



**APPENDICES**

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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**APPENDIX A**

**RESEARCH QUESTIONNAIRE**

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**Research Questionnaire****Subject**

**Roles of Farmer Housewife in Decision Making Concerning Farming  
Through Sufficiency Economy, Chiang Mai Province**

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**The Degree of Doctor of Philosophy in Agricultural Extension  
and Rural Development**

**Faculty of Agriculture      Chiang Mai University**

**Date of interview      Date.....Month.....Year.....**

**Explanation** Please label  $\surd$  in front of the most actual statement and fill statement in assigned blank.

**The questionnaire consists of 5 parts as follows:**

- Part 1** Data about general socio-economics background of farm housewives and families
- Part 2** Questions concerning roles of farm housewives in the decision making on doing the sufficiency economy farming
- Part 3** Questions about household agricultural activities in accordance with the sufficiency economy farming
- Part 4** Questions about household well-being regarding the sufficiency economy farming
- Part 5** Questions about problem and obstacle in decision making of the housewives in agricultural activities regarding the sufficiency economy farming

<p><b>Part 1 Data about general socio-economics background of farm housewives and families</b></p>
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1. Age.....Years
2. Level of education of farmer housewife
 

<input type="checkbox"/> Uneducated	<input type="checkbox"/> Lower than elementary level
<input type="checkbox"/> Elementary level	<input type="checkbox"/> Lower secondary level
<input type="checkbox"/> Upper secondary level/ vocational certificate	
<input type="checkbox"/> High vocational certificate	
<input type="checkbox"/> Bachelor degree	<input type="checkbox"/> Higher than Bachelor degree
3. Level of education of farmer husband
 

<input type="checkbox"/> Uneducated	<input type="checkbox"/> Lower than elementary level
<input type="checkbox"/> Elementary level	<input type="checkbox"/> Lower secondary level
<input type="checkbox"/> Upper secondary level/ vocational certificate	
<input type="checkbox"/> High vocational certificate	
<input type="checkbox"/> Bachelor degree	<input type="checkbox"/> Higher than Bachelor degree
4. Number of family members.....people, to be household agricultural workforces..... people
5. Period of marriage.....years
6. Number of children.....people
7. Income of farmer housewives (monthly).....Baht
8. Income of farmer families (monthly)
 

<input type="checkbox"/> < 10,000 Baht	<input type="checkbox"/> 10,000 – 19,999 Baht
<input type="checkbox"/> 20,000 – 29,999 Baht	<input type="checkbox"/> 30,000 – 39,999 Baht
<input type="checkbox"/> 40,000 – 49,999 Baht	<input type="checkbox"/> ≥ 50,000 Baht
9. Do you and your family moved the residence?
 

<input type="checkbox"/> Never moved	<input type="checkbox"/> Moved 1 times within 1-5 years
<input type="checkbox"/> Moved 1 times more than 5 years	
10. Are you a member of any group? (eligible to answer more than 1 choice)
 

<input type="checkbox"/> Not a member
<input type="checkbox"/> Agricultural Cooperatives Group
<input type="checkbox"/> Agricultural Housewife Group

- ( ) Village Funds  
 ( ) Bank for Agriculture and Agricultural Cooperatives  
 ( ) Others (please specify).....

11. How much do you play economics roles in your household?

Economics roles in household	Levels of role taking				
	Very high (5)	High (4)	Moderate (3)	Low (2)	Very low (1)
1. Family feeding					
2. Working outside					
3. Providing production factor					
4. Cost control and assets					
5. Saving what is earned					
6. Working in farm such as planting, putting fertilizers, etc.					
7. Animal husbandry					
8. Sales transaction					
9. Farm management					
10. Household bookkeeping					

12. How much do the power relation (patriarchy) in your family?

Power relation (Patriarchy)	Levels of treat				
	Very high (5)	High (4)	Moderate (3)	Low (2)	Very low (1)
1. In your family, choosing where to live or to live with whom solely depends on the husband					
2. after the marriage, farmer housewives have to use the husband' surname					
3. You cannot do anything if your husband needs to have more than 1 wife.					
4. Husband is mostly the person who make a decision in the family.					
5. When a conflict happens, you have no power in negotiating.					
6. Your husband hardly sees your importance in doing activities in the family.					
7. You will not let man look down upon, take advantage and be a subject of violence.					
8. In your family, the boy is given more important than the girl.					

<b>Power relation (Patriarchy)</b>	<b>Levels of treat</b>				
	<b>Very high (5)</b>	<b>High (4)</b>	<b>Moderate (3)</b>	<b>Low (2)</b>	<b>Very low (1)</b>
9. In your family, the boy is inherited more assets than the girl.					
10. You and your husband helps each other doing household works.					
11. Your family offers more education opportunity to a boy than a girl.					
12. When a conflict happens, you usually lack of confidence and self-esteem.					
13. In your family, your husband is superior than you in every respect.					
14. In your family, man usually suppresses and takes advantage from woman.					
15. You agree with the proverb that "It's a sad house where the hen crows louder than the cock"					
16. In your family, husband has absolute power in teaching and punishing					

<b>Power relation (Patriarchy)</b>	<b>Levels of treat</b>				
	<b>Very high (5)</b>	<b>High (4)</b>	<b>Moderate (3)</b>	<b>Low (2)</b>	<b>Very low (1)</b>
family members					
17. In your family, husband has a role of leadership in every respect.					
18. Housewives should act as a person taking care of husband as a major role.					
19. Lacking of social opportunity is because mostly you have to be responsible for household tasks and taking care of husband and children.					

13. How much do you receive sufficient economics knowledge from various sources?

<b>Source of sufficient economics knowledge</b>	<b>Level of acknowledgment</b>				
	<b>Very high (5)</b>	<b>High (4)</b>	<b>Moderate (3)</b>	<b>Low (2)</b>	<b>Very low (1)</b>
Radio					
Television					
Broadcasting news tower					
Newspaper					
Brochure or manual					
Internet					
Agricultural officer					
Neighbors					



**Part 2 Roles of farmer housewives decision making on doing sufficiency economy farming**

How much do you play roles of decision making on doing sufficiency economy farming in your family?

Activity	Level of roles of decision making				
	Very high (5)	High (4)	Moderate (3)	Low (2)	Very low (1)
<b>Moderation</b>					
1. Using existing capital and equipment in doing agriculture					
2. Using household workforces in doing things together					
3. Purchasing necessary products for their living and occupation					
4. Using compost and organic fertilizer that already contains in the soil without relying on chemicals					
5. Storing some portion of products gained for further harvest without buying more seeds					
6. Using natural enemies to prevent insect diseases instead of using too much insecticide					

Activity	Level of roles of decision making				
	Very high (5)	High (4)	Moderate (3)	Low (2)	Very low (1)
<b>Reasonableness</b>					
7. Planning production based on geographical potential					
8. Planning harvest according to the need of the market					
9. Planning of land utilization for different purposes such as growing different plants in the same area					
10. Studying sufficient agricultural knowledge that is beneficial to their occupation					
11. Seeking out the cause of agricultural problems such as problem of reduced productivity					
<b>Self-immunity</b>					
12. Conducting an investment plan by prior studying its agricultural capital					
13. Saving from agricultural gain					
14. Money division for investment, consumption and saving					
15. Household bookkeeping					

Activity	Level of roles of decision making				
	Very high (5)	High (4)	Moderate (3)	Low (2)	Very low (1)
and daily statement for the family planning					
16. Considering possible risks such as alternative products when the main product is reduced, etc. as well as finding solution to the risks					
<b>Knowledge</b>					
17. Seeking knowledge from other sources such as TV, radio, brochure, etc.					
18. Finding a relevant book regarding agricultural knowledge					
19. Attending agriculture-related training or seminar to enhance their knowledge of sufficient economy					
20. Finding a way to develop the career such as growing another kinds of plants or expanding harvesting area, etc.					
21. Attending the meeting of the village					

Activity	Level of roles of decision making				
	Very high (5)	High (4)	Moderate (3)	Low (2)	Very low (1)
22. Taking an observation field to study from the successful one					
<b>Morality</b>					
23. Not taking advantage from others by determining a proper price					
24. After spraying preservation chemicals, not early selling products which are under the restricted period					
25. Not claiming other belongings/ assets to be theirs					
26. Being generous and supporting people who are deficient					
27. Diligence in performing occupation					
28. Considering common benefits such as voluntary work of community development					
29. Leading a life on the basis of sufficiency – not exploit others					

Activity	Level of roles of decision making				
	Very high (5)	High (4)	Moderate (3)	Low (2)	Very low (1)
30. Being fair in solving problems					

**Part 3 Household agricultural activities in accordance with the sufficiency economy farming**

Does your family do agricultural activities in accordance with the sufficiency economy farming?

Activity	Yes (1)	No (0)	The reason if you answer "No"
<b>Man</b>			
1. Work division in the families			
2. Using own workforce in carrying out agricultural activities			
3. Rotating household workforces, none of them moves away to work			
4. Not employing external workforces			
5. Finding more knowledge in doing agriculture according to sufficient agriculture, in order to be apply for their farming, such as training or observation trip, etc.			
<b>Money</b>			
6. Household bookkeeping for own audit			
7. Family saving			
8. Reasonable spending, not extravagant			
9. Purchasing products only necessary to their occupation			

Activity	Yes (1)	No (0)	The reason if you answer "No"
10. If borrowing for living, family members have a plan for liquidation			
<b>Material</b>			
11. Utilizing own material or dung for the utmost benefit such as using leaves or dung to produce compost or manure, or feeding straw to cattle, or using firewood in boiling, etc.			
12. Using animal workforces or the agricultural tools for the utmost benefits			
13. Agricultural resource circulation such as straw, paddy husk or dried grass as a cover of soil surface and using coir placed at the bottom of the hole when growing plants, or using coir when grafting, etc.			
14. Processing products or preserving it for own consumption such as sour pickling, drying out or preserving in syrup, etc.			
<b>Management</b>			
15. Planning to use the house area for the utmost benefit			
16. Inquiring agricultural officer in the sub-district/village for agricultural information			
17. Determining precise period of doing agriculture according to sufficient economy			
18. Conducting a plan of order of priority what is to be done first or later			
19. Considering if the ongoing agricultural			

Activity	Yes (1)	No (0)	The reason if you answer "No"
activities are based on sustainable preservation and utilization			
20. Planning by considering geographical potential			
21. Considering to risks in various aspects			
22. Growing rice for own consumption in a year			
23. Digging a pond for fishery and storing rain water			
24. Integrated farm of vegetables, fruits and herbs			
25. Growing backyard garden			
26. Feeding animal for own consumption and selling			

**Part 4 Well-being of farmer families according to sufficiency economy farming**

Does you family have well- being according to sufficiency economy?

Well- being	Yes (1)	No (0)	Note
<b>Sanitation</b>			
1. Deprived of diseases, having good health and living in non-toxic conditions			
2. Strong health being able to work regularly			
3. Cheerful and delighted states of mind			
4. Being unworried and encouraged			
5. Accessibility to public health service			
<b>Working</b>			
6. Being able to fully take care their farms and take			



<b>Well- being</b>	<b>Yes (1)</b>	<b>No (0)</b>	<b>Note</b>
control of agricultural activities			
7. Reducing the risk from natural disasters such as wildfire, storm, drought or flood, etc.			
8. Good working environment			
9. Having sufficient workforces			
10. Having sufficient circulating funds for agriculture			
<b>Income</b>			
11. Having continuous income from agriculture			
12. Having sufficient buying power for their living			
13. Having reserve fund			
14. Earning additional income from selling products that exceed from saving for own consumption			
<b>Family life</b>			
15. Warm and loving family			
16. Being strong and self-dependent family			
17. Having sufficient basic facility in life such as TV, vehicle, etc.			
18. Family members spend more time together			
19. Happy family taking care of each other			
20. Making discussion among family members and helping one another solving problems			
<b>Working environment</b>			
21. Secure shelter			
22. Accessibility to sufficient public health services			
23. Safety in life and property, no criminal and drugs			
24. Good environment			
25. Sufficient amount of consumable water			



**Part 5 Problems and obstacles of farmer housewives in doing agricultural activities according to sufficiency economy farming**

Does your family have problems and obstacles in doing agriculture activities according to sufficiency economy farming?

Problems and obstacles in doing agricultural activities according to sufficiency economy farming	Level of problems and obstacles				
	Very high (5)	High (4)	Moderate (3)	Low (2)	Very low (1)
1. water source is not enough to do agriculture					
2. Little amount of water in the storing pond, especially during drought season					
3. Deteriorated soil, unsuitable for Agriculture					
4. little agricultural area unsuitable to follow the principle of sufficient economy					
5. insects and pests cause damage to the farm plant					
6. the cost of some production factors such as seed, fertilizer, animal feed whose price are getting skyrocketed					
7. workforces in carrying agricultural activities are insufficient					
8. no excessive production for own consumption, except from selling					

Problems and obstacles in doing agricultural activities according to sufficiency economy farming	Level of problems and obstacles				
	Very high (5)	High (4)	Moderate (3)	Low (2)	Very low (1)
9. The price of excessive products for own consumption is low					
10. No officer gives advice about doing agriculture					
11. Others (please specify) ..... ..... .....					



**APPENDIX B**  
**RELIABILITY ANALYSIS**

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### Reliability of questionnaire

#### Part 1 (Economics roles of farmer housewives in family)

#### RELIABILITY ANALYSIS – SCALE (ALPHA)

##### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
R1	32.92	27.077	.211	.844
R2	33.46	22.269	.751	.799
R3	33.38	22.756	.618	.811
R4	33.31	24.564	.612	.816
R5	33.23	23.526	.589	.815
R6	34.54	20.103	.832	.784
R7	33.62	25.923	.300	.840
R8	34.08	23.077	.507	.824
R9	33.38	25.256	.309	.842
R10	33.15	23.474	.555	.818

##### Reliability Coefficients

N of Cases = 20

N of Items = 10

Alpha = .836

**Reliability of questionnaire**  
**Part 1 (Power relation (patriarchy) in the family)**

RELIABILITY ANALYSIS – SCALE (ALPHA)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PR1	56.90	47.884	.757	.570
PR2	57.45	51.103	.821	.588
PR3	56.90	48.621	.665	.580
PR4	57.15	49.397	.606	.588
PR5	57.45	48.471	.793	.572
PR6	56.90	57.674	.126	.647
PR7	56.25	69.145	-.564	.720
PR8	57.30	57.695	.118	.648
PR9	57.70	46.116	.752	.560
PR10	56.90	65.989	-.468	.697
PR11	57.95	47.524	.754	.568
PR12	57.95	47.945	.600	.582
PR13	57.55	53.945	.297	.628
PR14	56.25	63.355	-.235	.696
PR15	57.65	46.555	.575	.579
PR16	57.45	51.524	.552	.601
PR17	56.80	60.589	-.076	.658
PR18	57.50	53.737	.333	.624
PR19	56.45	69.945	-.582	.725

Reliability Coefficients

N of Cases = 20

N of Items = 19

Alpha = .726

### Reliability of questionnaire

#### Part 1 (Sufficiency economic acknowledgement from various sources)

#### RELIABILITY ANALYSIS – SCALE (ALPHA)

##### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ME1	23.00	15.263	.682	.715
ME2	22.90	16.621	.668	.729
ME3	22.75	16.197	.565	.736
ME4	23.40	18.253	.118	.825
ME5	23.30	16.116	.539	.740
ME6	24.50	14.895	.659	.716
ME7	22.80	18.379	.224	.789
ME8	22.85	15.713	.568	.734

##### Reliability Coefficients

N of Cases = 20

N of Items = 8

Alpha = .775

**Reliability of questionnaire**

**Part 2 (Roles of farmer housewives decision making on doing sufficiency  
economy farming)**

RELIABILITY ANALYSIS – SCALE (ALPHA)

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
M1	94.25	64.618	.186	.720
M2	94.00	65.474	.100	.724
M3	94.50	64.158	.302	.716
M4	94.50	59.105	.473	.699
M5	94.30	62.747	.261	.715
M6	94.25	69.145	-.224	.745
Re1	94.20	57.537	.751	.685
Re2	94.70	58.326	.615	.691
Re3	94.00	61.684	.387	.708
Re4	94.70	61.063	.488	.703
Re5	94.60	67.200	-.080	.734
I1	95.10	59.042	.438	.701
I2	95.05	55.208	.549	.688
I3	95.20	57.958	.550	.693
I4	94.45	62.892	.434	.710
I5	94.15	69.503	-.261	.745
K1	94.35	60.766	.478	.703
K2	94.35	63.608	.392	.713
K3	94.75	62.197	.318	.712
K4	94.50	58.789	.496	.697

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
K5	94.90	56.411	.649	.684
K6	94.85	59.924	.436	.703
L1	94.30	62.853	.284	.714
L2	94.10	69.674	-.260	.747
L3	94.05	63.629	.291	.715
L4	94.25	58.724	.463	.699
L5	93.75	71.566	-.328	.762
L8	93.90	67.779	-.124	.740
L7	93.70	70.116	-.278	.751
L8	94.15	67.818	-.127	.740

## Reliability Coefficients

N of Cases = 20

N of Items = 30

Alpha = .723



### Reliability of questionnaire

#### Part 5 (Problems and obstacles in doing agricultural activities according to sufficiency economy farming)

#### RELIABILITY ANALYSIS – SCALE (ALPHA)

##### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PROB1	31.31	33.429	.424	.863
PROB2	32.13	26.383	.746	.837
PROB3	31.88	28.783	.717	.840
PROB4	31.75	31.000	.736	.844
PROB5	31.69	29.963	.702	.843
PROB6	32.94	27.929	.741	.837
PROB7	32.13	31.050	.531	.856
PROB8	32.38	32.250	.401	.866
PROB9	31.63	34.917	.157	.882
PROB10	31.69	29.029	.669	.846

##### Reliability Coefficients

N of Cases = 20

N of Items = 10

Alpha = .865



**APPENDIX C**

**TABLE OF THE POPULATION SAMPLING**

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Table of the population sampling

Direction	District (random sampling)	All Sub- district	40% percent of the sub- district	Sub-district (random sampling)	Village	40% percent of the village	Village (random raming)	House hold	40% of the households	Sample group	
<b>North</b>	Maetaeng	13	5	Kudchang	7	3	Moo 1 Baan Moengkud	95	38	2	
(Include 6 districts)  (40% of district = 2 districts)							Moo 3 Baan Sobkai	102	41	3	
							Moo 5 Baan Huayhamdang	108	43	3	
				Maetaeng	8	3	Moo 5 Baan Teen that	78	31	2	
							Moo 1 Baan Thungluang	101	40	2	
							Moo 3 Baan Maeka	167	67	4	
				Maehophra	9	4	Moo 1 Baan Palao	100	40	2	
							Moo 3 Baan Phueng	178	71	4	
							Moo 5 Baan Maehorphre	193	77	5	
							Moo 7 Baan Nameng	173	69	4	
					Baan Chang	5	2	Moo 2 Baan Kaomakha	90	36	2
								Moo 5 Baan Sridongyen	106	42	3
					Baan Khilek	11	4	Moo 5 Baan Jomjaeng	157	63	4

Direction	District (random sampling)	All Sub- district	40% percent of the sub- district	Sub-district (random sampling)	Village	40% percent of the village	Village (random ramping)	House hold	40% of the households	Sample group
							Moo 3 Baan Dongpalun	178	71	4
							Moo 4 Baan Nongkhong	87	35	2
							Moo 6 Baan Rumperng	173	69	4
	Chaiprakarn	4	2	Mae Taolp	6	2	Moo 1 Baan Maetolop	303	121	7
							Moo 3 Baan Pa Ngew	163	65	4
				Pongtum	8	3	Moo 1 Baan Pongtam	15	6	1
							Moo 2 Baan Tha	69	28	2
							Moo 3 Baan Pangkwai	20	8	1
<b>South</b>	Sanpatong	11	4	Sankang	9	4	Moo 1 Baan Tungor	130	52	3
(Include 7 districts)							Moo 3 Baan Klang	165	66	4
(40% of district =							Moo 5 Baan Huaysom	89	36	2
							Moo 7 Baan Tharuamchai	54	22	1
				Namborluang	11	4	Moo 2 Baan Namborluang	235	94	6

Direction	District (random sampling)	All Sub- district	40% percent of the sub- district	Sub-district (random sampling)	Village	40% percent of the village	Village (random ramping)	House hold	40% of the households	Sample group	
3 districts)							Moo 3 Baan Phaesunmai	89	36	2	
							Moo 5 Baan Nongha	128	51	3	
							Moo 7 Bann Huafai	73	29	2	
					Makhunwan	7	3	Moo 1 Baan Sansai	168	67	4
								Moo 2 Baan Khunkhong	141	56	3
								Baan Dongpasang	228	91	6
					Makhamluang	6	2	Moo 1 Baan Kuan	216	86	5
								Moo 9 Baan Dong Khilek	183	73	4
		Omkoï	6	2	Sobkhong	12	5	Moo 1 Baan Thorkai	96	38	2
								Moo 3 Baan Mae Longluang	95	38	2
								Moo 6 Baan U-jae	44	18	1
								Moo 7 Baan Hvayyao	34	14	1
							Moo 9 Baan Mae Ngao	95	38	2	

Direction	District (random sampling)	All Sub- district	40% percent of the sub- district	Sub-district (random sampling)	Village	40% percent of the village	Village (random raming)	House hold	40% of the households	Sample group
				Nakian	21	8	Moo 20 Baan Kongpor Nue	50	20	1
							Moo 3 Baan Naklan	50	20	1
							Moo 4 Baan Baina	80	32	2
							Moo 10 Baan Phipan	64	26	2
							Moo 15 Bann Maekerb	16	6	1
							Moo 2 Baan Maekhong	106	42	3
							Moo 8 Baan Maelog	83	33	2
							Moo 1 Baan Maehong	60	24	1
	Doi Tao	6	2	Doi Tao	10	4	Moo 4 Baan Chimpee	184	74	5
							Moo 3 Baan Doi Tao	200	80	5
							Moo 1 Baan Thinsumrar	213	85	5
							Moo 9 Baan Thung Dogchang	48	19	1
				BongTan	7	3	Moo 5 Baan Bongtan	355	142	9

Direction	District (random sampling)	All Sub- district	40% percent of the sub- district	Sub-district (random sampling)	Village	40% percent of the village	Village (random ramping)	House hold	40% of the households	Sample group	
							Moo 3 Baam Nongpu	332	133	8	
							Moo 4 Baan Nongphakbung	167	67	4	
<b>East</b>	Sansai	12	5	Paphai	17	7	Moo 15 Baan Kasetphattana	133	53	3	
(Include 6 districts) (40% of District = 2 districts)							Moo 11 Baan Thayang	79	32	2	
							Moo 3 Baan Paphai	175	70	4	
							Moo 6 Baan Pong	164	66	4	
							Moo 1 Baan Moengkhon	222	89	5	
							Moo 7 Baan Sriboonroeng	144	58	4	
							Moo 8 Baan Sriwangtharn	197	79	5	
					Maefaek	12	5	Moo 2 Baan Pong	314	126	8
							Moo6 Baan Maetae	188	75	5	
							Moo 4 Baan Rp.;iamg	119	48	3	

Direction	District (random sampling)	All Sub- district	40% percent of the sub- district	Sub-district (random sampling)	Village	40% percent of the village	Village (random ramping)	House hold	40% of the households	Sample group
							Moo 5 Sri Ngarm	183	73	4
							Moo 7 Baan Sahakorn	146	58	4
				Nongharn	11	4	Moo 10 Baan Kasetmai	60	24	1
							Moo 13 Baan Doinoi	128	51	3
							Moo 8 Baan Wiweg	150	60	4
							Moo 7 Baan Nongharn	199	80	5
				Sanpapao	6	2	Moo 2 Baan Pakang	164	66	4
							Moo 6 Baan Phayak Noi	126	50	3
				Sanphranet	7	3	Moo 7 Baan Thathum	85	34	2
							Moo 3 Baan Paphai	173	69	4
							Moo 6 Baan Mae Yoison	149	60	4
	Saraphi	12	5	Khuamoong	10	4	Moo 5 Baan Khuamoong	153	61	4
							Moo 10 Baan Doengtai	111	44	3



Direction	District (random sampling)	All Sub- district	40% percent of the sub- district	Sub-district (random sampling)	Village	40% percent of the village	Village (random ramping)	House hold	40% of the households	Sample group
							Moo 4 Baan Thama-O	129	52	3
							Moo 3 Baan Pakmoeng	82	33	2
				Chomphu	9	4	Moo 4 Baan Thatonkwao	334	134	8
							Moo 5 Baan Thungkhisue	160	64	4
							Moo 6 Baan Bubpharam	202	81	5
							Moo 1 Baan Nong Papaosae	110	44	3
				Nongphueng	8	3	Moo 6 Baan Kongsai	319	128	8
							Moo 2 Baan Chiangsaen Noi	249	100	6
							Moo 7 Baan Paket Thee	202	81	5
				Nongfaek	9	4	Moo 6 Baan Kudaeng	126	50	3
							Moo 8 Baan Sunpadue	188	75	5
							Moo 2 Baan Sanjpasak	153	61	4
							Moo 3 Baan Nongfaek	112	45	3

Direction	District (random sampling)	All Sub- district	40% percent of the sub- district	Sub-district (random sampling)	Village	40% percent of the village	Village (random ramping)	House hold	40% of the households	Sample group
				Thakwang	7	3	Moo 3 Baan Kwae	154	62	4
							Moo 6 Baan Kwae Tun	103	41	3
							Moo 2 Baan Nongpong	115	46	3
West	Maejaem	10	4	Kongkhaek	11	4	Moo 11 Baan Kongkhaektai	126	50	3
(Include 4 districts) (40% of district = 2 districts)							Moo 9 Baan Phaphueng	81	32	2
							Moo 6 Baan Buangluang	111	44	3
							Moo 8 Baan Ommeng	154	62	4
				Thapha	9	4	Moo 5 Baan Thap	58	23	1
							Moo 9 Baan Naroen	70	28	2
							Moo 4 Baan Padaed	137	55	3
							Moo 2 Baan Phanang	71	28	2
				Baan Chan	6	2	Moo 7 Baan Den	80	32	2
							Moo 3 Baan Wat Chan	76	30	2

Direction	District (random sampling)	All Sub- district	40% percent of the sub- district	Sub-district (random sampling)	Village	40% percent of the village	Village (random ramping)	House hold	40% of the households	Sample group
				Mae Daed	7	3	Moo 6 Baan Dong Sammuen	43	17	1
							Moo 2 Baan Maetala	71	28	2
							Moo 1 Baan Maephapu	78	31	2
	Samerng	5	2	Borkaew	10	4	Moo 5 Baan Borkaew	176	70	4
							Moo 1 Baan Huay Mana	191	76	5
							Moo 3 Baan Mae Khape	101	40	2
							Moo 2 Baan Mae To	91	36	2
				Samerng	6	2	Moo 5 Baan Pok	234	94	6
							Moo 2 Baan Maephae	103	41	3
	<b>9 districts</b>	<b>79 sub- districts</b>	<b>31 sub- districts</b>		<b>282 villages</b>	<b>112 villages</b>		<b>15,279 households</b>	<b>6,112 households</b>	<b>375 samples</b>

Source: Community Information (2009)

**CURRICULUM VITAE**

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<b>Working Experience</b>	In 2005 until present University staff in Division of the standard extension and quality assurance (QA), The office of educational quality development, Chiang Mai University