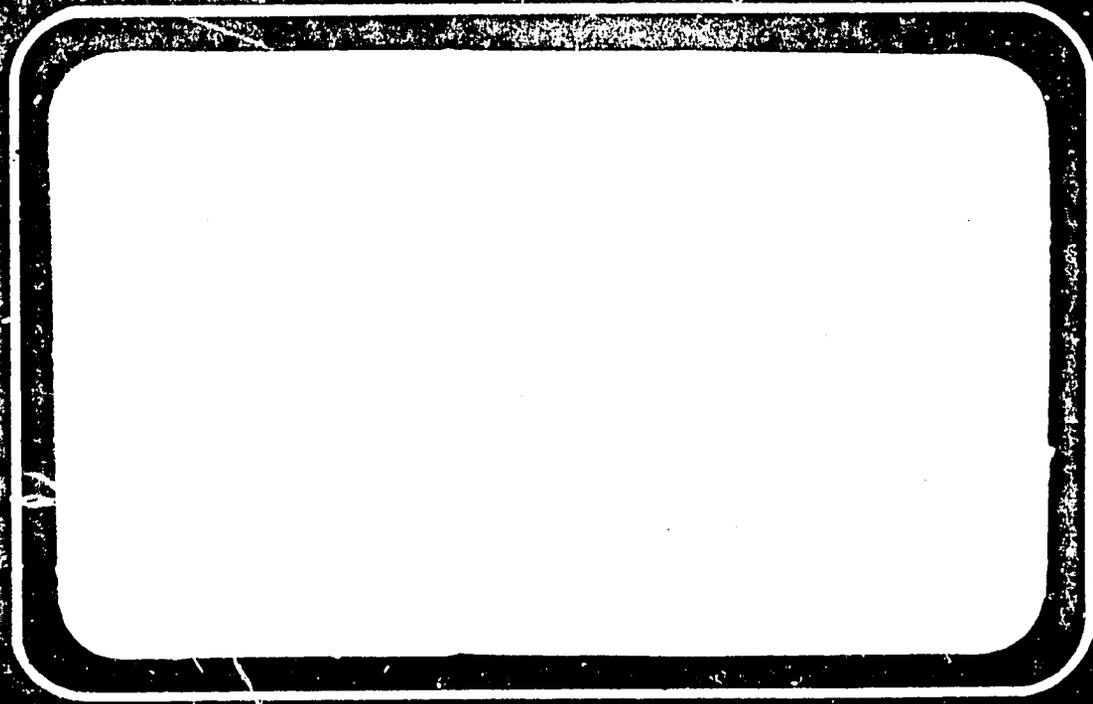


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คณะเศรษฐศาสตร์และบริหารธุรกิจ
FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION

มหาวิทยาลัยเกษตรศาสตร์
กรุงเทพฯ

KASETSART UNIVERSITY,
BANGKOK, THAILAND.

X Basic Baseline Data on Mukdahan
Land Settlement, 1976

Faculty of Economics & Business Administration
Kasetsart University
Bangkok
1978

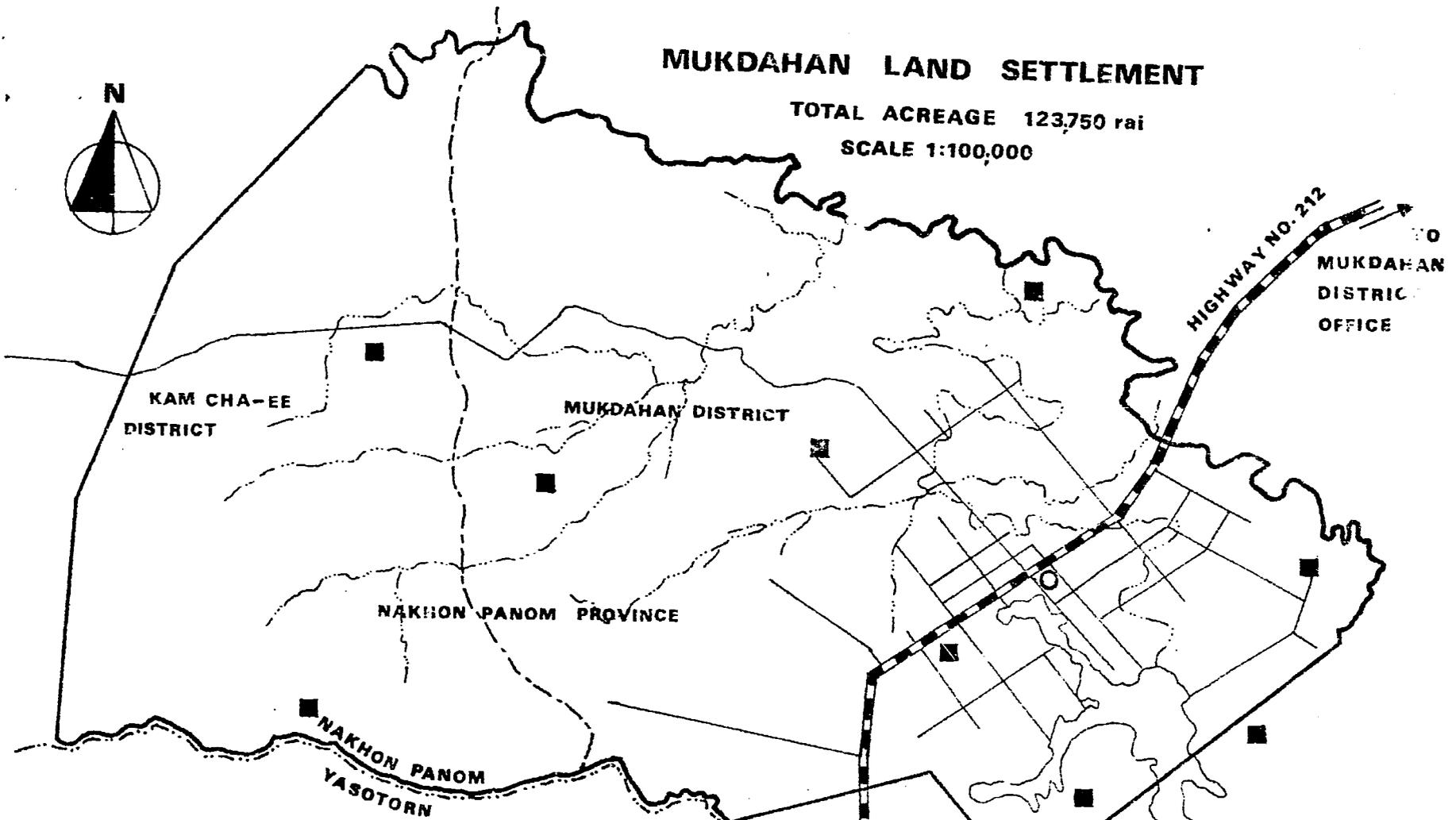
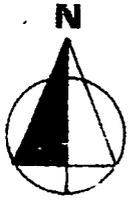
X Basic Baseline Data on Mukdahan Land Settlement, 1976

Land Settlement	<u>Mukdahan</u>
Location	<u>Nikom Kam Sroj</u> , subdistrict <u>Nakhon Panom</u> province
Year established	<u>1956</u>
Total area	<u>123,750</u> rais
Total area allocated	<u>38,400</u> rais
Official membership	<u>1,740</u> rais
Size of land plot	<u>25</u> rais

MUKDAHAN LAND SETTLEMENT

TOTAL ACREAGE 123,750 rai

SCALE 1:100,000



HIGHWAY NO. 212
TO
MUKDAHAN
DISTRICT
OFFICE

KAM CHA-EE
DISTRICT

MUKDAHAN DISTRICT

NAKHON PANOM PROVINCE

NAKHON PANOM
YASOTORN

TO YASOTORN PROVINCE

- | | |
|--------------------------|------------------------|
| LAND SETTLEMENT BOUNDARY | LAND SETTLEMENT OFFICE |
| PROVINCE BOUNDARY | ROAD |
| DISTRICT BOUNDARY | RESERVOIR |
| HIGHWAY | VILLAGE |
| CREEK | |

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X. 1. Brief Report on Mukdahan Land Settlement

Mukdahan land settlement was established in 1956. The total area under the project is about 123,750 rais. Until 1976, an amount of 38,400 rais has been allocated for farmers. The formal plot size for each family is 25 rais.

The interview covered 130 farmers all over the land settlement, 35 from zone 1, and 95 from zone 2. In addition, 10 non-settler farmers living adjacent to the land settlement were interviewed. Among survey settlers, 50% was members of the settlement's agricultural cooperatives, 27% was member of BAAC's credit group, 12.30% joined the USAID's sericulture group, and about 3.85% was member of PWD's sericulture group.

Farmers were first settled down in the area of zone 2 long before the establishment of the land settlement in 1956. On the average, 58% of survey settlers farm in the area over 15 years whereas only 49% of them became the settlement's member for a period of over 15 years.

The majority of heads of farm households were among age groups of 30-39, 40-49 and 50-59 years. Most family heads finished 4th grade schooling. The percentages of family heads who had no formal education for zone 1 and zone 2 were 8.6 and 19.9 respectively. The educational background of non-settlers found in the survey was very much similar to that of the settlers. The majority of farmer - settlers involved in upland crop farming, about one-third of them drew their main income from paddy cultivation.

The average family size of settlers was a little over 7. Out of this, 4.71 persons were in the working-age group (11-60 years old). On the average, 3.98 persons per family work on farm in the first season and about 0.6 person did that in the second farming season.

The survey revealed that a family held land about 36 rais which was about 10 rais larger than the official plot size. Out of the 10 rais, one-half each was from inside and outside of the settlement. Average land use in 1976 for zone 1 zone 2 and outside the settlement were 33.84 rais, 39.42 rais and 46.92 rais respectively.

About one-third of land was used for upland crop cultivation, 30% for paddy farming, 5% for fruit trees, and a little over 20% of land was left idle.

In considering the wealth of settlers, assets were grouped into five categories. Land accounted about two-thirds of the average value which was $\text{R} 51,288$. 'Building' and 'animals' were the only two significant asset groups. It was also revealed that settlers in zone 2 was wealthier than those in zone 1. Moreover, non-settlers found in the survey were less wealthy than the average settlers.

As far as crop production was concerned, the major part of land in Mukdahan land settlement was used for paddy production. Cassava, sugarcane and kenaf were among the rest of important crops. Groundnut was grown here for both seasons, but it was not significantly important in terms of acreage in 1976. Yields of most crops were about or a little below those of the average except for sugarcane which recorded about 6.5 tons per rai planted.

Among three groups of production cost items, family labor was the major part of it for both zones in the land settlement and outside it. Expenses on hired labor and machines were large only on crops of large acreage and required special harvest of processing such as sugar-cane, cassava, and kenaf. The breakdown of production cost into three groups of farm activities showed that cost on growing activity (care taking included) was the largest. Harvesting cost ranked second before expenses on land preparation activity.

Approximately 43% of settlers borrowed money in 1976. Their sources of borrowing in order of importance were cooperatives, banks, relatives, and merchants whose average loan sizes were ₱ 5,354, ₱ 6,349, ₱ 533, and ₱ 27,000 respectively. Only the loan from merchants was charged a high rate of interest of 18% per annum. Non-settlers did borrow money from the only credit source-banks with average loan size of ₱ 10,000.

As typically found in other land settlements, it was found here that the majority of rice and glutinous rice produced was for home-consumption needs, leaving a small portion of less than 5% for sale. For other crops, they were for sales mostly except in the case of sugar-cane and groundnut which was slightly kept as seed use.

The percentage of fruits and vegetables sold ranged from 67 for zone 2 to 90 for zone 1. Their corresponding values were ₱ 1,353 and ₱ 2,223 per farm.

The majority of farmer-settlers raised chicken and buffaloes. Duck and cattle raising was done by about one-fourth of the survey settlers.

Swine production was found only in zone 2 and of non-significant in terms of value produced.

As far as farm income was concerned, cassava, sugarcane, and glutinous rice were among the three most important sources of income. It was revealed that crop production in zone 2 was more profitable than that of zone 1.

The major sources of non-farm income included local trading, hired labor services, and salary which accounted for 81% of the average value per farm of ₪ 5,057. It should be mentioned that the average non-farm income of non-settlers was about one-half of that of the survey settlers.

The average family income per farm household ranged from ₪ 10,733 to ₪ 13,177 for settlers in zone 1 and zone 2 respectively. This was almost twice as much as those of the non-settlers. The main reason for a rather high income level in this settlement was probably due to the large amount of both income from fruits and vegetables, and non-farm income.

Expenses of fish, meat, and vegetables formed the major part of average weekly household expenditures of both settlers and non-settlers. On the monthly basis, expenses on rice constituted about two-thirds of its average monthly expenditures. Expenses on housing, medical care, and clothing were among the top three ranking items of annual consumption expenditures reported by farmers. Settlers here seemed to be better off economically than their counterpart non-settlers.

As far as savings was concerned, it was found that, on the average, 82% of settlers has saved their money in the amount of $\text{N} 5,069$ per family in 1976. Their most favorite form of savings was 'self kept in cash'. 'Loaned to relatives', 'deposit with the banks', and 'self kept as assets' were among the second favorite forms of savings. These patterns were true in all zones and also outside of the settlement.

The breakdown of settlers on silk worm rearing status showed that in 1976 about 12% reared silk worm on traditional method, 3% already joined the PWD's sericulture group, 1.5% completely stopped rearing, and 8.5% will soon join the USAID's sericulture project. Major reason for heads of farm households not participate in the sericulture project's training program themselves was 'too busy with other work'. Reasons for children not joining such training were they were still too young, and/or they were busy with other work'.

Among Mukdahan's settlers who were aware of the sericulture project, eligible, and ready to join it, about 18% indicated that they will not join the project.

Pilot farmers of USAID's sericulture project were normally asked questions about the project by other settlers. In Mukdahan, fifty percent each reported of having been asked, and never have been asked questions about the project.

About 50% of Mukdahan's settlers reported that they were not aware of the family planning program available in the settlement in 1976.

Approximately two-thirds of Mukdahan's settlers did not practice any form of birth control at the time of the survey. Among those who practiced, using pills, IDU, and sterilization were dominant.

As far as migration of family members was concerned, it was reported that about 49% of the survey households did have member migrated.

Nikom Mukdahan

X 2. Statistical Tables

Nikom Mukdahan

Table 1 Distribution of sample farms by zone and by Organization membership, 1976.

Organizations	farmer group					
	zone 1		zone 2		Total	
	No.	%	No.	%	No.	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Ag. cooperatives	25	71.42	40	42.10	65	50.00
2. BAAC's credit group	9	25.71	26	27.37	35	26.92
3. Thai-German group	--	--	--	--	--	--
4. FWD's sericulture	--	--	5	5.26	5	3.85
5. USAID's sericulture	16	45.71	--	--	16	12.30
6. Others	2	5.71	2	2.10	4	3.08

Nikom Mukdahan

Table 2 Percentage distribution of farm households by number of years farmed in the settlement area and number of years became settlers, by zone, 1976.

Category	Number of years				
	5 and less	6-10	11-15	over 15	total
(1)	(2)	(3)	(4)	(5)	(6)
<u>SETTLERS</u>					
Zone 1					
A	5.7	11.3	31.4	51.6	100.0
B	11.6	11.4	40.0	37.0	100.0
Zone 2					
A	3.3	9.6	26.5	60.6	100.0
B	7.3	12.6	26.3	53.8	100.0
Total					
A	3.8	10.0	27.7	58.4	100.0
B	8.4	12.3	30.0	49.3	100.0
<u>NON-SETTLERS</u>					
A	-	10.0	60.0	30.0	100.0

Note : A = number of years farmed in the (settlement) area
 B = number of years became settlers

Table 3 Percentage distribution of heads of farm households by sex, age group and zone , 1976.

Category	Age group (years)					total
	under 30	30-39	40-49	50-59	60 & over	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>SETTLERS</u>						
<u>Zone 1</u>						
male	5.7	28.6	31.4	19.9	5.7	91.3
female	-	-	5.8	2.9	-	8.7
total	5.7	28.6	37.2	22.8	5.7	100.0
<u>Zone 2</u>						
male	6.4	18.9	29.4	17.9	21.0	93.6
female	-	1.1	-	3.2	2.1	6.4
total	6.4	20.0	29.4	21.1	23.1	100.0
<u>Total</u>						
male	6.2	21.5	30.0	18.5	16.9	93.1
female	0	0.8	1.5	3.1	1.5	6.9
total	6.2	22.3	31.5	21.6	18.5	100.0
<u>NON-SETTLERS</u>						
male	-	-	10.0	80.0	10.0	100.0
female	-	-	-	-	-	-
total	-	-	10.0	80.0	10.0	100.0

Table 4 Education among heads of farm households, by age group, 1976.

Category	% of heads of farm households by age group					
	20-29 years	30-39 years	40-49 years	50-59 years	over 60 years	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>SETTLERS</u>						
<u>Zone 1</u>						
- below 4 th grade	-	-	2.9	-	-	2.9
- 4 th grade	5.7	25.7	34.3	14.3	2.9	82.8
- 5 th - 7 th grade	-	-	-	-	2.9	2.9
- higher than 7 th grade	-	2.9	-	-	-	2.9
- No formal education/ uneducated	-	-	2.9	2.9	2.9	8.6
<u>Zone 2</u>						
- below 4 th grade	-	2.1	1.1	4.3	5.3	12.7
- 4 th grade	9.5	14.7	21.1	10.5	7.4	63.2
- 5 th - 7 th grade	1.1	-	-	-	1.1	2.1
- higher than 7 th grade	-	1.1	3.2	1.1	-	5.3
- No formal education/ uneducated	-	1.1	4.3	5.3	6.3	19.9
<u>Total</u>						
- below 4 th grade	-	1.54	1.54	3.08	3.85	10.0
- 4 th grade	8.46	17.69	24.62	11.54	6.15	68.46
- 5 th - 7 th grade	0.77	-	-	-	1.54	2.31
- higher than 7 th grade	-	1.54	2.31	0.77	-	4.62
- No formal education/ uneducated	-	0.77	3.85	4.62	5.38	14.62
<u>NON-SETTLERS</u>						
- below 4 th grade	-	-	-	-	-	-
- 4 th grade	-	-	10.0	70.0	10.0	90.0
- 5 th - 7 th grade	-	-	-	-	-	-
- higher than 7 th grade	-	-	-	-	-	-
- No formal education/ uneducated	-	-	-	10.0	-	10.0

Nikom Mukdahan

Table 5 Main income source of farm households, 1976.

Unit : 8				
Category	Settlers			Non-settlers
	Zone 1	Zone 2	Total	
(1)	(2)	(3)	(4)	(5)
Paddy farming	2.86	43.40	32.20	10.00
Upland crop farming	88.57	54.35	63.78	60.00
Vegetable farming	2.86	1.09	1.57	-
Orchard farming	-	1.09	0.79	-
Cattle-buffalo raising	2.86	-	0.79	-
Civil service & other service	2.86	-	0.79	10.00
Total	100	100	100	100

Table 3 Land holding among farmers by zone, 1976.

Category	Land use (rai)					
	zone 1		zone 2		Total	
	average	%	average	%	average	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Inside settlement</u>						
Land owned	29.96	68.53	31.30	79.40	30.94	81.61
Land rented in	0.74	2.19	0.44	1.12	0.52	1.37
Land rented free	0.63	1.86	0.16	0.41	0.28	0.74
<u>Outside settlement</u>						
Land owned	1.83	5.41	7.38	18.72	5.38	15.51
Land rented in	-	-	0.11	0.28	0.08	0.21
Land rented free	0.68	2.01	0.03	0.08	0.21	0.55
Total	33.84	100	39.42	100	37.91	100

Table 7 Average land use by zone, 1976.

Type	Settlers						Non-settlers	
	zone 1		zone 2		Total		Av.	%
	Av.	%	Av.	%	Av.	%		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Paddy crops	10.17	30.05	12.39	31.44	11.79	31.10	10.30	21.95
Upland crops	12.33	36.44	11.66	29.59	11.84	31.23	10.10	21.53
Fruit trees	2.23	6.59	1.52	3.96	1.71	4.51	2.10	4.48
Mulberry	0.94	2.77	0.42	1.07	0.56	1.48	0.28	0.60
Others	6.33	18.71	11.39	28.89	10.03	26.46	22.64	48.25
Home	1.84	5.44	2.03	5.15	1.96	5.22	1.50	3.20
Total	33.84	100	39.42	100	37.91	100	46.92	100

Nikom Mukdahan

Table 3 Average value of farm assets at the end of 1976 by zone.

Unit : Baht per farm

Category	Settlers			Non-settlers
	Zone 1	Zone 2	Total	
(1)	(2)	(3)	(4)	(5)
Land	45,200 (65.81)	53,532 (65.57)	51,288 (65.63)	52,150 (68.52)
Building	11,901 (17.33)	15,291 (18.73)	14,379 (18.40)	13,415 (17.63)
Animals	7,717 (11.24)	10,222 (12.52)	9,547 (12.22)	8,715 (11.45)
Equipment & machinery	3,561 (5.18)	2,278 (2.79)	2,624 (3.36)	1,353 (1.78)
Others	299 (0.44)	312 (0.38)	308 (0.39)	475 (0.62)
Total	68,678 (100.00)	81,635 (100.00)	78,146 (100.00)	76,108 (100.00)

Note : The numbers in brackets are percentage.
 The 'Land' category includes only farmers' own land.
 The 'Building' category includes farm house, storage, and animal shelter. Cattle, buffaloes, swine, chicken, and ducks belong to the 'animal' category. The 'equipment & machinery' category includes all farm's equipment and machines. 'Others' includes only farm's well.

Nikom Mukdahan

Table 9 Average value of non-farm assets at the end of 1976 by zone.

Category	Unit : Baht			
	Settlers			Non-settlers
	zone 1	zone 2	total	
(1)	(2)	(3)	(4)	(5)
1. Desks, Chairs, Closets	254.43	423.06	378.10	175.50
2. Bed room furniture	984.86	1,106.57	1,073.80	1,075.00
3. Watches, clocks	224.29	243.32	238.19	220.00
4. Radios, Television sets	206.29	331.37	297.69	220.00
5. Gun	310.59	390.32	368.85	100.00
6. Iron, sewing machines	249.34	304.20	347.95	7.00
7. Gold ornaments	185.71	212.11	205.00	-
8. Bicycles	408.57	442.74	433.54	455.00
9. Motorcycles	-	193.68	141.54	-
10. Water containers	127.14	121.43	122.97	128.00
11. Lamp	81.17	40.77	51.65	18.80
12. Kitchenware	315.71	381.89	364.08	408.00
13. Others	1,014.29	1,417.32	1,524.19	-
Total	5,162.37	5,689.45	5,547.55	2,807.30

Table 10 Distribution of family size and average member per farm, 1976.

Category	Family size (no. of person)				
	under 4	4-6	7-9	more than 9	total
(1)	(2)	(3)	(4)	(5)	(6)
<u>SETTLERS</u>					
<u>Zone 1</u>					
- % of farm households	11.42	31.14	31.43	20.01	100.0
- average member per farm	3.00	4.85	7.45	15.14	7.51
<u>Zone 2</u>					
- % of farm households	8.42	41.05	34.74	15.79	100.0
- average member per farm	2.63	5.10	8.00	11.00	6.96
<u>Total</u>					
- % of farm households	9.23	40.00	33.85	16.92	100.0
- average member per farm	2.75	5.04	7.86	12.86	7.11
<u>NON-SETTLERS</u>					
- % of farm households	10.0	10.0	70.0	10.00	100.0
- average member per farm	3.00	6.00	7.29	10.00	7.00

Table 11 Percentage distribution of family by number of children and average children per family, by zone, 1976.

No. of children	Settlers						Non-settlers	
	zone 1		zone 2		total		A	B
	A	B	A	B	A	B		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
no children	2.9	-	-	-	0.8	-	-	-
1 - 3	34.3	2.3	23.2	2.6	26.2	2.5	-	-
4 - 6	37.1	5.3	38.9	4.9	38.5	5.1	30.0	5.3
7 - 9	20.0	7.6	29.5	7.8	26.9	7.8	60.0	8.2
10 & over	5.8	23.0	8.4	10.6	7.7	23.6	10.0	10.0
Total	100.0	4.9	100.0	5.7	100.0	5.5	100.0	7.5

Note : A = percentage of family
 B = average children per family

Table 12 Average family member and their work on farms by zone and age group, 1976.

age group	Settlers									Non-settlers		
	zone 1			zone 2			total			1	2	3
	1	2	3	1	2	3	1	2	3			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
under 11	2.09	-	-	2.16	0.03	0.20	2.16	0.02	0.01	1.5	0.1	-
11 - 13	0.36	0.29	0.06	0.67	0.21	0.02	0.72	0.23	0.03	0.8	0.3	-
14 - 18	1.23	1.23	0.17	0.98	0.83	0.03	1.05	0.94	0.07	1.8	1.6	0.1
19 - 55	3.00	2.77	0.43	2.69	2.43	0.40	2.78	2.52	0.41	2.3	2.2	0.2
56 - 60	0.11	0.06	-	0.18	0.15	0.04	0.16	0.12	0.03	0.5	0.4	-
over 60	0.23	0.06	-	0.27	0.18	0.07	0.26	0.15	0.05	0.1	0.1	-
Total	7.51	4.40	0.60	6.96	3.83	0.59	7.11	3.98	0.61	7.0	4.7	0.3

Note : 1 = average member of farm households.
 2 = average member who work on farm in first season.
 3 = average member who work on farm in second season.

Table 13 Amount of credit, by source of loan among farmer-borrowers, 1976.

Category	Source of loan					
	Merchants	Neighbors	Relatives	Banks	Cooperatives	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>SETTLERS</u>						
<u>Zone 1</u>						
- % of farmer-borrower	-	-	2.86	17.15	37.29	-
- amount per farmer-borrower (₱)	-	-	500.00	3,003.33	5,076.92	-
- average interest rate (%)	-	-	0.00	12.00	12.00	-
<u>Zone 2</u>						
- % of farmer borrower	1.05	-	2.10	14.73	18.95	-
- amount per farmer-borrower (₱)	27,000.00	-	550.00	7,748.56	5,555.55	-
- average interest rate (%)	18.00	-	0.00	12.00	12.00	-
<u>Total</u>						
- % of farmer borrower	0.77	-	2.31	15.96	24.70	-
- amount per farmer-borrower	27,000.00	-	533.33	6,348.99	5,354.84	-
- average interest rate (%)	18.00	-	0.00	12.00	12.00	-
<u>NON-SETTLERS</u>						
- % of farmer-borrower	-	-	-	10.00	-	-
- amount per farmer-borrower (₱)	-	-	-	10,000.00	-	-
- average interest rate (%)	-	-	-	12.00	-	-

Table 14 Percentage of farmers who borrowed and average loan size, by type of loan and zone, 1976.

Category	Zone 1	Zone 2	Total
1. % of borrower on short-term loan	37.14	31.58	33.08
2. average short-term loan (₪)	4,115	6,353	5,676
3. % of borrower on intermediate term loan	17.14	7.37	10.00
4. average intermediate-term loan(₪)	4,833	4,929	4,885

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Table 15 Amount of credit by type and source of loan, 1976.

Category	Sources of loan					
	Merchants	Neighbors	Relatives	Banks	Cooperatives	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Zone 1</u>						
Short-term loan						
% borrowed	-	-	2.86	11.33	25.71	-
average amount (₪)	-	-	500	3,375	4,667	-
Intermediate-term loan						
% borrowed	-	-	-	5.71	11.44	-
average amount (₪)	-	-	-	2,500	6,000	-
<u>Zone 2</u>						
Short-term loan						
% borrowed	1.05	-	2.11	14.74	13.86	-
average amount (₪)	27,000	-	550	6,606	5,385	-
Intermediate-term loan						
% borrowed	-	-	-	2.11	5.26	-
average amount (₪)	-	-	-	5,750	4,600	-
<u>Total</u>						
Short-term loan						
% borrowed	0.77	-	2.31	13.85	16.92	-
average amount (₪)	27,000	-	533	3,533	5,782	-
Intermediate-term loan						
% borrowed	-	-	-	3.08	6.92	-
average amount (₪)	-	-	-	4,125	5,222	-

Table 16 Number of farmer-savers and their average savings by zone and type of savings, 1976.

Category	Settlers			Non-settlers
	total	zone 1	zone 2	
(1)	(2)	(3)	(4)	(5)
1. Kept by relatives				
- no. of farm h.h.	7	4	3	0
- av. amount per h.h. (₪)	115.38	228.57	73.68	-
2. Loaned to relatives				
- no. of farm h.h.	35	13	22	3
- av. amount per h.h. (₪)	1,048.08	1,280.00	962.63	800.00
3. Loaned to others				
- no. of farm h.h.	9	4	5	2
- av. amount per h.h. (₪)	200.00	300.57	187.37	1,400.00
4. Self kept in cash				
- no. of farm h.h.	96	31	65	10
- av. amount per h.h. (₪)	1,810.54	2,502.80	1,555.47	3,450.00
5. Self kept as assets				
- no. of farm h.h.	21	10	11	2
- av. amount per h.h. (₪)	632.31	651.43	625.26	550.00
6. Deposit with banks				
- no. of farm h.h.	23	5	18	3
- av. amount per h.h. (₪)	1,243.46	755.71	1,423.16	2,000.00
Total				
- no. of farm h.h.	107(82.31)	33(94.28)	74(77.89)	10(100.0)
- av. amount per h.h. (₪)	5,069.77	5,727.14	4,827.58	8,200.00

Table 17 Distribution of Farms by Crops Grown and area planted by zone,
1976.

unit:rai

Categories	Settlers						Non-settlers	
	Zone 1		Zone 2		Total		no. of farm	area planted
	no. of farm	area planted	no. of farm	area planted	no. of farm	area planted		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>First season</u>								
Rice	8	70.00	13	208.00	21	278.00	1	15.00
Glutinous rice	23	286.00	63	973.50	86	1,259.50	8	86.00
Upland rice	-	-	1	2.00	1	2.00	-	-
Ground nut	1	1.00	11	29.25	12	30.25	2	5.00
Mungbean	-	-	-	-	-	-	1	3.00
Sugarcane	3	19.00	37	431.50	40	450.50	-	-
Cassava	30	353.00	67	484.25	97	837.25	9	85.00
Kenaf	10	40.50	37	145.50	47	186.00	2	8.00
<u>Second season</u>								
Ground nut	-	-	1	3.00	1	3.00	-	-
Cassava	-	-	1	10.00	1	10.00	-	-

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Table 18 Average yield per rai on planted and harvested area, by type of crops, 1976.

Unit : kg/rai									
Crops	Settlers						Non-settlers		
	zone 1		zone 2		total		1	2	
	1	2	1	2	1	2			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
<u>First season</u>									
Rice	41.08	151.37	202.67	210.80	162.00	205.64	160.00	800.00	
Glutinous rice	145.97	211.12	196.00	211.91	180.54	211.77	171.77	220.48	
Upland rice	-	-	300.00	300.00	300.00	300.00	336.00	336.00	
Groundnut	216.00	216.00	156.07	160.18	158.05	162.07	540.00	540.00	
Mungbean	-	-	-	-	-	-	80.00	80.00	
Sugarcane	5,895	7,467	6,511	6,697	6,485	6,724	-	-	
Cassava	1,457.63	1,540.55	1,180.36	1,222.52	1,178.27	1,256.64	1,163.53	1,498.40	
Kenaf	167.40	221.80	131.87	133.94	130.53	149.36	187.50	214.29	
<u>Second season</u>									
Groundnut	-	-	80.00	80.00	80.00	80.00	-	-	
Cassava	-	-	400.00	400.00	400.00	400.00	-	-	

1 = yield/rai planted
2 = yield/rai harvested

Table 19 Crop disposition for selected crops, zone 1, 1976.

Unit : kg

Crops	Crop Disposition					
	Total	debt- repaid	seed use	home- consumed	sold	stocked
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>First season</u>						
Rice	82.00 (100.00)	-	1.03 (1.25)	71.14 (85.10)	3.00 (3.65)	-
Glutinous rice	1,192.80 (100.00)	0.57 (0.72)	34.46 (2.88)	833.20 (69.85)	14.29 (1.20)	302.29 (25.34)
Groundnut	6.17 (100.00)	-	6.17 (100.00)	-	-	-
Sugarcane	3,200 (100.00)	-	486.00 (15.19)	-	2,714.00 (84.81)	-
Cassava	14,701.23 (100.00)	-	-	-	14,701.23 (100.00)	-
Kenaf	193.28	-	-	0.43 (0.22)	192.86 (99.78)	-

Note : figures in parentheses are percentage.

Table 20 Crop disposition for selected crops, zone 2, 1976.

unit: kg

Crops	Crop Disposition					
	Total	debt- repaid	seed use	home- consumed	sold	stocked
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>First season</u>						
Rice	443.79 (100.00)	-	32.15 (7.24)	317.96 (71.65)	67.37 (15.18)	26.32 (5.93)
Glutinous rice	1,954.00 (100.00)	31.58 (1.62)	62.39 (3.19)	1,199.64 (61.39)	432.42 (22.13)	228.04 (11.67)
Upland rice	6.32 (100.00)	-	0.25 (3.96)	6.07 (96.04)	-	-
Groundnut	48.05 (100.00)	-	1.87 (3.89)	0.32 (0.67)	45.86 (95.44)	-
Sugarcane	29,572.00 (100.00)	32.00 (0.11)	989.00 (3.34)	-	26,762.00 (90.50)	1,789.00 (6.05)
Cassava	6,019.23 (100.00)	-	-	-	6,008.76 (99.83)	10.53 (0.17)
Kenaf	201.97 (100.00)	-	-	0.02 (0.01)	201.95 (99.99)	-
<u>Second season</u>						
Groundnut	2.53 (100.00)	-	0.38 (15.02)	-	2.15 (84.98)	-
Cassava	42.10 (100.00)	-	-	-	42.10 (100.00)	-

Note: figures in parentheses are percentage.

Table 21 Crop disposition for selected crops, whole settlement, 1976.

Unit : kg.

Crops	Crop disposition					
	Total	debt- repaid	seed- use	home- consumed	sold	stocked
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>First season</u>						
Rice	346.43 (100.00)	-	23.77 (6.86)	253.39 (73.14)	50.04 (14.44)	19.23 (5.55)
Glutinous rice	1,749.11 (100.00)	25.38 (1.45)	54.87 (3.14)	1,100.98 (62.94)	319.85 (18.29)	249.03 (14.18)
Upland rice	4.61 (100.00)	-	0.18 (3.9)	4.43 (96.09)	-	-
Groundnut	36.78 (100.00)	-	3.03 (8.24)	0.23 (0.62)	33.52 (91.14)	-
Sugarcane	2,247.21 (100.00)	2.31 (0.1)	95.38 (3.8)	-	2,026.75 (90.28)	130.77 (5.82)
Cassava	8,356.73 (100.00)	-	-	-	8,349.04 (99.90)	-
Kenaf	199.63 (100.00)	-	-	0.13 (0.07)	199.50 (99.93)	-
<u>Second season</u>						
Groundnut	1.85 (100.00)	-	0.28 (15.14)	-	1.57 (84.86)	-
Cassava	30.77 (100.00)	-	-	-	30.77 (100.00)	-

Note : figures in parentheses are percentage

Table 22 Crop disposition for selected crops, outside the settlement, 1976.

Unit : kg.

Crops	Crop Disposition					
	Total	debt- repaid	seed use	home- consumed	sold	stocked
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>First season</u>						
Rice	240.00 (100.00)	--	12.00 (5.00)	228.00 (95.00)	--	--
Glutinous rice	1,477.20 (100.00)	--	42.60 (2.88)	1,144.60 (77.48)	100.00 (6.77)	190.00 (12.86)
Upland rice	67.20 (100.00)	--	7.2 (10.71)	24.00 (35.71)	--	36.00 (53.57)
Groundnut	270.00 (100.00)	--	26.00 (9.63)	--	244 (90.37)	--
Mungbean	24.00 (100.00)	--	0.40 (1.67)	--	32.60 (98.33)	--
Cassava	9,890.00 (100.00)	--	--	--	9,890.00 (100.00)	--
Kenaf	150.00 (100.00)	--	--	--	150.00 (100.00)	--

Note : figures in parentheses are percentage.

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Table 23 Cost of production per rai planted by crop and zone, 1976.

Unit : $\text{฿}/\text{rai}$

Crops	Zone 1				Zone 2			
	LP	GR	HA	T	LP	GR	HA	T
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>First season</u>								
Rice	36.0	73.9	26.2	136.1	91.0	122.4	63.9	277.3
Glutinous rice	59.3	146.1	63.5	268.9	34.0	81.3	61.2	176.5
Upland rice	-	-	-	-	30.0	115.0	52.5	197.5
Groundnut	8.0	110.0	120.0	238.0	58.7	175.0	62.0	295.7
Mungbean	-	-	-	-	-	-	-	-
Sugarcane	16.7	836.6	353.0	1,206.3	148.5	363.4	228.2	704.1
Cassava	90.3	115.9	79.5	285.7	102.6	115.2	102.2	320.0
Kenaf	139.2	262.9	281.6	683.7	54.9	95.5	100.1	250.5
<u>Second season</u>								
Groundnut	-	-	-	-	200.0	415.0	120.0	735.0
Cassava	-	-	-	-	9.7	66.5	77.8	154.0

Note : LP = land preparation
 GR = growing
 HA = harvesting
 T = total

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Table 23 (continued)

Crops	Unit : ฿/rai							
	Settlers				Non-settlers			
	LP	GR	HA	T	LP	GR	HA	T
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
<u>First season</u>								
Rice	77.1	110.1	54.4	241.6	30.0	55.0	26.6	111.6
Glutinous rice	39.7	96.0	61.8	197.5	74.1	147.9	89.6	310.6
Upland rice	30.0	115.0	52.5	197.5	192.5	251.5	101.5	545.5
Groundnut	57.0	172.9	63.9	293.8	139.6	337.2	106.2	683.0
Mungbean	-	-	-	-	67.6	156.0	229.0	452.6
Sugarcane	143.0	383.5	233.5	760.0	-	-	-	-
Cassava	97.4	115.5	92.7	305.6	57.8	164.5	92.3	314.6
Kenaf	73.3	131.9	139.7	344.9	106.9	177.2	279.6	563.7
<u>Second season</u>								
Groundnut	200.0	415.0	120.0	735.0	-	-	-	-
Cassava	9.7	66.5	77.8	154.0	-	-	-	-

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Table 24 Cash cost of production per rai planted by crop by zone, 1976.

Crops	Unit : ¥/rai							
	Zone 1				Zone 2			
	LP	GR	HA	T	LP	GR	HA	T
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>First season</u>								
Rice	-	11.5	-	11.5	-	35.5	2.72	38.2
Glutinous rice	1.7	32.2	12.8	46.7	3.5	32.6	9.4	45.5
Upland rice	-	-	-	-	-	25.0	-	25.0
Groundnut	-	60.0	-	60.0	6.8	38.8	0.8	46.4
Mungbean	-	-	-	-	-	-	-	-
Sugarcane	-	418.4	272.9	691.3	128.3	281.8	189.6	599.9
Cassava	38.5	24.4	37.6	100.5	80.2	33.5	46.5	160.2
Kenaf	82.7	60.6	52.4	195.7	11.5	24.0	10.6	46.1
<u>Second season</u>								
Groundnut	-	-	-	-	-	15.0	-	15.0
Cassava	-	-	-	-	-	14.0	-	14.0

Note : LP = land preparation
 GR = growing
 HA = harvesting
 T = total

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Table 24 (continued)

Crops	Unit : ¥/rai							
	Settlers				Non-settlers			
	LP	GR	HA	T	LP	GR	IA	T
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
<u>First season</u>								
Rice	-	29.4	2.0	31.4	-	10.0	13.3	23.3
Glutinous rice	3.1	32.5	10.2	45.8	11.6	57.5	10.9	80.0
Upland rice	-	25.0	-	25.0	80.0	251.5	-	331.5
Groundnut	6.6	39.5	0.8	46.9	-	74.0	5.0	79.0
Mungbean	-	-	-	-	-	26.7	4.0	30.7
Sugarcane	122.9	287.7	193.3	603.9	-	-	-	-
Cassava	62.6	29.7	42.7	135.0	20.2	33.4	16.5	78.1
Kenaf	27.0	31.9	19.7	78.6	-	13.6	146.0	159.6
<u>Second season</u>								
Groundnut	-	15.0	-	15.0	-	-	-	-
Cassava	-	14.0	-	14.0	-	-	-	-

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Table 25 Cost of production per rai planted by crop and zone, 1976.

Crops	Unit : baht							
	Zone 1				Zone 2			
	A	B*	C**	total	A.	B*	C**	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>First season</u>								
Rice	10.7	124.6	0.8	136.1	35.5	239.1	2.7	277.3
Glutinous rice	26.7	222.3	20.0	269.0	22.2	131.0	23.3	176.5
Upland rice	-	-	-	-	25.0	172.5	-	197.5
Groundnut	60.0	178.0	-	238.0	37.8	249.3	6.7	295.8
Mungbean	-	-	-	-	-	-	-	-
Sugarcane	315.8	515.0	375.5	1,206.3	205.9	140.2	394.0	740.1
Cassava	14.8	185.2	85.7	285.7	19.8	159.9	140.3	320.1
Kenaf	25.0	488.0	120.7	633.7	22.6	204.5	23.4	250.5
<u>Second season</u>								
Groundnut	-	-	-	-	15.0	720.0	-	735.0
Cassava	-	-	-	-	14.0	140.0	-	154.0

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Table 25 (continued)

Unit : P/rai

Crops	Settlers				Non-settlers			
	A	B*	C**	Total	A	B*	C**	Total
(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
<u>First season</u>								
Rice	29.2	210.3	2.2	241.7	10.0	88.3	13.3	111.6
Glutinous rice	23.2	151.7	22.5	197.5	19.6	230.6	60.4	310.6
Upland rice	25.0	172.5	--	197.5	11.5	214.0	320.0	545.5
Groundnut	38.5	246.9	8.4	293.9	74.0	804.0	5.0	883.0
Mungbean	--	--	--	--	26.7	422.0	4.0	452.7
Sugarcane	210.7	156.0	393.2	760.0	--	--	--	--
Cassava	17.7	170.5	117.3	305.6	23.2	236.6	54.8	314.6
Kenaf	23.1	266.2	55.5	344.8	4.6	404.1	155.0	563.7
<u>Second season</u>								
Groundnut	15.0	720.0	--	735.0	--	--	--	--
Cassava	14.0	140.0	--	154.0	--	--	--	--

Note : A = variable inputs, B = family labor,
C = hired labor and machine.

* average labor cost per day ranges from $\text{P}15$ to $\text{P}20$

** hired labor and machine service are normally charged together for the land preparation and growing activities. Hired labor cost alone is seldom found in harvesting activities.

Table 26 Average value of vegetables and fruits home-consumed and sold in 1976 by zone.

Category	Settlers			Non-settlers
	Total	Zone 1	Zone 2	
(1)	(2)	(3)	(4)	(5)
Vegetables				
- av. value per farm	990.48	1,506.48	800.37	1,201.80
- av. value home-consumed	246.93	96.74	302.26	199.80
- av. value sold	743.55	1,409.74	498.11	1,002.00
Fruits				
- av. value per farm	1,152.32	968.51	1,220.03	1,057.80
- av. value home-consumed	308.65	155.37	365.12	302.80
- av. value sold	843.66	813.14	854.90	755.00
Vegetables & Fruits				
- av. value per farm	2,142.80	2,474.99	2,020.40	2,259.60
- av. value home-consumed	555.58	252.11	667.38	502.60
- av. value sold	1,587.21	2,222.88	1,353.01	1,757.00

Table 27 Average number and value of livestock and poultry per family
- kept in farm households at the end of 1976, by zone.

Category	Settlers			Non-Settlers
	Total	Zone 1	Zone 2	
(1)	(2)	(3)	(4)	(5)
Cattle				
- av. number (heads)	0.72	0.66	0.75	1.10
- av. value (Baht)	1,343.65	1,225.71	1,376.10	3,000.00
- % of h.h. raised cattle	20.76	20.00	21.05	30.00
Buffaloes				
- av. number (heads)	2.81	2.54	2.90	2.30
- av. value (Baht)	7,629.23	6,022.86	8,221.05	5,250.00
- % of h.h. raised buffaloes	82.30	81.43	81.05	80.00
Swine				
- av. number (heads)	-	-	-	-
- av. value (Baht)	77.69	-	106.32	-
- % of h.h. raised swine	4.61	-	6.32	-
Chicken				
- av. number (heads)	-	-	-	-
- av. value (Baht)	447.96	432.68	453.59	415.00
- % of h.h. raised chicken	85.38	82.86	86.32	80.00
Duck				
- av. number (heads)	-	-	-	-
- av. value (Baht)	48.62	35.28	53.53	49.50
- % of h.h. raised duck	26.92	25.71	27.37	40.00

Table 28 Amount of non-farm income per farm by zone, 1976.

Source of non-farm income	Unit : Baht per farm			
	Settlers			Non-settlers
	zone 1	zone 2	total	
(1)	(2)	(3)	(4)	(5)
1. local trade	2,177.14	1,898.95	1,973.65	300.00
2. firewood sale	22.06	17.79	19.15	50.00
3. charcoal making	295.86	100.85	153.35	218.00
4. carpenter service	102.86	63.26	73.85	-
5. fishing	354.71	351.21	352.15	630.00
6. forest product sale	8.57	31.50	25.30	500.00
7. hired labor service	782.86	1,167.16	1,063.69	380.00
8. salary	437.14	1,270.32	1,046.00	342.00
9. silk product sale	59.71	209.47	169.15	100.00
10. cottage manufacturing	22.28	66.32	54.46	10.00
11. others	58.86	150.53	125.85	60.00
Total	4,322.86	5,327.33	5,056.89	2,596.00

Table 29 Average family income by zone, 1976.

Unit : Baht				
Category	Settlers			Non-settlers
	zone 1	zone 2	Total	
(1)	(2)	(3)	(4)	(5)
1. net farm income from crops	4,188.07	6,497.00	5,703.03	2,411.01
2. income from fruits & vegetable	2,222.88	1,353.01	1,587.21	1,757.00
3. non-farm income	4,322.86	5,327.33	5,056.89	2,596.00
Total (family income)	10,733.81	13,177.34	12,347.13	6,764.01

Table 30 Gross Margin per rai on individual crops, zone 1, 1976.

Crops	Yield (kg/rai)	Value (¥/rai)	Cash cost (¥/rai)	Gross margin 1 (¥/rai)	Total var. cost (¥/rai)	Gross margin 2 (¥/rai)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>First season</u>						
Rice	41.08	71.48	11.5	59.98	136.1	-64.62
Glutinous rice	145.97	291.94	46.7	245.24	269.0	22.94
Grounkinut	216.00	423.36	60.0	363.36	239.0	185.36
Sugarcane	5,895.00	943.20	691.3	251.90	1,206.3	-263.10
Cassava	1,457.63	699.66	100.5	599.16	285.7	413.96
Kenaf	167.04	519.49	195.7	323.79	663.7	-164.21

Note : gross margin 1 = value - total cash costs.
 gross margin 2 = value - total variable cost.

Table 31 Gross Margin per rai on individual crops, zone 2, 1976.

Crops	Yield (kg/rai)	Value (฿/rai)	Cash cost (฿/rai)	Gross margin 1 (฿/rai)	Total var. cost (฿/rai)	Gross margin 2 (฿/rai)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>First season</u>						
Rice	202.69	352.69	38.2	314.48	227.3	75.42
Glutinous rice	198.00	463.32	45.5	417.82	176.5	286.82
Upland rice	300.00	450.00	25.0	425.00	197.5	252.50
Groundnut	156.07	305.90	46.4	259.50	295.8	10.40
Sugarcane	6,511.00	1,041.76	599.9	441.86	704.1	301.66
Cassava	1,180.86	625.86	160.2	465.66	320.0	305.86
Kenaf	131.87	556.49	46.1	510.39	350.5	305.99
<u>Second season</u>						
Groundnut	80.00	120.00	15.0	105.00	735.0	-615.00
Cassava	400.00	200.00	14.0	186.00	154.0	46.00

Note : gross margin 1 = value - total cash costs;
 gross margin 2 = value - total variable costs.

Table 32 Gross Margin per rai on individual crops, whole settlement, 1976.

Crops	Yield (kg/rai)	Value (¥/rai)	Cash cost (¥/rai)	Gross margin 1 (¥/rai)	Total var. cost (¥/rai)	Gross margin 2 (¥/rai)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>First season</u>						
Rice	162.00	278.64	31.4	247.24	241.6	37.04
Glutinous rice	180.54	420.66	45.8	374.86	197.5	223.16
Upland rice	300.00	450.00	25.0	425.00	197.5	252.50
Groundnut	158.95	309.78	46.9	262.88	293.8	15.98
Sugarcane	6,485.00	1,037.60	603.9	433.70	760.0	277.60
Cassava	1,178.27	589.14	135.0	454.14	305.6	263.54
Kenaf	139.53	540.35	78.6	461.75	344.9	203.45
<u>Second season</u>						
Groundnut	89.00	120.00	15.0	105.00	735.0	-615.00
Cassava	400.00	200.00	14.0	186.00	154.00	46.00

Table 33 Gross Margin per rai on individual crops, outside the settlement, 1976.

Crops	Yield (kg/rai)	Value (฿/rai)	Cash cost (฿/rai)	Gross margin 1 (฿/rai)	Total var. cost (฿/rai)	Gross margin 2 (฿/rai)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>First season</u>						
Rice	160.00	278.40	23.3	255.10	111.6	166.80
Glutinous rice	171.77	274.83	80.0	194.83	310.6	-35.77
Upland rice	336.00	504.00	331.5	172.50	545.5	-41.50
Groundnut	540.00	1,004.40	79.0	925.40	883.0	121.40
Mungbean	80.00	580.00	30.7	449.30	452.7	27.30
Cassava.	1,163.53	593.40	72.1	515.30	314.6	278.80
Kearif	137.50	611.25	159.6	451.65	563.7	47.55

Note : gross margin 1 = value - total cash costs.
 gross margin 2 = value - total variable costs.

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Table 34 Average weekly expenditures for household consumption in 1976, cash and in kind, by agricultural zone.

unit: Baht

Category	Settlers											
	Zone 1			Zone 2			Total			Non-settlers		
	cash	in kind	total	cash	in kind	total	cash	in kind	total	cash	in kind	total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. meat	51.4	0.4	51.8	28.3	3.8	32.1	34.49	2.92	37.41	19.3	-	19.3
2. fish	39.7	16.0	55.7	26.5	17.1	43.6	30.03	16.81	46.84	9.5	65.0	74.54
3. vegetables	1.6	12.5	14.1	5.0	11.2	16.2	4.07	11.54	15.61	0.3	16.6	16.9
4. fruits	0.7	5.0	5.7	1.9	6.1	8.0	1.60	5.80	7.40	0.6	7.0	7.6
5. sugar	2.9	-	2.9	6.7	-	6.7	5.70	-	5.70	3.0	-	3.0
6. spices	2.3	-	2.3	3.2	0.5	3.7	2.99	0.38	3.37	0.9	-	0.9
7. non-alcoholic drinks	2.2	-	2.2	2.6	-	2.6	2.48	-	2.48	-	-	-
8. alcoholic drinks	4.7	-	4.7	5.2	-	5.2	5.04	-	5.04	1.3	-	1.3
9. cigarette	2.6	2.5	5.1	6.6	1.4	8.0	5.55	1.67	7.22	4.8	3.0	7.8
Total	108.1	36.4	144.5	86.0	40.1	126.1	91.95	39.12	131.07	39.7	91.6	131.3

Table 35 Average monthly consumption expenditures per farm household
by zone, 1976.

Unit : R / farm

Type of expenditures	Settlers			Non-settlers
	Zone 1	Zone 2	total	
(1)	(2)	(3)	(4)	(5)
<u>A. Cash expenditures</u>				
rice	94.86	58.73	66.45	99.00
cereal	4.11	8.98	7.67	5.50
fuel	19.71	40.86	31.33	-
kerosene	18.20	19.34	19.03	22.00
newspaper	1.97	2.91	2.56	5.30
dry battery	7.54	9.19	8.75	7.50
soap	8.23	11.56	10.68	9.70
tooth paste	8.31	14.52	12.85	7.10
detergent	13.86	15.76	15.11	14.90
charcoal	5.63	4.55	4.84	-
total	192.43	186.34	185.28	171.90
<u>E. Expenditures in kind</u>				
rice	169.03	236.26	218.10	262.50
charcoal	15.09	20.74	19.22	32.00
total	184.11	257.02	237.39	294.50
Grand total	366.54	443.36	422.68	465.50

Table 36 Average annual consumption expenditures per farm household
in 1976 by zone.

Category	Unit : Baht per h.h.			
	Settlers			Non-settlers
	zone 1	zone 2	total	
(1)	(2)	(3)	(4)	(5)
1. Food (eating out)	241.86	373.16	337.31	513.00
2. Travelling exp.	244.00	514.74	441.85	905.00
3. Clothing	769.71	972.42	917.95	1,095.00
4. Housing	1,640.00	2,002.11	1,904.62	-
5. Furniture	121.63	27.99	53.13	26.00
6. Ornaments	35.71	29.99	31.46	56.00
7. Medical care	532.00	1,084.79	935.96	785.00
8. Educational exp.	378.14	484.63	455.96	267.00
9. Merit making	245.43	482.95	419.00	475.00
10. Ceremony	272.29	319.37	306.69	55.00
11. Gifts	26.14	24.44	24.90	67.00
12. Amusement	61.29	158.42	132.27	361.00
Total	4,568.20	6,474.81	5,961.49	4,610.00

Table 37 Percentage distribution of households by silk worm rearing status, 1976.

Category	Settlers			Non-settlers
	zone 1	zone 2	Total	
(1)	(2)	(3)	(4)	(5)
1. Traditional silk worm rearing	5.71	14.74	12.31	40.00
2. PWD's sericulture project	2.86	3.16	3.00	-
3. USOM's sericulture project	-	-	-	-
4. Will soon join the project	31.43	-	8.46	-
5. Stop rearing silk worm	-	2.11	1.54	10.00
6. Never reared	60.00	80.00	74.61	50.00
Total	100	100	100	100

Table 38 Percentage distribution of heads of farm households by reasons for not joining the sericulture training program, 1976.

reasons	zone 1	zone 2	total
(1)	(2)	(3)	(4)
1. too old	-	1.05	0.77
2. busy with other work	-	3.16	2.33
3. afraid of being in debt	-	-	-
4. family member already joined	5.88	1.05	2.33
5. project not yet started	8.83	2.11	3.87
6. unaware of the project	5.88	1.05	2.33
7. not interested	-	1.05	0.77
8. could not grow mulberry	-	-	-
9. unqualified for training	-	-	-
10. not yet applied for	-	6.32	4.65
11. quit rearing	-	-	-
12. other	-	-	-
13. no answer	-	-	-
14. not applicable	79.41	84.21	82.95
Total	100.0	100.0	100.0

Table 39 Percentage distribution of farm households on reasons children not joining the training project, 1976.

reasons	zone 1	zone 2	total
(1)	(2)	(3)	(4)
1. too young	8.57	2.11	3.85
2. afraid of being in debt	-	-	-
3. busy with other work	-	3.16	2.31
4. unable to receive training	-	-	-
5. children grown up	-	-	-
6. project not yet started	5.71	-	1.54
7. unaware of the project	2.86	1.05	1.54
8. wait for mulberry growing	-	-	-
9. children not interested	-	1.05	0.77
10. prefer traditional method	-	-	-
11. family member already joined	2.86	-	0.77
12. have no children	-	-	-
13. could not grow mulberry	-	-	-
14. others	2.86	5.26	4.62
15. no answer	2.86	1.05	1.54
16. not applicable	74.28	86.32	83.08
Total	100.0	100.0	100.0

Table 40 Percentage distribution of farms classified by decision made toward sericulture project, by zone, 1976.

Category	zone 1	zone 2	total
(1)	(2)	(3)	(4)
1. already joined the project	35.29	1.05	10.00
2. will not joined the project	11.76	20.00	17.69
3. not applicable *	52.95	78.95	72.31
Total	100	100	100

Note : * "not applicable" includes 'not aware of', 'not eligible', and 'not ready to join'.

Table 41 Percentage distribution of settlers by ownership of silk worm rearing house, by zone, 1976.

Category	Zone 1	Zone 2	Total
(1)	(2)	(3)	(4)
yes	2.86	4.21	3.85
no	-	2.11	1.54
not applicable*	97.14	93.68	94.61
Total	100	100	100

Note : * not applicable includes those who have not decided to join the sericulture project.

Table 42 Percentage distribution of settlers who are aware of sericulture project classified by opportunity of answering question about the project to other settlers, by zone, 1976.

Category	Zone 1	Zone 2	Total
(1)	(2)	(3)	(4)
1. Those who have been asked	8.82	2.11	3.85
2. Those who have never been asked	14.71	-	3.85
3. Not applicable*	76.47	97.89	92.30
Total	100	100	100

Note : * "not applicable" includes those who are not aware of the project themselves and those who are not eligible to join the project.

Table 43 Percentage distribution of settlers by decisions made toward joining the sericultures project after having informed about the project by other settlers, by zone, 1976.

Category	Zone 1	Zone 2	Total
(1)	(2)	(3)	(4)
1. will join the project	5.88	1.05	2.31
2. will not join the project	-	-	-
3. not applicable	94.12	98.95	97.69
Total	100	100	100

Note : * "not applicable" includes those who have never been informed about the project and those who are not eligible for the project.

Table 44 Awareness of family planning program in the settlement of settlers, by source of information and by zone, 1976.

Category	Settlers			Non-settlers
	Zone 1	Zone 2	Total	
(1)	(2)	(3)	(4)	(5)
private source	-	4.21	3.08	-
government source	40.00	36.84	37.69	20.00
unaware	51.43	50.53	50.77	80.00
not applicable (no need of the program)	8.57	8.42	8.46	-
Total	100	100	100	100

Table 45 Percentage distribution of settlers by form of birth control practiced by zone, 1976.

Category	Settlers			Non-settlers
	Zone 1	Zone 2	Total	
(1)	(2)	(3)	(4)	(5)
not practiced	77.14	62.11	66.15	100
abstinence	-	-	-	-
female sterilization	5.71	9.47	8.46	-
male sterilization	2.86	1.05	1.54	-
IDU	2.86	10.53	8.46	-
condoms	2.86	-	0.77	-
injection	-	1.05	0.77	-
pills	5.71	12.63	10.77	-
traditional medicine	-	-	-	-
others	-	1.05	0.77	-
not applicable	2.86	2.11	2.31	-
Total	100	100	100	100

Table 46 Percentage distribution of farm households by number of member migrated in 1976.

Category	Settlers			Non-settlers
	Zone 1	Zone 2	Total	
(1)	(2)	(3)	(4)	(5)
1) Farm h.h. with no member migrated	51.4	53.7	53.1	20.1
2) Farm h.h. with member migrated	48.6	46.3	46.9	80.0
No. of member migrated :				
1	14.3	9.5	10.7	10.0
2	11.5	9.5	10.0	-
3	11.5	11.6	11.5	20.0
4	2.8	4.2	3.8	30.0
5	2.8	4.2	3.8	10.0
6	2.8	2.1	2.4	10.0
7	-	3.2	2.4	-
8	2.8	2.1	2.4	-
Total	48.6	46.3	46.9	80.0

Table 47 Percentage distribution of problems by farmer group, 1976.

Problems	Settlers			Non-settlers
	Zone 1	Zone 2	Zone 3	
(1)	(2)	(3)	(4)	(5)
<u>About farming</u>				
Weather	82.86	68.42	72.31	100.00
Insufficient capital	51.43	67.37	63.01	50.00
Crop diseases & insects	34.29	33.68	33.85	50.00
Low quality land	22.86	31.58	29.23	30.00
Monopoly from trader	20.00	35.79	31.54	30.00
Agricultural extension	2.86	-	0.77	10.00
<u>General</u>				
Crime	8.58	5.25	6.16	-
Communications	11.43	9.47	10.00	-