

Information for Local Agricultural Economist (Sorkortor)

1. General Information

1.1 Who are you? What to do?

You are one of the volunteers of the Office of Agricultural Economics, Ministry of Agriculture and Cooperatives called the “Local Agricultural Economist (SorKorThor)” assigned to help the authority to conduct the survey of major rice production per rai through selection of the sample farm households. The data is required to grasp the production of major rice in your province.

Your work involves two major components as follows:

1. Prepare a list of all major rice farm households in the sample village and select three sample farm household using the random table.
2. Select a sample field in the major rice farm fields which the sample farm household has.

Every SorKorThor is required to actually attend the training program for the field work to ensure every working step, such as to understand all details in the manual and record of farm production per rai, to receive the tools and equipment needed in the survey as well as the “Manual and Field Survey Note on Farm Production per rai” from the authority.

For the survey, SorKorThor is required to introduce himself to the local leader (village headman/Sub-district headman) that you have been assigned by the Regional Office of Agricultural Economics (ROAE) to survey the major rice production per rai through field survey and ask for cooperation on your work.

1.2 Return of the checked and proper field survey note

When you work in your village, sub-district or district, you may face the problems and difficulties at all times. You may need to cooperate with the responsible ROAE Officer. Phone number and address are required to complete the survey in the field survey. After you have checked the data for accuracy and completeness, the manual and field survey note shall be kept in your residence and waits for submission to ROAE Officer. The officer will pick up the survey form at your residence.

The production that gathered from the survey field should be contained in the bag provided and fill out the tag. The officer from ROAE will come and take the production back together with field survey note as appointed with SorKorThor.

1.3 Tools and equipment

The list of tools and equipment for major rice survey to be provided to you by ROAE Officer. You have responsibility to take care of equipment and return to ROAE Officer after field survey completed.

1.4 Work to be performed by the local agricultural economist (SorKorThor)

Assigned by ROAE to conduct of the survey for farm production per rai

Participate in the training course

Prepare a list of major rice farm households (Form 1)

Random sampling of 3 farm households (Form 2)
(Using random table for sample farm households)

Interview to sample farmer households (Form 3)

Field survey of farm field (Form 3)

- Return production of major rice (2 survey spot/ 1 sample household)
- Submit checked and complete "Manual and Field Survey Note" and tools/ equipment to ROAE Officer

1.5 Definition

1. **Sample village** means the village where major rice is planted and could be harvested between 1st November 2006 – 15th January 2007.

2. **Major rice farm household** means the household having at least one rai of planted on major rice and having the farm field in the sample village.

3. **Sample household** means the farm household in 2) which will harvest the crop during the survey period of November 2006 – January 2007. (Except in the south region, January – February 2007)

4. **Major rice farm field** means the major rice farming area larger than one rai in the same farm fields. If there is a clear division by road, pass, stream or canal, it should be distinguished a different field.

5. **Growing condition** means the estimated condition of the crop production compared with average production in normal years by the opinion of the owner farmer.

1	=	Very poor
2	=	Poor
3	=	Normal
4	=	Good
5	=	Excellent

6. **Production per rai** means the weight of major rice grains gathered from sample farm field (1 rai), gaining information through;

☹ Interview of sample farm household

☺ Calculation on crop cutting survey

Unit number is kilogram per rai

2. Listing of farm households and the selection of sample farm household

2.1 Listing of farm households

The first thing to be done is to list up the farm households which plant major rice in the sample village to the “List of Major Rice Farming Households, Crop year 2006/07” (Form 1), then count the number of farm households in the list. The name of sample village will be provided by ROAE Officer to you before the survey.

2.2 Selection of sample farm households

After preparation of the list and count of the total number of farm households, select three sample households using the random table. Then the three sample farm households are entered in the “List of sample households for the survey of major rice production per rai, Crop Year 2006/07” (Form 2).

For example: Suppose that you can count the sample list as equal to 75 households, use Form 2 by looking at sample household No. 71-75 then the sample household will be No. 15, 42 and 69 respectively. If you can count the sample list as equal to 49 households, the sample household will be No. 10, 26 and 40 respectively.

3. Operation of survey

3.1 You need to introduce yourself to the sample farmer that you are the person assigned by the Regional Office of Agricultural Economics for the survey of major rice production per rai in the sample village.

3.2 You need to explain clearly the objectives and survey method on the production per rai in the selected farm of the sample farmer as follows:

“**The objective of this survey** is to assess the average production of major rice per rai in this province through actual crop cutting, counting, measuring and weighing of the major rice in two survey spots (3 meters in length per spot). The survey spot are selected randomly in the sample farm fields which are selected from three sample farm household in this village.

The result of the survey will be used only for making of statistics and will not be used in other objectives such as taxation or income assessment. Before selection of sample firm field, you need to ask basic information on farming to the owner of sample farm household and ask for cooperation and assistance for this survey.

3.3 Random of sample farm field, field block and survey spot

3.3.1 Random of the sample field

(1) Interview sample household in order to know number of harvesting major rice field and draw a map of located field and put the number into each field.

In case of SorKorThor can not enter the field due to improper period of harvesting, SorKorThor should ask the exactly period for harvesting and make appointment for the new visit. In case, there is no field remain after harvesting, SorKorThor can random the reserved sample immediately.

(2) Let's SorKorThor random the sample field by using Table 1

Table 1 : Random Table for Sample Farm Field

Total number of Farm Fields	Sample Farm Fields	Total number of Farm Fields	Sample Farm Fields	Total number of Farm Fields	Sample Farm Fields	Total number of Farm Fields	Sample Farm Fields
1	1	6	4	11	7	16	9
2	2	7	4	12	11	17	7
3	2	8	6	13	5	18	10
4	3	9	5	14	12	19	13
5	1	10	3	15	10	20	8

3.3.2 In case of major rice field that planted in the rice field, it found out that there are many blocks in the field, then SorKorThor should follows this procedure:

- (1) Interview the sample farmer household in order to know total number of block in the field and then draw a draft picture of the total block in the field.
- (2) Random 2 blocks in the field from the total number of block by using Table 2.

Table 2 : Random table for the sample block

Total no. of block in the field	Block		Total no. of block in the field	Block		Total no. of block in the field	Block		Total no. of block in the field	Block		Total no. of block in the field	Block	
	No.1	No. 2		No.1	No. 2		No.1	No. 2		No.1	No. 2		No.1	No. 2
1	1	1	11	5	10	21	7	17	31	3	18	41	19	40
2	1	2	12	1	7	22	9	20	32	3	19	42	1	21
3	1	3	13	3	10	23	4	15	33	13	29	43	5	23
4	1	3	14	4	11	24	8	20	34	5	22	44	12	34
5	2	5	15	6	14	25	8	20	35	10	28	45	12	34
6	2	5	16	1	9	26	5	18	36	17	35	46	1	24
7	2	6	17	4	13	27	2	16	37	6	25	47	19	43
8	4	8	18	1	10	28	9	23	38	18	37	48	16	40
9	2	7	19	3	12	29	11	26	39	3	23	49	11	36
10	5	10	20	1	10	30	1	16	40	1	21	50	4	29

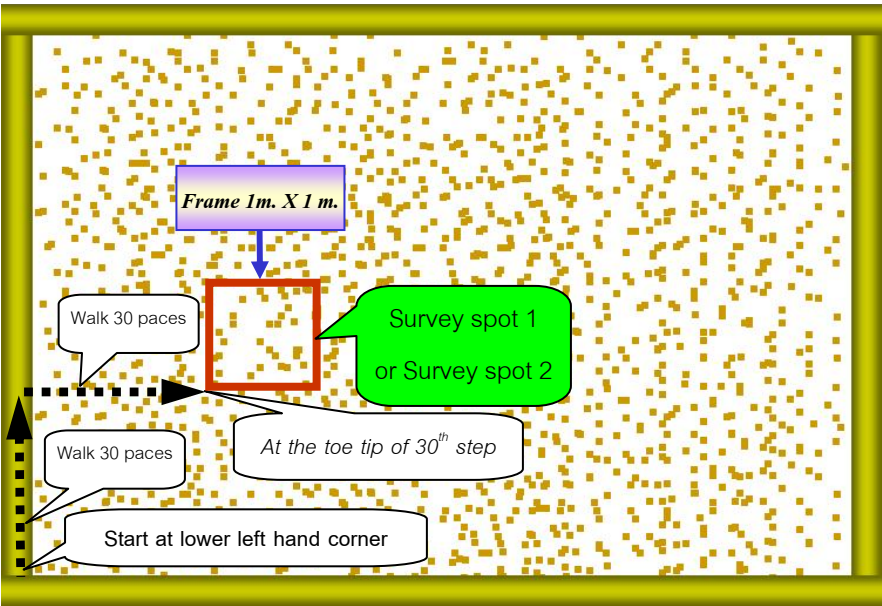
3.3.3 Random of the survey spot and the collecting of production

Use 30 paces method in order to do a random survey on 2 survey spots as follows;

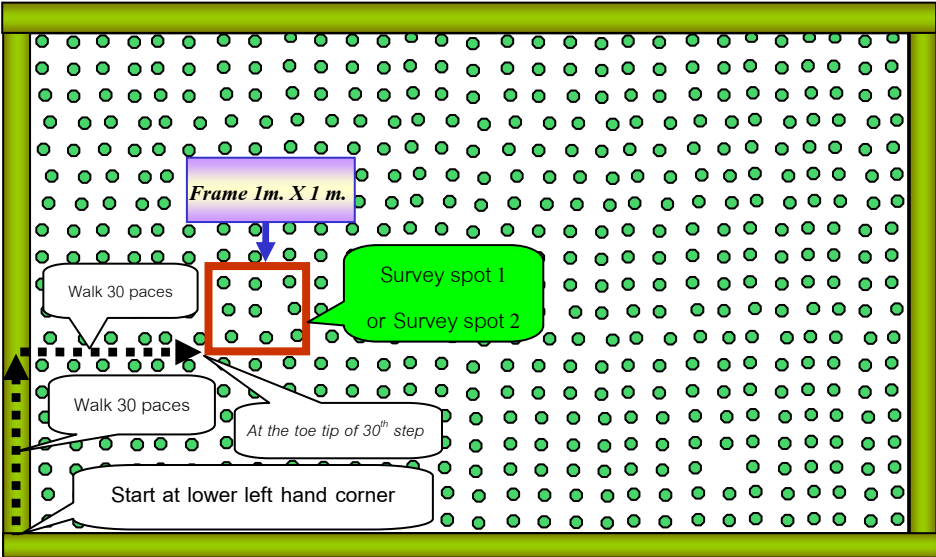
- From the lower left-hand corner, walk along the edge of the firm field for 30 steps and turn right or left into the firm field and walk in for another 30 steps. The right-hand block is the first survey spot.
- From the upper right-hand corner, walk along the edge of the firm field for 30 steps and turn right or left into the firm field and walk in for another 30 steps. The right-hand block is the second survey spot.
- Place frame at the end of 30th paces on the left hand side, it takes 1 square meter
- Collect the major rice production only under frame
- Put the production gathered from 2 survey spots into each bag and fill out the tag to each bag
- Dry the production

Follows these steps for the survey operation

Picture 1: Shows major rice crop cutting survey in broadcasting field



Picture 2: Shows major rice crop cutting survey in transplanting field



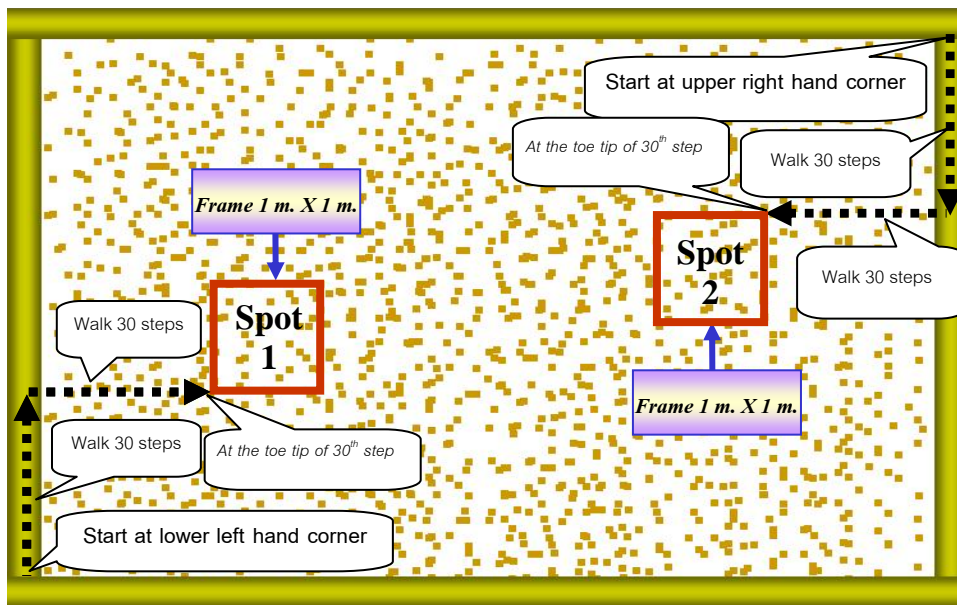
For the survey spot no. 2, do the same practices as survey spot no. 1

If there is only 1 field block in the sample field, follows this procedure:

- Survey spot 1** - From the lower left-hand corner, walk along the edge of the firm field for 30 steps and turn right or left into the firm field and walk in for another 30 steps.

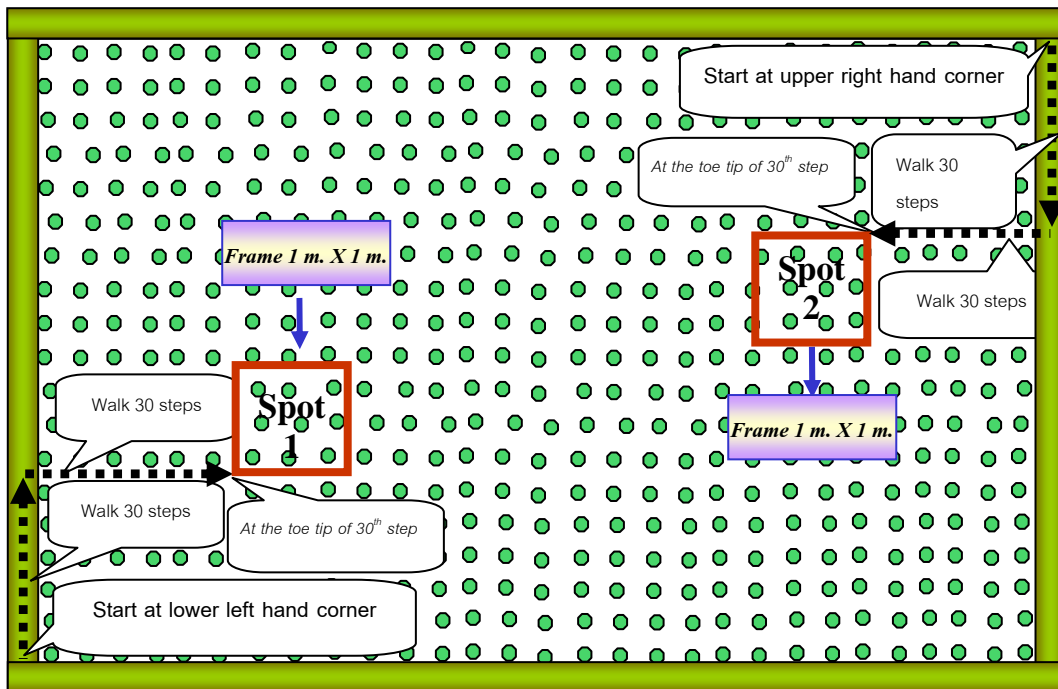
- Survey spot 2** - From the upper right-hand corner, walk along the edge of the firm field for 30 steps and turn right or left into the firm field and walk in for another 30 steps.

Follows these steps for the survey operation



Picture 3: Crop cutting in the broadcasting rice field, in case there is only 1 block field in the sample field

Picture 4: Crop cutting in the transplanting rice field, in case there is only 1 field block in the sample field



4. Hand in the survey note and equipment

Hand in survey notes after completed and checked the accuracy, return production bags and equipment by making appointment with ROAE Officer.

5. Description of the tag to attach the bag for harvested major rice

Harvested	Sample household Name:			Sample no.		Survey spot 1, 2
Date	Province	District	Sub-district	Moo	Officer/SorKorThor. Name	

Circle the number to identify survey spot number

List of major rice farm household, crop year 2006/2007

Form 1

Village name..... Moo..... Tumbon.....

District..... Province..... ROAE.....

Officer/Volunteer Name..... Surname.....

Date..... Month..... Year

No.	Name list of major rice farm household	Remarks
1		
2		
3		
4		
5		
6		
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11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

No.	Name list of major rice farm household	Remarks
31		
32		
33		
34		
35		
36		
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38		
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60		

List of major rice farm household, crop year 2006/2007 (continued)

Form 1

No.	Name list of major rice farm household	Remarks	No.	Name list of major rice farm household	Remarks
61			101		
62			102		
63			103		
64			104		
65			105		
66			106		
67			107		
68			108		
69			109		
70			110		
71			111		
72			112		
73			113		
74			114		
75			115		
76			116		
77			117		
78			118		
79			119		
80			120		
81			121		
82			122		
83			123		
84			124		
85			125		
86			126		
87			127		
88			128		
89			129		
90			130		
91			131		
92			132		
93			133		
94			134		
95			135		
96			136		
97			137		
98			138		
99			139		
100			140		

Crop year 2006/2007

Village name..... Moo..... Tumbon.....
 District Province..... ROAE.....
 Officer/Volunteer Name..... Surname.....
 Date..... Month..... Year

Sample Household number	Name list of major rice farm household	Field survey		Reason
		Yes	No	
1				
2				
3				
Reserve No. 1				To replace sample household No.
Reserve No. 2				To replace sample household No.
Reserve No. 3				To replace sample household No.

In case of select the reserve sample household, select the farm household alternately upper and lower of the actual sample household by using the list (Form 1). For example, in case of the actual sample household is No. 21, Reserve samples are No. 20, 22, 19, 23 respectively.

Random table of sample households											
Total No. of household	Sample household No.			Total No. of household	Sample household No.			Total No. of household	Sample household No.		
	1	2	3		1	2	3		1	2	3
1-5	1	2	3	51-55	11	28	45	101-105	21	58	95
6-10	2	4	6	56-60	12	31	50	106-110	22	62	102
11-15	3	7	11	61-65	13	34	55	111-115	23	65	107
16-20	4	9	14	66-70	14	38	66	116-120	24	68	112
21-25	5	11	17	71-75	15	42	69	121-125	25	72	119
26-30	6	14	22	76-80	16	46	76	126-130	26	75	124
31-35	7	17	27	81-85	17	48	79	131-135	27	78	129
36-40	8	20	22	86-90	18	51	84	136-140	28	80	132
41-45	9	23	37	91-95	19	54	87				
46-50	10	26	40	96-100	20	56	92				

Survey form on Major Rice production per rai,

Form 3

Crop year 2006/2007

Sample Household No. **1**

1. Sample household data

Name		Address						Telephone No.		
Total farming area (rai)	No. of planted field (field)	No. of harvested field (field)	Field No.	Sample field area (rai)	Total block in the field (block)	Sample block		Type of rice		Variety name (Specific)
						Block No.	Area (rai-ngan)	Nonglutinous	Glutinous	

1. Sample household data (Part 1)

Planting method				Irrigation zone		Water source			Planted		Harvested		Growing condition	Cause
Transplant	*Broadcast 1	*Broadcast 2	Drop	In zone	Off zone	Irrigation	Rain	Pond	Month	Year	Month	Year		
5, 4, 3, 2, 1														

*Broadcast 1: SumRuay Broadcast 2: NumTom

Circle the number 5=Excellent, 4=Good, 3=Normal, 2=poor, 1=very

1. Sample household data (Part 2)

No. of seed volume used per rai (kg.)	Use of fertilizer				Use of		Use of machine				Technical assistance for planting by	Present year		Previous year	
	organic/ compost others		Chemical		herbicide/ insecticide	Soil preparation		Harvesting		Yield per rai (kg.)		Moisture (%)	Yield per rai (kg.)	Moisture (%)	
	Yes	No	Yes	No		Yes	No	Yes	No						

2. Field survey data

Date of survey...../...../.....

	Weight of grains including the bag per 1 squaremeter (kg.)	Weight of the bag (kg.)	Net weight per 1 squaremeter (kg.)	Moisture (%)	Yield per rai (kg.)	Production per rai at moist of 14 % (kg.)
	(1)	(2)	(3) = (1) - (2)	(4)	(5) = (3)x1,600	(6) = (5) x [(100-(4))/86]
Survey spot 1						
Survey spot 2						
Average of 2 survey spots					(7) = (Spot1+2)/2	(8) = (Spot1+2)/2

3. Map : Illustration of the location, shape and position of two survey spots

<p>3.1 Illustrating all of the farm fields of which the sample farm household has in the village</p>	<p>3.2 Shape of the sample farm field and location of two survey spots</p>
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Information for Sample Farm Households

1. The Office of Agricultural Economics is responsible for collection of all kind of agricultural data. The Government of Japan has been providing cooperation and support to the survey of the farm production per rai for the major rice correctly and accurately in accordance with the fact.
2. The Office of Agricultural Economics would like to ask for cooperation from the sample farm households to help and facilitate the field survey for the production per rai.
3. Three households are randomly selected from the major rice planted farm household in the sample village as the representative of the village.
4. The survey is conducted by the volunteers called the "Local Agricultural Economist (SorKorThor.)". They are assigned to contact the survey by the government officers.
5. The objective and survey procedure are as follows.

"The objective of this survey is to assess the average production of major rice per rai in this province through actual crop cutting, counting, measuring and weighing of the major rice in two survey spots (3 meters in length per spot). The survey spots are selected randomly in the sample farm fields which are selected from three sample farm households in this village.

The result of the survey will be used for making of statistics only. The government guarantees that the data of this survey will not be used for other objectives such as taxation, assessment of income and other."

6. You are requested to cooperate with the volunteer (SorKorThor.) who is the representative of the government and to assist the measuring, cutting and weighing the major rice in your sample farm field in accordance with the method and procedure provided by the authority.
7. The Office of Agricultural Economics will pay 200 baht for your time and assistance contributed to the government.

Signature.....(Signed)

(.....) (Legible)

Date2006

Example

List of major rice farm household, crop year 2006/2007

Form 1

Village name.....Tungterng..... Moo.....5..... Tumbon.....Pong.....

District.....Daansai..... Province.....Leoi..... ROAE.....3...

Officer/Volunteer Name.....Mr.Sutrong..... Surname.....Rakdee.....

Date.....20..... Month.....December..... Year2006.....

No.	Name list of second rice farm household	Remarks
1	Ms.Kesorn Piluk	
2	Ms.Ku Ketharn	
3	Ms.Jumlong Kulabud	
4	Ms.Duannoi Prasobbua	
5	Ms.Tuanjai Srilapong	
6	Ms.Tumma Haewpetch	
7	Ms.Phun Jungjaichit	
8	Ms.Marium Bangburid	
9	Mr.Lumduan Kaewsuy	available
10	Ms.Ladda Suksabai	
11	Ms.Sornngam Kaewngam	
12	Ms.Sanong Lekklan	
13	Ms.Somsong Pansri	
14	Ms.Panee Kumlee	
15	Ms. Umpa Tanaut	
16	Mr.Kaew Sukanha	
17	Mr.Kum Hedvichai	
18	Mr.Jarun Tapeng	
19	Mr.Jan Kwangkwang	
20	Mr.Jantip Tasonthi	
21	Mr.Jan Suniprom	
22	Mr.Jumnong Janthong	
23	Mr.Jaroen Piangnoi	available
24	Mr.Jai Pansa	
25	Mr.Chalood Liangwong	
26	Mr.Chaaim Nikocha	
27	Mr.Chan Yimsuan	
28	Mr.Chu Aunprom	
29	Mr. Chum Buunmawong	
30	Mr.Decha Paanchart	

No.	Name list of second rice farm household	Remarks
31	Mr.Pradit Samantrakul	
32	Mr.Peng Tuitriam	
33	Mr.Pajon Sinbunma	
34	Mr.Pad Kaewkar	
35	Mr.Fon Piangjai	
36	Mr.Pornchai Somfun	available
37	Mr.Puang Meeyuilem	unavailable
38	Mr.Pad Punruen	
39	Mr.Panlop Potipan	
40	Mr.Monpai Pothong	
41	Mr.Manus Konsuwan	
42	Mr.Umnart Jaroensuk	
43	Mr.Ekachai Waiwut	
44		
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List of sample households for the survey of major rice yield per rai, Form 2

Example

Crop year 2006/2007

Village name.....Tungterng..... Moo.....5..... Tumbon.....Pong.....

DistrictDaansai..... Province..... Leoi..... ROAE....3...

Officer/Volunteer Name.....Mr.Sutrong..... Surname.....Rakdee.....

Date.....20..... Month.....December..... Year2006.....

Sample Household number	Name list of second rice farm household	Field survey		Reason
		Yes	No	
1	Mr. Lumduan Kaewsuay	✓		
2	Mr.Jaroen Plengnoi	✓		
3	Mr.Puang Meeyuilem		✓	
Reserve No. 1	Mr.Pornchai Somfun	✓		To replace sample household No.3
Reserve No. 2				To replace sample household No...
Reserve No. 3				To replace sample household No...

In case of select the reserve sample household, select the farm household alternately upper and lower of the actual sample household by using the list (Form 1). For example, in case of the actual sample household is No. 21, Reserve samples are No. 20, 22, 19, 23 respectively.

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Total No. of household	Sample household No.			Total No. of household	Sample household No.			Total No. of household	Sample household No.		
	1	2	3		1	2	3		1	2	3
1-5	1	2	3	1-55	11	28	45	1-105	21	58	95
1-10	2	4	6	1-60	12	31	50	1-110	22	62	102
1-15	3	7	11	1-65	13	34	55	1-115	23	65	107
1-20	4	9	14	1-70	14	38	66	1-120	24	68	112
1-25	5	11	17	1-75	15	42	69	1-125	25	72	119
1-30	6	14	22	1-80	16	46	76	1-130	26	75	124
1-35	7	17	27	1-85	17	48	79	1-135	27	78	129
1-40	8	20	32	1-90	18	51	84	1-140	28	80	132
1-45	9	23	37	1-95	19	54	87				
1-50	10	26	40	1-100	20	56	92				

Survey form on Major Rice production per rai,

Form 3

Crop year 2006/2007

Sample Household No. **1**

Example

1. Sample household data

Name		Address					Telephone No.			
Total farming area (rai)	No. of planted field (field)	No. of harvested field (field)	Field No.	Sample field area (rai)	Total block in the field (block)	Sample block		Type of rice		Variety name (Specific)
						Block No.	Area (rai-ngan)	Nonglutinous	Glutinous	
18	2	2	2	8	5	2	1 - 2	✓		Jasmine
						5	2 - 3	✓		Jasmine

1. Sample household data (Part 1)

Planting method				Irrigation zone		Water source			Planted		Harvested		Growing condition	Cause
Transplant	Broadcast 1	Broadcast 2	Drop	In zone	Off zone	Irrigation	Rain	Pond	Month	Year	Month	Year		
✓				✓			✓		06	2549	12	2549	5, 4, 3, 2 , 1	Flood
✓				✓			✓		06	2549	12	2549		Flood

Circle 2 the number 5=Excellent, 4=Good, 3=Normal, 2=poor, 1=very

1. Sample household data (Part 2)

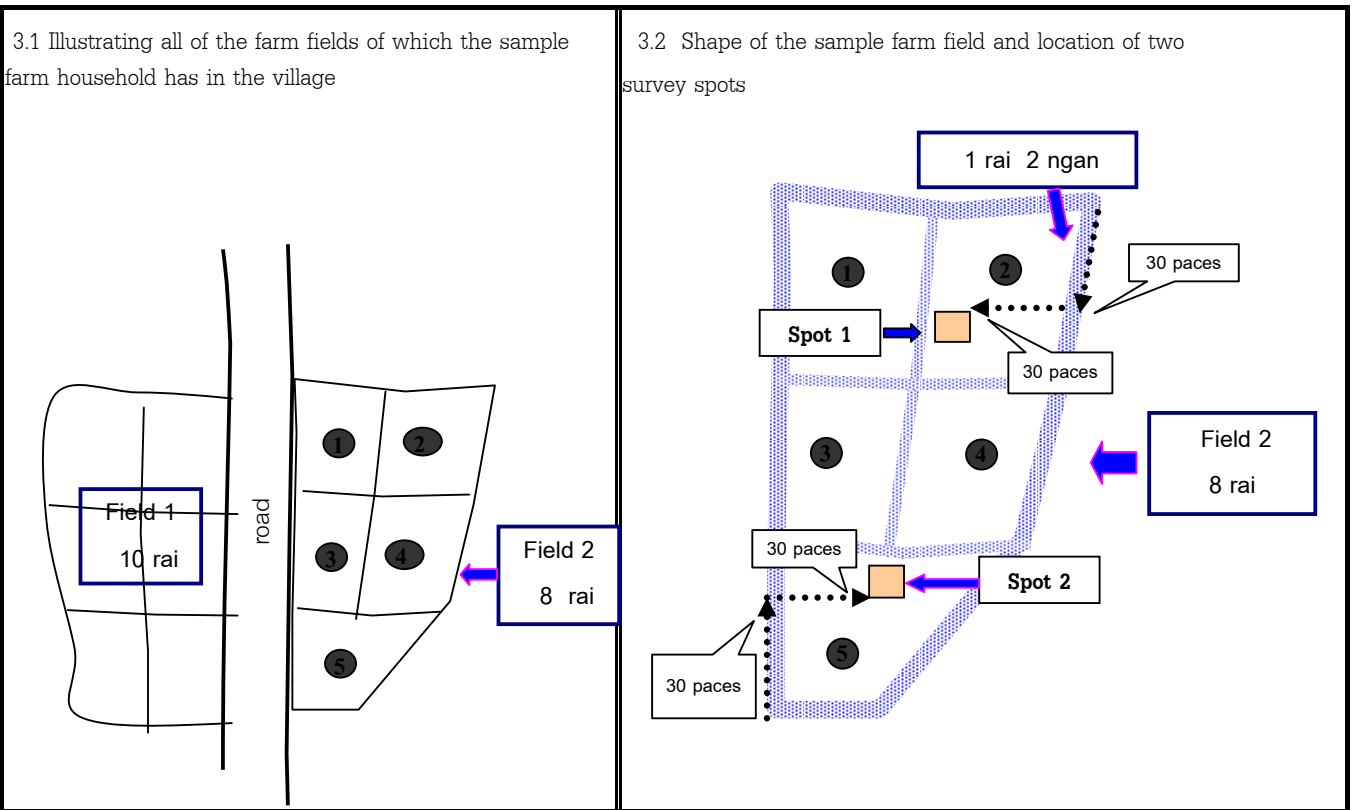
No. of seed volume used per rai (kg.)	Use of fertilizer				Use of herbicide/insecticide		Use of machine				Technical assistance for planting by Neighbor	Present year		Previous year	
	organic/compost		Chemical others		Yes	No	Soil preparation		Harvesting			Yield per rai (kg.)	Moisture (%)	Yield per rai (kg.)	Moisture (%)
	Yes	No	Yes	No			Yes	No	Yes	No					
10	✓		✓		✓		✓			✓		350	20	400	18

2. Field survey data

Date of survey...../...../.....

	Weight of grains including the bag per 1 squaremeter (kg.)	Weight of the bag (kg.)	Net weight per 1 squaremeter (kg.)	Moisture (%)	Yield per rai (kg.)	Production per rai at moist of 14 % (kg.)
	(1)	(2)	(3) = (1) - (2)	(4)	(5) = (3)x1,600	(6) = (5) x [(100-(4))/86]
Survey spot 1	0.42	0.20	0.22	20	352.00	327.44
Survey spot 2	0.55	0.20	0.35	18	560.00	533.95
Average of 2 survey spots					(7) = (Spot1+2)/2	(8) = (Spot1+2)/2
					456.00	430.70

3. Map : Illustration of the location, shape and position of two survey spots



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The result of the survey will be used for making of statistics only. The government guarantees that the data of this survey will not be used for other objectives such as taxation, assessment of income and other."

6. You are requested to cooperate with the volunteer (SorKorThor.) who is the representative of the government and to assist the measuring, cutting and weighing the major rice in your sample farm field in accordance with the method and procedure provided by the authority.

7. The Office of Agricultural Economics will pay 200 baht for your time and assistance contributed to the government.

Signature..... ล้ำดวน แก้วสาย.....(Signed)

(...Mr. Lumduan Kaewsai.....) (Legible)

Date25 December.....2006