain	-3.344	maintain
PR -----> AD	0.135	maintain	2.783	maintain
KN -----> AD	--		--	
AT -----> AD	0.246	maintain	5.048	maintain

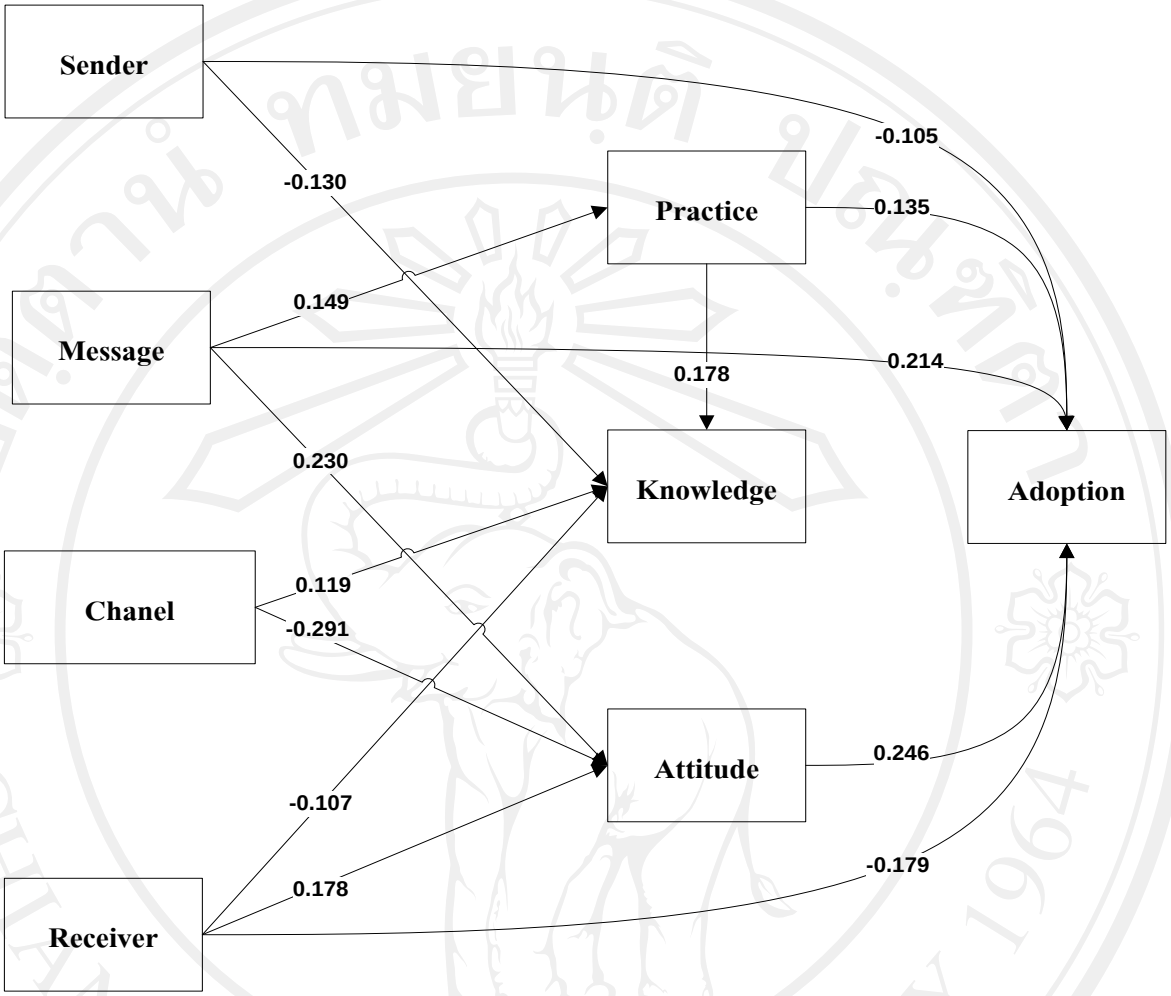

Figure 9 The path way model on the adoption of the philosophy of sufficiency economy and improvement

Part 6 The Quality Information about the Sufficiency Economy Philosophy of the Farmers

A study on p art 2 involved a qualitative data analysis in which data were obtained from an in-depth interview and focus group discussion (7 groups, 40 participants). The following issues were discussed:

1. Media having an effect on the adoption of the philosophy of sufficiency economy.
2. Application of the concept the sufficiency economy philosophy to daily life activities.
3. Principles of self-reliance and hot to apply it
4. Concept of the sufficiency economy philosophy and basic factors in agricultural livelihood, i.e. relationships of expenses reduction an increase of incomes, and opportunity expansion.
5. Application of the concept of the sufficiency economy philosophy must have the adequacy in various aspects, e.g. economic, social, and spiritual aspects. Opinions and practice.

Results of the study could be concluded as follows:

Issue 1. Media having an effect on the adoption of the philosophy of sufficiency economy

All participants agreed that television most played roles in transmission, perception and brought the sufficiency economy philosophy into practice. This was followed by the following media: radio, public relations poster, newspaper, and journal. However, internet was found to have least roles since it was new technology. Besides, most farmers did not have computer but they had television.

"Mostly, we watch television rather than listening to the radio or reading newspaper. Television presents the concept of sufficiency economy for about 10-15 minutes per one presentation whereas soap opera lasts 2-3 hours. I would like the television to present the sufficiency economy program longer than it is now."

Most of the farmers watched television in the morning and in the evening because they usually woke up at about 5 o' clock in the morning wand during 7.00-8.00 p.m. was their leisure time. Mr. Surat Surachai stated that television was a good media. "Television presents motion pictures with sounds which interests me to watch", he said. Mr. Kritphicha Suriya added "watching television in clear for learning but learning from the elderly who used to practice sufficiency economy is clearer. Moreover, we can perceive the development of continual growth of vegetables." This conformed to what Mrs. Saowarot Sadaengkaew said "Sometimes, there were development projects in my village and the village head took the village

representatives to observe it in actual situations. After that, we held a meeting for farming preparation. In the case that a farmer does not have enough money for the investment, he can get a loan from the village fund and repays it after harvesting. Besides, there are brood stocks available for interested people to culture fishes but they must return fingerlings so that others can further culture it. For soil fertility, we use organic fertilizer produced by us." Uncle Ma (52 years old) expressed that "Media having an influence on earning a living seems to emphasize on financial completion rather than moderation." Aside from this, local agencies were important media p0laying roles in the extension of the concept of sufficiency economy. "Not only television pays important roles in the extension of the concept of sufficiency economy but also the municipality office and district office. They had advised us about the concept of sufficiency economy but we sometimes could not adopt it. For example, the preparation of a household account. I did it but I found that my house hold expensed were more than incomes. Although the Bank for Agriculture and Agricultural Cooperatives had also advised us on the preparation of a household account but we were not successful. This is because we do not work every day but we have daily expenses."

Mr. Sermsak Rattanadilotkul placed the importance on media having an influence on the adoption of the sufficiency economy philosophy as follows:

"We mostly perceive the philosophy of sufficiency economy through television and followed by newspaper and agricultural extension workers. It seems that the adoption of the philosophy is easy but it is not easy to practice. For instance, my child usually spends 5,000-6,000 baht per month for schooling. Besides, I must buy motorcycles for them to go to school. So, I think that the philosophy of sufficiency economy is sometimes not applicable to me."

Issue 2. Application of the concept of the sufficiency economy philosophy to daily life activities

1. Regarding agricultural careers, the farmers had adapted the concept of the efficiency economy philosophy for their daily site activities. Seventy percent of them did mixed farming whereas 20 percent did more farming and 10 percent were general and agricultural hired workers.

1.1 Mixed farming could be sorted into the following:

1.1.1 Subsistent mixed farming This aimed to produce food for household consumption. Thus, cultivation land was small (residential area). Main incomes were from being a hired worker. Some were old farmers that could not work hand in the agricultural sector.

1.1.2 Progressive mixed farming (semi-commercial) This aimed to produce food for household consumption and the surplus was sold for household expenses . Farmers grew and domesticated many kinds of plants and animals. They were high quality of need varieties and animals bleed. They had a bigger cultivation

land than that of the subsistent mixed farming. The preferred organic farming / organic farming together with the application of chemical.

1.1.2.1 Growing plants only but many kinds. Farmers grew annual plants and fruit trees such as longan and mango. They sometime grew annual plants together with fruit trees using the concept of the sufficiency economy philosophy to reduce production costs. One farmer in Sarapee district said "For production factors, I used to use chemical fertilizer and it was costly. Now, I use organic fertilizer and apply the concept of sufficiency economy to my daily site activities. A local expert in soil science had attended a training on soil science and the sufficiency economy philosophy. After that, he persuaded us to produce organic fertilizer and bio-fermented fertilizer for enriching soil fertility and preventing diseases and insects. This truly reduces production costs. Besides, it is environmentally friendly practice and good to our health."

1.1.2.2 Mixed farming The farmers grew plants and animals. They also dag a pond for agricultural purposes. "I do mixed farming. I seas chickens, fighting cocks, frogs and I grow plants like banana, lettuce, etc. I also produce processed products such as dried banana and prickled lettuce." Mr. Pairote Sangsuwan, aged 15 years old said "I usually follow the concept of sufficiency economy. I grow vegetable and culture fish's household consumption and supplementary incomes. Not only this, I sear ducks naturally and its eggs are consumed and sold. I also grow many kinds of fruit trees and some of its yields were processed for sales. For my farm land, one part is the residential area, one part is vegetable plot, and another one part is fish pond. I also sear chickens at the pond."

1.2 Commercial mono agriculture The farmers grow vegetables, fruit trees, on area animals to meet needs of the market. They used high quality of seed varieties and animal breeds. However, they used chemical fertilizer in order to obtain the yields on time with good quality as required by the market. There was price and market guarantee. However, they were not confident in organic farming because they believed that organic farming gave unstable yields and quality. They also stated that it was time consuming to produce bio-fermented fertilizer. This group of farmer needed a big sum of money for their children schooling; particularly in the tertiary education level.

1.2.1 Mono agriculture using the philosophy of sufficiency economy. One of farmer (Mr. Thawee Inkaew) said " I have perceived the philosophy of sufficiency economy though television and I have been applying it for 2 years successively. I grow organic cabbage, cauliflower, and broccoli for the first year. I had invested it for 80,000 baht but I could sell the yields for 40,000 baht only. For the second year, I grow the same organic vegetables using 15,000 baht for the investment, but I could sell the yields for 30,000 baht. The profit was not enough for household expenses so I shifted to use chemicals. You just imagine, the first year that I grew the organic vegetables, the price of gasoline was 17-18 baht per either and the

price of fertilizer was 500 baht per sack. In the following year, however, the price of gasoline increased to 30 baht and the price of fertilizer increased to 1,000 baht. However, at the present, I spend money thriftily in my daily site activities. For example, I need not use expensive electrical appliances. The price of my mobile phone is about 800-1,000 baht only."

1.2.2 Mono agriculture not applying the philosophy of sufficiency economy.

One farmer in Maefaek Mai sub-district said, "To make a decision to grow a kind of plant, I usually grow the plant which other farmers grow, there is no middleman comes to buy my yields or, if he buy, the price of the yields is very low. I and other farmers grow many kinds of plants to reduce risks of fluctuated market prices. For profitability, it depends on the middleman who determines the price of the yields. Indeed, we spend a lot of money for fertilizer, insecticide, pesticide, herbicides, etc. We cannot bargain it when the price of these chemical increases. I think that if I do organic farming I cannot earn enough money for household expenses and my children schooling. Some farmers grow potato as a main career but they have to spend a lot of money for diseases and insects prevention. Sometimes, we use another kind of medicine to control diseases or pests because the previous one cannot control it anymore." This conforms to opinions of Mr. Sermsak Rattanadilokkul. He said, "I need to apply the philosophy of sufficiency economy focusing on organic farming was not so successful. Thus, I turned to use chemicals which I could earn more incomes." One of farmer disagreed to the concept of the sufficiency economy philosophy. He said, " It is impossible We should be dependent on new technology since we have big daily household expenses site gasoline, lunch meal, desserts, etc. Only some aspect of the concept sufficiency economy can be applicable. I use chemicals became my plants grow fast and I can sell it earlier than using organic substance."

1.3 Being an agricultural hired worker and a cultivation land tenant. This group lacked of knowledge and understanding in the concept of the sufficiency economy philosophy. One farmer said, "The concept of sufficiency economy philosophy is good but it is not easy to apply it in daily site activities due to the percent economic condition. We do not have our own land for plant cultivation or animal searing. Besides, we need to hire workforce to harvest the yields for 900-950 baht per rai. So you can see that the production costs are very high.

2. Save expenditure Some farmers expenses their opinions about their issue. "Saving in accordance with the concept of the sufficiency economy philosophy can be done in some aspects. For example, the reduction of an amount of money spent for buying lotto." Personally, I try to save my expenses as much as possible. Besides, I grow maize at the back yard and I always exhort my children to be thrifty. I want them to realize on the importance of money which is difficult to earn. So, they must have a moderate livelihood. For me, I earn supplementary

incomes by producing handicrafts." Mr. Kritpicha Suriya said, " I try not to be in debts but save for self-reliance. I only use essential technology such as watching television and listening to the radio for news/entertainment perception. I usually grow rice, fruit trees, and vegetables and sears animals. I sometimes am a hired worker for supplementary income."

3. Saving for necessary expenses and elderly life

Many farmers realized on their future incomes security. Thus, they placed the importance on savings. The following were their method of savings:

"Suppose that I earn 100 baht, I usually spend 50 baht and the rest is kept." This conformed to an opinion of Mr. Saowarot Saengkaew, aged 31 years said, " Based on 3 part of my money, I save 1 part, spend 1 part, and reserve 1 part." Mrs. Wanitchaya Tanprasert, aged 43 years said, " I also save my money, grow vegetables and sear chickens/ducks in the backyard of my house." Besides, her aunt living with her also teaches her children to save money. Mrs. Rattanaporn Saithong also said, " I spend money wisely based on my financial status. I avoid using resources having an effort on pollution. This is part of sufficiency economy system."

4. Preparation of a household account Mr. Sawang Inta expensed his opinion, " I follow the concept of sufficiency economy. First of all, I must know my income and expenses of each day. For example, my an annual income is 15,000 baht earned from longan according, vegetable growing, and being a hired worker. I must compute my daily expenses and try to reduce it." It had made a household account for 3 years and did not make it 2 years later. He gave the seasons, " I had started making a household account 1st January 2006 up to 30th December 2007. My income was 210,000 baht but the profitability was only 30,000 baht. I concluded that my daily expenses must not be more than 200 baht. Besides, Mrs. Sudarat Surachai also made a household account. She said, " I used to have debt but not I have no debts because I make a household account."

Issue 3. Principles of self-reliance and hoe to apply it

The farmers had adapted and applied the philosophy of sufficiency economy to their livelihood based on an appropriateness of each locality. Based on focused group discussion, the following were conclusion:

1. Self-reliance in production factors One member of the longan growing farmers group in Sarapee district said, "Regarding self-reliance in production factors, we do not use chemical fertilizer on insecticide sold in the market but we produce bio-fermented fertilizer. If anybody is successful in using the fertilizer, he will suggest it to other."

2. Self-reliance in workforce Most of the farmers placed the priority in workplace for the agricultural production; particularly among the mono agriculture farmers. Farm machinery and chemicals eliminating weeds were introduced to reduce workforce. In addition, household workplace was the priority.

"Suppose that we do too big farming, we have to hire workforce. But if we do farming suitable for a member of household workforce, we need not to hire workforce. This truly reduces production costs."

Aside from workforce, the farmers used their own farm machinery for farming such as tractors or hand tractors. It could be adapt to be a yield transportations vehicle.

"I do not hire workforce for rice growing because I use my own hand factor and I apply chemicals by myself. If I use workforce for pouching, I have to pay 800-900 baht per rai. It's time consuming to use draft animals (e.g. ox and buffalo) My farm does not access to irrigation and it will have a problem in farming if then is no rain."

3. Self- reliance in capital One focus group discussion participant expressed his interesting opinion on the self-reliance in capital. "When we plan to do any business a farming, we should not do a too big one otherwise we may get a loan for the investment. It must be based on the moderation; meaning that our business should begin from a small one and then expand it if is successful. This is the concept of the sufficiency economy philosophy." According to the opinion of Mrs. Rattanaporn Sathong, " The principles of self-reliance can be applied successfully. We just do our agricultural careers industriously and honestly then we will not have debts if we are thrifty."

4. Reduction of market dependence This comprised factors on agricultural production and daily life commodity market.

4.1 Reduction of external production factors, e.g. fertilizer, insecticide, etc. One of the farmers in Sarapee district said, "Initially, I had to adapt the concept in fertilizer application when I had adopted the philosophy of sufficiency economy. I also made a trial and error on organic fertilizer using. This was because chemical fertilizer using made my crops grow factor than organic fertilizer using. At first, I used one kilogram of chemical fertilizer together with cattle dung instead of using two kilogram of chemical fertilizer only just like before. After that, I used only 0.5 kilogram and eventually I used only cattle dung. This helped me reduce production costs."

For the production of organic fertilizer, moreover, then was the application of pellet fertilizer producing machine for convenience in using. Another one of the farmers expressed his opinion on the reduction of external production factors that it was good to his health and the environment.

"In the past, I usually bought chemical fertilizer became the fertilizer could accelerate grow the performance of my crops. At present I turn to use organic fertilizer produced by me and farmers in my community. We also use bio-fermented fertilizer for eliminating insects. Using organic fertilizer has an effect on shown growth performance of the crops when compared to chemical fertilizer but it is saver and it is environmentally conservation."

4.2 immunity market concerning with daily livelihood.

"When talking about eating habit, we should consider about nutritional value of the food which we eat as well as it price. Some kinds of foods are not good to our health. For instance, carbonated beverages are not cheap but it is not beneficial to own body. If we believe that a particularly kind of food is good to our health, we should consume it. In contrast, if it is not good to our health, we avoid it."

Besides, it was found that most of the farmers grew organic vegetables for household consumption. Examples were chili, eggplant, galangal, guffin lime, basic, etc. Some of them seared native chickens and ducks for household consumption and, sometimes, they contributed it to neighbors.

Issue 4. Concept of the sufficiency economy philosophy and basic factors in agricultural livelihood, i.e. relationships of expenses reduction, an increase of income, and opportunity expansion.

Most of the farmers perceived that the afoul factors had interrelationships but may be different based on its activities such as the activity on workplace exchange or neighbors pitching in and help. Besides, woman participants had formed themselves as a product processing group using local saw materials such as banana and rice. Mr. Kritpicha Suriya said, " I earn supplementary incomes from cattle searing; that ids, the second cub is sold to another farmer."

Issue 5. Application of the concept of sufficiency economy philosophy must have the adequacy in various aspects, e.g. economy, social, and spiritual aspects. Opinions and practice.

1) Economy aspect People in the community were dependent on one another, particularly on home growth vegetables. Besides, there were production factors and yields exchange. For production capital, they got loan from the Bank for Agriculture and Agricultural Cooperatives (BAAC).

"Part of the profits from agricultural yields selling was repaid to the loan. We got a sum of loans necessary for cultivation. Sometimes, the return was not enough for the repayment to the BAAC and we had to borrow a sum of money from our neighbor to repay debts."

2) Social aspect The farmers had an exchange of knowledge, production techniques, saw material provision, and local production factors, e.g. organic fertilizer and bio-fertilizer. The group of longan producers in Sarapee district stated "We usually in term of economic and social aspects in order to strengthen our community. Besides, it will be good a good model for other societies." People in our community always help one another in accordance with the concept of the sufficiency economy.

"If there is a funeral ceremony in our community, the community members usually help the host by preparing tents, tables, chairs, foods, drinks, etc. The most needs not to hire other to prepare it."

3) Spiritual aspect Very often that people (participants) in the community happily shared their food such as vegetables to neighbors. The participants said that they were willing to help their neighbor in the case that their neighbors needed help such as in the case of funeral, ordination, marriage ceremonies, etc. Meanwhile, knowledge transfer among them created familiarity and close relationships. This conformed to the opinions of Mr. Pairote Saengsuwan and Mrs. Kannika Duangchai. They said, "People in our community have good relationships because most of them are relatives. When any problem occurs we do not ignore to help one another." Mrs. Kanika Duangchai added, "Our village holds a meeting once a month aiming at informing news or any incident happening in our village and seeking for solutions."

In addition, Mrs. Rattanaporn Saithong had concluded the concept of the sufficiency economy as follows:

"The adoption of the concept of sufficiency economy philosophy comprises the following 3 aspects: 1) moderation-sufficiency in production and consumption; 2) reasonableness-rationale in decision-making about the level of adequacy; and 3) good immunity-preparation of readiness for confronting an effect on various changes which may arise in the near future."

Based on, results of the qualitative data analysis (from in-depth interview and focused group discussions), it could be enumerated as shown in the diagram below.