

4 The summary of the result of the commissioned survey (North Sumatra)

4-1 Outline of the Respondent

	Singalor Lau	Dolok Marlawau	Citama	TOTAL
Condition of Respondent				
1 Number of respondent family	20 fam.	20 fam.	20 fam.	60 fam.
2 Number of respondent	20 prs.	20 prs.	20 prs.	60 prs.
- male	19 prs.	20 prs.	18 prs.	57 prs.
- female	1 prs.	0 prs.	2 prs.	3 prs.
3 KUD Member	15 prs.	16 prs.	15 prs.	46 prs.
4 Non member	5 prs.	4 prs.	5 prs.	14 prs.
Condition of the Family Head				
5 Number of family head	20 prs.	20 prs.	20 prs.	60 prs.
- male	19 prs.	20 prs.	19 prs.	58 prs.
- female	1 prs.	0 prs.	1 prs.	2 prs.
6 KUD member	15 prs.	16 prs.	15 prs.	46 prs.
7 Non member	5 prs.	4 prs.	5 prs.	14 prs.
8 Farmer	20 prs.	20 prs.	20 prs.	60 prs.
9 Other job	0 prs.	1 prs.	1 prs.	2 prs.
			(transportation)	
The main income source of the family				
10 Agriculture	20 prs.	20 prs.	18 prs.	58 prs.
11 Laborer	0 prs.	0 prs.	1 prs.	1 prs.
12 Daily employee	0 prs.	1 prs.	2 prs.	3 prs.
13 Land rent	4 prs.	0	0	4 prs.
14 Others	0 prs.	2 prs.	0	2 prs.

* The samples of the survey were selected by interviewers and the KUD chairman with special considerations to obtain impartial respondents.

4-2 Rural Community and Rural Economy

- Customs, Ceremonies and Social Life in Rural Community

There are certain traditional ceremonies which are still conducted by farmers in North Sumatera. In Karo, every village conducts a year-end festival, just after the harvest time, to rejoice. Similar processions can also be found in Simol.

Farmers usually gather and pray together just before planting the seed and after harvesting. When the paddy is filled out, in several place in Karo, farmers cook and eat "lenang" together with the whole family, accompanied by the music of Karo's drum.

Other popular customs are those which implement the principle of "gotong royong" (togetherness), such as cleaning the waterworks, wedding ceremonies, entering the new house, or funerals.

- Prerogatives of Various Economic Entities

Small shops and kiosks are the main economic entities in many villages in North Sumatera, and they play a vital role in providing farmers with daily necessities and input for their production activities. There are several cases in which these entities also act as distribution channels for farmers' products. While home industries have become an alternative for farmers to create added-values for their products and an additional sources of income.

4-3 Agricultural Production

- Distribution of Agricultural Input Material such as Makers and Dealers of Chemical, Vinyl, Feed-stuff

While the production of most of the agricultural inputs e.g., urea, other chemical fertilizer and paddy seeds remains in the hands of the government-owned companies, the majority of distribution is channeled through the KUD system. Farm inputs for plantation/estate crops is done through the PT Pertani.

Farm chemicals, vinyl sheets, feed-stuff are brought in from Java. There are few producers of cattle-feed, mainly for swine, beef-cattle, fish and poultry. A total of 270,000 tons of cattle-feed is manufacturers in the province by 8 cattle-feed mills - four of them i) Charon Pokan, ii) Gold Coin Co, iii) Gunung Windu Co, and iv) Malabar Co. are located in Medan itself. The main ingredients used are maize and cassava. The distribution of these products is done through the private trade and, in a limited way, through the KUD network.

- Description of Farm Machinery (Makers and Dealers)

The following table shows the availability of farm machinery in the province during 1994 and 1995:

Type of Farm Machines	1994	1995	Percent
2-wheel tractors	3,478	3,406	97.9
4-wheel tractors	939	1,065	113.4
Hand Sprayers	135,128	145,630	107.7
Threshers	8,088	7,481	92.4
Paddy Processors (out of which, RMU)	8,047 (791)	7,067 (799)	87.8 (101.0)
Water Pumps	314	1,406	447.7
Corn Processors	931	1,221	131.1
Cassava Processors	3,986	4,910	123.1

Source: Statistik Indonesia-Year Book 1994, BPS-Jakarta, and Department of Agriculture, North Sumatera, Medan 1995.

Most of the machines are of Japanese origin while some were locally produced. Part of the machines were made available under government and external grants.

4-4 Agro-Processing and Its Distribution

- Demand of Major Farm Products (Commodities, Form of Processing, Consumption)

Production of major commodities of North Sumatera and the share of two districts - Karo and Simalungun - in 1994 and 1995 has been as follows:

Commodity (Tons)	1994	1995	Percentage
PADDY			
Province Total	3,079,960	3,134,533	-
-Karo	-	110,450	3.5%
-Simalungun	-	403,457	12.8%
CORN			
Province Total	311,918	371,578	-
-Karo	-	138,812	37.3%
-Simalungun	-	104,558	28.1%
CASSAVA			
Province Total	454,693	373,350	-
-Karo	-	183	-
-Simalungun	-	72,326	19.3%
SWEET POTATO			
Province Total	139,462	117,336	-
-Karo	-	3,007	2.5%
-Simalungun	-	15,718	13.3%
GROUNDNUT			
Province Total	28,134	32,115	-
-Karo	-	1,524	4.7%
-Simalungun	-	8,202	25.5%
SOYBEANS			
Province Total	56,497	49,655	-
-Karo	-	1,167	2.3%
-Simalungun	-	982	1.9%
CLOVES			
Province Total	1,382	1,008	-
-Karo	-	105	10.4%
-Simalungun	-	101	10.0%
VANILLA			
Province Total	173	298	-
-Karo	-	225	75.5%
-Simalungun	-	2	0.6%

Source: North Sumatra in Figures 1994 and 1995, BPS-Medan.

Other important products of the province have been: fruits and vegetables, rubber, palm oil, coffee, copra, and rattan. There are several large-size palm oil, rubber, coconut processing factories in the province.

Some of the agricultural products of the province were exported. The situation of exports during 1992 and 1993 was as follows:

Commodity	Volume Exported (T)		Value Exported (US\$)	
	1992	1993	1992	1993
Rubber	495,682	479,181	443.6m	427.6m
Palm Oil	882,281	1,196,030	335.0m	424.4m
Copra	15,646	29,985	9.5m	3.3m
Coffee	27,841	26,370	358.6m	392.8m
Vegetables	158,233	207,389	230.6m	300.7m

Other agricultural commodities exported from the province included: vanilla and rattan.

Rice is the major crop in the province is insignificant, and whatever is produced is consumed locally.

The province has some poultry activity. The following table shows the number of broilers and local chicken in the province:

Commodity		Population	Meat/kg	Eggs/kg
Egg Layers	'94	3,985,140	1,972,613	29,302,641
	'95	4,468,608	1,978,701	34,728,042
	%	112.1%	100.3%	118.5%
Broilers	'94	6,942,690	5,141,963	-
	'95	8,020,874	32,203,807	-
	%	115.5%	626.2%	-
Local Chicks	'94	15,585,280	20,039,311	10,682,877
	'95	17,059,686	30,260,864	12,171,888
	%	109.4%	151.0%	113.9%
Ducks	'94	1,980,574	2,212,678	10,113,878
	'95	2,019,900	1,042,720	11,980,740
	%	101.9%	47.1%	118.4%

Source: North Sumatra in Figures 1994 and 1995, Medan

There are no processing facilities in the province for grading, packing and shipment except for some traditional facilities.

Similarly in the sector of livestock, vegetables and fruits processing, the facilities remain traditional and insignificant.

The livestock situation and processing facilities in the province are as under:

Commodity		Population	No.Slaughtered	Meat/kg
Beef cattle	'93	221,509	32,471	5,695,542
	'95	250,569	48,465	7,579,926
	%	113.1%	149.2%	133.0%
Buffalo	'93	228,836	39,054	6,286,570
	'95	247,947	43,558	7,000,480
	%	108.3%	111.5%	111.3%
Sheep/Goat	'93	647,223	193,787	1,914,470
	'95	786,019	257,454	2,574,460
	%	121.4%	132.4%	134.4%
Horse	'93	9,451	1,015	116,375
	'95	7,300	1,031	128,875
	%	77.2%	101.5%	111.2%
Pigs	'93	2,268,725	559,058	27,887,550
	'95	920,998	599,526	29,924,460
	%	40.5%	107.2%	107.3%

Source: North Sumatra in Figures 1993, Medan, and Director of Livestock Development, North Sumatra, 1996

Slaughter houses in the province are operated by the government and private enterprises. Most of the slaughtering is traditional. In 1992 a quantity of pigs was exported to Singapore.

- Technical Level of Major Agro-Processing Farm Products by Commodities

The technical level of agro-processing in the province still remains to be developed. The only major agro-processing is paddy milling in view of the demand for clean rice from Bulog as well as from the open market. Rice milling units are too small and ineffective to produce quality rice.

- Major Agro-Processing Business Entities, Volume of Production and Facilities

In 1995 there were 7,067 paddy processors, 1,221 corn processors and 4,910 cassava processors in the province. There were 799 rice milling units, out of which 61 were in the KUD sector. There were 824 warehouses and drying floors and 72 rice drying units. The capacity of rice processors is very small (0.5 to 1 ton/hour). The larger units are in the private sector.

- Marketing Area of Major Farm Products, Distribution System

For agricultural products e.g., vegetables, fruits and some cash crops, the major destinations for shipping are the wholesale markets in Java, as well as within the province itself.

The farm household or the KUD have not established any joint handling, joint marketing or joint shipment facilities except for the provision of some transport and/or negotiating the deals.

- Business Customs and Its Practice (Pricing, Accounts Settlement)

These practices are more or less fixed. Some slight variations occur due to the type of commodity and its degree of durability and perishability. The terms are generally cash-upon-delivery of goods. However, for larger values the transactions can be partly cash and partly through bank instruments. In the case of various commodities, the customs can be enumerated as under:

a) Rice:

The procurement is under the government programme. The procurement price is fixed by the government. The farmers sell their paddy/rice to the KUD against fixed price. The KUD pays the farmers in cash and rarely through their account in the cooperative. The surplus paddy is sold by the farmer in the open market, generally to the trader who comes to his house with cash in hand. In this case the terms are cash, and in many cases, a token advance payment is also made to the farmers for the next crop.

b) Vegetables:

The transactions are usually cash-and-carry from the road-head.

c) Cash crops:

Except for clove, all transactions are on cash-and-carry basis. The price for clove procurement is fixed by the government. Payments to the farmers are made through the KUD.

d) Poultry:

Generally terms are cash-upon-collection from the producer. The middleman, in turn, either sells the commodity on cash terms to the retailer or on payment-after-sale basis.

4-5 Actual Situation of Agriculturist and Their Demands

(1) Actual situation of agriculturists

- Ownership of farmland area

The survey covered 60 farmers in three KUDs in North Sumatra Province (i.e. KUD Citama, KUD Singalor Lau, and KUD Nasa Dolok) indicate that, in terms of land ownership, 83% from total area is classified as land owned by themselves. The rest, 17% is classified as rented land.

More detail, cultivated farmland area of major farmers range from 0.5 ha to 1 ha per farmer in KUD Citama, from 1.5 to 2 ha per farmer in KUD Singalor Lau, whereas the major farmers in KUD Nasa Dolok have about 0.25-0.5 ha per farmer.

Table 4-5-1 Number of Household by Ownership of Farmland Area

Farmland Area (000 M ²)	Citama		Nasa Dolok		Singalor Lau		Total (3 KUDs)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
<2.5	2	10	1	5	-	-	3	5
2.5 - 5.0	4	20	7	35	-	-	11	18.3
5.1 - 10.0	9	45	1	5	4	20	14	23.3
10.1 - 15.0	2	10	2	10	7	35	11	18.3
15.1 - 20.0	2	10	3	15	5	25	10	16.7
>20.0	1	5	6	30	4	20	11	18.3
Total	20	100	20	100	20	100	60	100

Table 4-5-2 Ownership of Farmland Area

Kind of Ownership		Name of KUD			
		Citama	Singalor Lau	Nasa Dolok	Total
Owned	Total Area	94,220	294,370	353,900	742,490
	Average*	4,711	14,719	17,695	12,375
	%	52.6	89.4	91.9	83.1
Leased	Total Area	85,037	35,100	31,300	151,437
	Average*	4,252	1,755	1,565	2,524
	%	47.4	10.7	8.1	16.9
Total	Total Area	179,257	329,470	385,200	893,927
	Average*	8,963	16,473	19,260	14,899
	%	100	100	100	100

* = Average per household

- Farm management pattern

Member farmers of 2 KUD under the survey are in kabupatens which are designated "high land" and "irrigated" in terms of agro-eco system. Therefore, an average land holding for a KUD varies in wide range, namely, for a KUD member farmer's average holding is 1.6 ha with 1.4 ha upland field, the other KUD member farmer holds 2.4 ha with "other" land in an average. As to the 3rd KUD, member farmer's average holding is 0.9 ha with 0.71 ha paddy field.

With regard to pest/ disease control equipment, hand-sprayer is extended to majority of member farmer in all 3 KUD but other farm machineries are not used by member farmers.

Only limited number of member farmers are keeping animals like cattle and buffalo but local chickens are raised by quite a few member farmers, i.e., 27 farmers out of 60 respondent are keeping nearly 2 thousand birds.

A KUD's member farmers produce lesser amounts of rice (average 2.5 tons substantial amounts of maize (average 18 tons per farmer) and a variety of fruits e.g., banana are produced by member farmers of KUD. It would be a special feature that in 2 KUD member farmers engage in such cash crops as coconut, rubber, palm oil and vanilla.

Almost of all of the member farmers of all 3 KUD apply considerable amount of fertilizer and agricultural chemicals which are supplied through KUD, and 33 respondents out of 60 member farmers in 3 KUD under survey purchased paddy seeds and 30 purchasers out of the above 33 respondents utilized KUD channels.

- Cultivated farmland area by commodity and number of livestock

In general, farmland in these KUDs were used for upland cultivation which takes nearly 45% to grow corn and vegetable from total, while paddy takes 30.75%. It is important to be mentioned, particularly in KUD Nasa Dolog, that about 17.5 ha or 36.6% from total farmland area they have used for others commodities.

Although not all of farmers in the three KUDs do not raise local chicken, but some of them raise it in larger amount, particularly in KUD Singalor Lau (the figure is 156 or 7.8 in average). A little

farmers also have several duck, particularly in KUD Nasa Dolok.

Table 4-5-3 Cultivated Farmland Area by Commodity

Kind of Commodity		Name of KUD			
		Citama	Silangor Lau	Nasa Dolok	Total
Paddy Field	Total Area	141,500	23,625	138,700	303,825
	Average*	7,075	1,181	6,935	5,054
	%	78.94	7.17	28.97	30.72
Upland	Total Area	35,500	302,200	89,000	426,700
	Average*	1,775	15,100	4,450	7,112
	%	19.80	91.72	18.59	43.14
Orchard	Total Area	3,900	3,450	800	8,150
	Average*	195	172.5	40	136
	%	2.18	1.05	0.17	0.82
Residential Site	Total Area	151	115	75,200	75,466
	Average*	7.55	5.75	3,760	1,258
	%	0.08	0.03	15.71	7.63
Livestock	Total Area	10.5	55	-	65.5
	Average*	0.53	2.75	-	3.3
	%	-	0.02	-	-
Other	Total Area	-	-	175,000	175,000
	Average*	-	-	8,750	2,917
	%	-	-	36.56	17.69
Total	Total Area	181,062	329,445	478,700	989,207
	Average*	9,053	16,472	23,935	16,487
	%	100	100	100	100

* = Average per household

Table 4-5-4 Number of Livestock

Kind of Livestock		Name of KUD			
		Citama	Silangor Lau	Nasa Dolok	Total
Beef Cattle	Number	2	-	-	-
	Average*	0.1	-	-	-
Work Cattle	Number	-	4	-	-
	Average*	-	0.2	-	-
Water Buffalo	Number	6	2	-	15
	Average*	0.3	0.1	-	0.25
Pig	Number	-	-	15	15
	Average*	-	-	0.75	0.25
Local Chickens	Number	156	75	33	264
	Average*	7.8	1.78	1.65	4.4
Duck	Number	20	-	40	60
	Average*	1.00	-	2.0	1.00
Goat	Number	-	-	5	5
	Average*	-	-	0.25	0.08

* = Average per household

- Situation of Holding of Farm Machinery and Facilities

The survey covered 60 farm households from the area of operation of three KUD in North Sumatra (KUD Singalor Lau, KUD Citama and KUD NASA Dolok) Major production of the area has been: rice followed by some cash crops. On an average the annual gross agricultural income of the farmers has been Rp 7,600,000. The income is derived from various sources e.g., rice (58.6%), cash crops (14.6%), vegetables and fruits (11.3%), livestock and dairying (1.3%).

and 14% from other sources. Farmers have invested in some simple and traditional farm machines and agricultural implements. These were: hand sprayers 21, hand tractors 2, mist blowers 10, power sprayers 8, 1 thresher, 2 portable pumps, 2 sprinklers, containers.

The farmers also owned some other farm related facilities e.g., farm produce storage 12,612m² (one farmers had 10,000m² of farm storage facility), farm equipment garage 144m², cattle shed 9m², and poultry house 256m². The farm machines and equipments have been rather traditional, and are minimum required for cultivation.

- Family members and number of persons engaged in farming

Generally, family members that 60 farmers covered in this survey have, range from 4 to 6 (40% form total respondents in KUD Citama, 80% in KUD Singalor Lau, and 55% in KUD Nasa Dolog). Furthermore, number of family members participated in farm activities are about 2 or 3 in average/household.

Table 4-5-5 Number of Household by Number of Family Members

Family Members	Citama		Silangor Lau		Nasa Dolog		Total (3 KUD)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
1 - 3	4	20	1	5	6	30	11	18.3
4 - 6	8	40	16	80	11	55	35	58.3
7 - 9	7	35	3	15	3	15	13	21.7
> 9	1	5	-	1	-	-	1	1.7
Total	20	100	20	100	20	100	60	100

Fr. = frequency

Table 4-5-6 Number of Persons Engaged in Farming

Sex	Name of KUD							
	Citama		Silangor Lau		Nasa Dolog		Total	
	Amount	Ave.	Amount	Ave.	Amount	Ave.	Amount	Ave.
M	25	1.25	34	1.70	22	1.10	81	1.35
F	30	1.50	31	1.55	20	1.00	81	1.35
Total	55	2.75	65	3.25	42	2.10	162	2.70

- Annual family income

In average, annual family income in KUD Singalor Lau is Rp 16.74 millions, Rp 4.67 millions in KUD Nasa Dolog, and Rp 3.98 millions in KUD Citama. Additionally, major farmers in KUD Singalor Lau have the highest annual income comparing with farmers in others two KUDs (more than 50% of total respondents in KUD Singalor Lau have about Rp 7.5 millions annual income, while 45% family in KUD Citama have about Rp 3.5 millions, and major respondents --40%-- in KUD Nasa Dolog have less than Rp 2.5 millions income per annum).

Table 4-5-7 Number of Household of Farm Household Income

Income (000,000)	Citama		Silangor Lau		Nasa Dolog		Total (3 KUDs)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
<2.5	6	30	-	-	8	40	14	23.3
2.5 - 5.0	9	45	1	5	6	30	16	26.7
5.1 - 10.0	5	25	11	55	4	20	20	33.3
10.1 - 15.0	-	-	3	15	1	5	4	6.7
15.1 - 20.0	-	-	3	15	1	5	4	6.7
>20.0	-	-	2	10	-	-	2	3.3
Total	20	100	20	100	20	100	60	100

Table 4-5-8 Farm Household Income

			Name of KUD			
			Citama	Silangor Lau	Nasa Dolok	Total (3 KUDs)
Annual Family Income	Gross Agri-Income	Amount Average* %	70,632,000 3,351,600 88.84	314,674,050 15,733,703 93.98	77,547,400 3,877,370 83.20	462,853,450 7,714,224 91.19
	Non Agri-Income	Amount Average* %	8,870,000 443,500 11.16	20,150,000 1,007,500 6.02	15,675,000 783,750 16.80	44,695,000 744,917 8.81
	Total Annual Income	Amount Average* %	79,502,000 3,975,100 100.00	334,824,050 16,741,203 100.000	93,222,400 4,661,120 100.00	507,548,450 8,459,141 100.00
Net Agri-Income	Gross Agri-Income	Amount Average* %	70,632,000 3,531,600 100.00	314,674,050 15,733,703 100.00	77,547,400 3,877,370 100.00	462,853,450 7,714,224 100.00
	Production Expenses	Amount Average* %	38,449,400 1,922,470 54.44	86,579,650 4,328,983 27.51	32,850,800 1,642,540 42.36	157,879,850 2,631,331 34.11
	Net Agri. Income	Amount Average* %	32,182,600 1,609,130 45.56	228,094,400 11,404,720 72.49	44,696,600 2,234,830 57.64	304,973,000 5,082,893 65.89

* = average per household

Farmers in KUD Citama gets an average of Rp 3,531,600 (gross) per year, and 54.4% of this is spend on agriculture production cost, which leaves a mere 45.6% as the net income for the farmer. In KUD Silangor Lau, the gross income is much higher, Rp 15,733,703 per year and the spending on agriculture production cost is only 27.5%, leaving a better net income of 72.5% or Rp 11 million per year. In KUD Dolok, farmers get a gross of Rp 3,877,370 per year and a net of Rp 2,234,830 per year.

- Savings Patterns of Farm Households

The commissioned survey results of savings patterns for farm households in North Sumatera is as follows:

TYPE/PLACE OF SAVINGS	SAVINGS (Rp. Million)	% TOTAL SAVINGS	TOTAL # RES-PONSE	% TOTAL FAMILIES SURVEYED	% TOTAL RES-PONSE	AVE SIZE SAVINGS (Rp.000)
Total Savings	16.9	100.0	48	80.0	100.0	352.0
KUD Voluntary Savings	0.8	4.7	47	78.3	100.0	16.9
Other Savings	16.1	95.3	7	11.7	100.0	2,300.0
- BRI	15.6	92.3	6	-	85.7	2,600.0

- Situation of Off Farm and Seasonal Works.

Farmers of unirrigated paddy fields who work on their land during rainy seasons, using a traditional calculation, have been able to harvest two times in a year. Outside these, some farmers go to neighboring cities to work in construction projects, some go to sand mining in big rivers, others opt for such services as "ojek".

Farmers of fruits and vegetables are spending the whole year working on their land and barely have enough time to do other activities.

- Measures to obtain farming technology (situation of using KUD):

All member farmers (60) in 3 KUD under survey reported that they rely on farming guidance provided by agricultural extension field worker (PPL). Though the number is limited, parents and neighbors are the source of such a information. No respondent refers to KUD staff as a source of technology on farming.

- Measures for Obtaining Production/Consumer Goods (Situation of Using KUD)

On an average the gross agricultural income of the household constitutes 89% of the annual total income. 43% is spent on production-related expenses. The breakdown of the agricultural income of a farm household is as follows: 58.7% is derived from paddy/rice cultivation, 14.7% from cash crops, 11.3% from vegetables and fruits, 1.3% from dairying and 14% from other sources. (see table below).

BREAK-UP (PERCENTAGE) OF AGRICULTURAL INCOME OF FARM HOUSEHOLDS : 3 KUD AREAS IN NORTH SUMATRA

Source of Income	SINGALOR	CITAMA	NASA DOLOK	Av. %
Rice	32.0	86.0	58.0	58.7
Livestock/Dairy	3.0 1.0	--	1.3	
Fruits and Veg.	28.0 --	6.0		11.3
Cash Crops	9.0	--	35.0	14.7
Other income	28.0	13.0	1.0	14.0

The highest income-generating sector has been paddy/rice cultivation followed by some cash crops and other income.

The break-up of household expenses has been as follows: food (41%), 25.3% education, 10% clothing, 9.6% ceremonies, 6.3% towards housing, and 8% is spent on other household related expenses. (see table below).

BREAK-UP (PERCENTAGE) OF HOUSEHOLD EXPENSES

Expenses	SINGALOR	CITAMA	NASA DOLOK	Av. %
Food	35.0	38.0	50.0	41.0
Clothing	11.0	8.0	11.0	10.0
Housing	13.0	5.0	0.2	6.3
Education	19.0	29.0	28.0	25.3
Ceremonies	16.0	6.0	7.0	9.6
Other expenses	6.0	14.0	4.0	8.0

Food and education are the heavy items of expenses for the farm household.

Households have been making use of their KUD to some extent, to procure their production and consumer needs as well as for sale of their products. 91.5% of farm household purchased their fertilizer requirements from their KUD. 26 members had purchased their 100% requirements of fertilizers from their cooperatives. 88.3% members purchased their insecticides and pesticides, and 35% of farm machine requirements from their cooperatives. Paddy seeds were purchased by 56.6% of farm households.

Other purchases made by the members from their cooperatives included: rice (by 13.5%), fish by 3 members, clothing (by 25%), and 16.6% members purchased their other foodstuffs. Households suggested further development of retail shops. 31.5% felt these were too far and 43.3% felt these were too small. The prices were lower than the open market (26%). Items handled by them were too few (60%).

The KUD-owned retail shops (waserdas) were used by the members to purchase their daily household necessities, food items, some simple farm equipment, clothing etc.

- Loans Received, Loan Repayment and Loan Repayment Intentions of Farm Households

The commissioned survey results for loans received, loan repayment and loan repayment intentions for farm households in North Sumatera is as follows:

TYPE OF	LOANS	% T	11	-	68.7	727.8
Specified	8.0	6.6				

- Intention of repayment of loan

CATEGORY	TOTAL # RESPONSES	% TOTAL RESPONSE
REPAYMENT OF KUD LOANS:	40	100.0
1. Repaying loan on time	36	90.0
2. Deadline has arrived but repayment is partially overdue	4	10.0
3. Deadline has arrived but unable to repay most of debt	0	0.0
4. Deadline has arrived but have not repaid any of debt	0	0.0
5. Deadline has not yet arrived	0	0.0
INTENTION TOWARD LOAN REPAYMENT:	47	100.0
1. The loan should be repaid exactly by the deadline	44	93.6
2. The loan should be repaid but not necessary to repay exactly on deadline	3	6.4
3. The loan does not have to be repaid (decision of debtor)	0	0.0

- **Merchandise Ratio and Marketing Methods of Farm Products (Situation of Using KUD)**

Not all the farm households use their KUD to market all their farm products. 63% farmers sold their paddy/rice to the KUD, and 6.6% their fruits e.g., bananas, durian, rambutans, avocados, mangoes, and citrus. Other produce marketed through their KUD included: eggs, poultry, fresh milk, fish, maize and vegetables. A majority of cash crops e.g., coconut, rubber, palm, were sold by the members by themselves directly in the open market.

None of the households or any of their KUD possessed any grading, packaging and cold storage/warehousing facilities. The KUD, however, operate outlets (kiosks) from which the farmers can purchase agricultural inputs and implements, but the range has been limited. Members have suggested their renovations and expansion.

(2) Intention for Farm Management

- **Key commodity in the future:**

Majority of member farmers in 3 KUD (40 respondents out of 60) informed their desire to the introduction of palawija. Itemized breakdown is not available. Other than the palawija, poultry occupied the second position (19 respondents among 60). Vegetable and fish culture follow to the above items (the number of respondents are 6 and 5 respectively).

- **Intention to Introduce Farm Machinery and Facilities**

The households have indicated their intention to mechanize certain farming operations as follows: 56.6% threshing, 41.6% tilling, 38% drying operations, 35% harvesting, 21.6% rice transplanting, 15% feeding machines, and 10% transportation. 38% households said that rice milling was not available thereby indicating that rice milling facilities need to be installed or enhanced. (see table below).

FARM HOUSEHOLDS' INTENTION TO MECHANISE FARM OPERATIONS

Intention to Mechanise	SANGALOR	CITAMA	NASA	Responses Received	Av. %
Tilling	8	3	14	25/60	41.6
Rice Transplanting	9	2	2	13/60	21.6
Harvesting	18	3	10	31/60	51.6
Threshing	15	11	8	34/60	56.6
Drying	19	--	4	23/60	38.0
Transportation	4	--	2	06/60	10.0
Feeding Machines	4	2	3	09/60	15.0
Milking	--	--	--	--	--
Others	--	--	--	--	--

At present no transportation and shipping facilities were available.

- **Demand for Credit to Improve Farm Management**

The commissioned survey results of credit demand patterns for farm households in North Sumatera is as follows:

CATEGORY	TOTAL # RESPONSES	% TOTAL RESPONSE
HOW IS LOAN SYSTEM FOR SATISFYING YOUR NEEDS?:	50	100.0
a. Sufficient	5	10.0
b. Commodities should be increased	39	78.0
c. Should not be increased	0	0.0
d. Other	6	12.0
- don't know	5	
- never borrowed		
- timeliness needed		
- need credit	1	
HOW EASY IS IT TO BORROW MONEY FROM KUD?:	51	100.0
a. Easy	40	78.4
b. Difficulty of security/guarantor	2	3.9
c. Procedure is complicated	0	0.0
d. Manager/Employee are too severe	0	0.0
e. Other	9	17.7
- don't know	5	
- never borrowed	3	
- KUD credit still needed	1	
- same as worker's pay		
MAXIMUM LIMIT OF LOAN AMOUNT:	49	100.0
a. Sufficient	4	8.1
b. Too low, should be increased	36	73.5
c. Too high	0	0.0
d. Other	9	18.4
- don't know	5	
- never borrowed		
- can't say	1	
- don't understand		
LOAN INTEREST RATE:	46	100.0
a. Satisfactory	21	45.7
b. Can't say either way	25	54.3
c. Higher than other banks	0	0.0
d. Other	0	0.0
- don't know		
- never borrowed		
- interest is small		
- like bank		
- important for SHU (profit)		

- The field of farming technology demanded:

It is noticeable that as to the fields of production technology and technology on application of fertilizer, distinct opposite directions are observed. Member farmers in a KUD 35 among 40 respondents reported their satisfaction to service in the fields but the as much as 38 member farmers belonging to another KUD feel insufficient on the technical guidance for above-mentioned fields.

As to the technology on grading and packing, majority of member farmers responded their satisfaction.

(3) Expectation to KUD

- Condition of Joining the KUD

- a. There are plural number of members from one household, the average number from one household is 1.23 persons. There are 8 households with plural members.
- b. The number of response from farm household is 60 out of them 13 households are not joining the KUD.
- c. Condition of contributions
Initial fee is Rp. 1,000 or Rp. 5,000. The number of KUD members consider the amount as "properly" is 28 persons, as "cheap" is 18 persons. However, the initial fee Rp. 1,000 at Silanshes to the management of the KUD

- Use of facilities and ability of employees

- a. Considering the usefulness of the KUD (whether it is useful or not), 17 persons (37%) of KUD members said "very useful", 27 persons said "useful", and 2 persons said "no idea". Non-members gave relatively severe evaluation.
- b. Considering the reliance of the KUD, 9 persons (20%) of KUD members said "highly reliable", 34 persons said "can be relied".
- c. The level of satisfaction to the KUD's activity was different for each KUD. The number of KUD member said "satisfied" 14 persons at Citama, 3 persons at Singalor Lau, and 2 persons at Dolok Mariawau.
- d. Considering the frequency of KUD staff to visit the members, 74% said that during the last 1 year they got at least two visits and every KUD are active. However, there was no visits to non-members, so that the members extension activity is very necessary.
- e. Considering the reflection of members' opinion, whether it is reflected to KUD or not, 90% said "reflected very well", there was no gap among KUD.
- f. Considering the convenience of KUD's facility, 85% was satisfied and said "the present condition is good". However, a part of the members considered "it is far", 75% said "the structure is small" or "since it has been old, renovation is necessary".

Evaluation to the KUD
(respondent: 60 persons, 46 of them are members)

	Singalor Lau	Dolok Marlau	Citama	Total	Ratio
- very useful	6	6	5	17	28.3%
(Of which : member)	6	6	5	17	37.0
- highly reliable	2	3	4	9	15.0
(Of which : member)	2	3	4	9	19.6
- satisfied on the activity	3	2	16	21	35.0
(Of which : member)	3	2	14	19	41.3

- Evaluations and wishes to the Officials and employees

- Considering the employees, more than 90% said "working hard", it was a high evaluation. However, non-members said both "work hard" and "can't say which one" at poor value even ratio, which make a relatively severe evaluation.
- Considering the accurateness of office works, 61% said "accurate", while considering promptness of the officers, 57% said "prompt". Considering the correctness, there was big gap between KUD. At Dolok Marlau and Citama, almost all of the respondents said "accurate", while only 4 persons out of 15 KUD members at Singalor Lau said "accurate". The response to "promptness" was the same.

The evaluation on the office works of KUD
(respondent: 60 persons, 46 of them are members)

	Singalor Lau	Dolok Marlau	Citama	Total	Ratio
- accurate	4	10	17	31	51.7%
(Of which : member)	4	10	14	28	60.9
- not accurate	0	0	0	0	0.0
(Of which : member)	0	0	0	0	0.0
- prompt	3	8	18	29	48.3
(Of which : member)	3	8	15	26	56.5
- not prompt	0	1	0	1	1.7
(Of which : member)	0	1	0	1	2.2

- Attendance to the General Meeting and Other Gatherings

- The condition of attendance to the general meeting is good for every KUD, 100% of KUD surveyed said "attended" the general meeting. This is probably because they attempt to attend the regional "preliminary general meeting".
- Besides the general meeting, the KUD members also actively attend other meetings, such as kelompok tani gathering, and A3 groups gathering.
- Considering the reasons for joining KUD are, mainly, the use of business and service, or matters related to the improvement of their individual farm management. Other main reasons were to obtain knowledge on technology, etc., and to access to information exchange. Also, eagerness to participate in organizational activity of the KUD is strong.

It is observed that the KUD members have strong determination on their farm management, or have a good understanding on the KUD's activity.

- d. The reasons for being a member of KUD is almost the same as the reason for joining, but the number of response was less. The contents are, "use of facility", "use of its business such as marketing, purchasing, and credit", "information exchange", etc.

- The Role of the member in KUD

The results of the questions related to the condition of assuming officials to the KUD members, there were 2 persons who assume as directors. Responds from officers in desa, etc., could not be obtained.

- Evaluation and Demand for Business Activities (Purchasing, marketing, processing, joint shipment, joint use facilities, terms of loan, farm guidance, better-living guidance and others)

The farm households have said that purchasing and marketing facilities, equipment including the rice milling facilities were either inadequate or needed renovation or upgrading.

Kiosks and waserdas (TPK and retail shops) were either too small, too far located or too old to be effective (31 - 65%). 60% wanted an expansion of range of items maintained by these two outlets. 76.6% households wanted the promotion of joint marketing, joint purchasing and joint-use facilities to their advantage. While a number of them expressed satisfaction with the current level of loans, 71.6% wanted the current maximum credit limited be expanded and 52% wanted a larger number of variety of loans. On farm management guidance, the farmer-members suggested more of guidance on farm production (38.3%), guidance on fertilizer use (31%), and guidance on grading and packaging (7%). The farmers also felt that warehousing and assembly hall facilities were too inadequate and needed expansion (46% and 60.0%).

The table given below summarizes the expectations of the farmer-members:

EXPECTATIONS OF THE FARM HOUSEHOLDS FROM THEIR KUD

Expectations	Av. %
-Upgrading Kiosks and Waserda ...	31.6
-Kiosks: Expansion of Items Range ...	35.8
-Waserda: Expansion of Items Range ...	65.0
-Establishing Joint Purchasing ...	31.6
-Establishing Joint Marketing ...	76.6
-Establishing Joint-Use Facilities ...	42.3
-Renovate and Expand Rice Milling Facilities ...	26.3
-Improve/Expand Warehousing Capacity ...	46.0
-Improve/Expand Assembly Hall ...	60.0
-Expand Loan Variety ...	52.0
-Increase Existing Credit Limits ...	71.6
-Increase Farm Production Guidance ...	38.3
-Increase Fertilizer Guidance ...	31.3
-Increase Better-Living Guidance ...	38.3

No regular or formal better-living activities are being carried out for the farmer-members by any of the three cooperatives. These services are solicited from various government and voluntary agencies from time to time.

- Questions for Non Members

- a. The responds from almost all of non members are same.
Almost all of respondents want to be a member, and there is no difficulty for joining. Also, if they finally joined, the merit they expect are mainly related to the use of the KUD activity.
- b. The reason for not joining is responded by 14 persons.

The contents are "just married" 2 persons, "there is no information from KUD" 6 persons, and "don't rely on KUD", "no merit to become member", "business activity of KUD is not clear", etc. The members extension activity is very necessary.

5 THE SUMMARY OF THE RESULT OF THE COMMISSIONED SURVEY (East Java)

5-1 Outline of the Respondent

	BUDI MAKMUR	TANI JAYA	SATYAM JAYATE	TOTAL	
Condition of Respondent					
1	Number of respondent family	20 fam.	20 fam.	20 fam.	60 fam.
2	Number of respondent	20 prs.	20 prs.	20 prs.	60 prs.
	- male	17 prs.	16 prs.	20 prs.	53 prs.
	- female	3 prs.	3 prs.	0	6 prs.
		(unclear 1)			
3	KUD Member	16 prs.	14 prs.	15 prs.	45 prs.
4	Non member	4 prs.	5 prs.	5 prs.	15 prs.
		(unclear 1)			
Condition of the Family Head					
5	Number of family head	20 prs.	20 prs.	20 prs.	60 prs.
	- male	19 prs.	14 prs.	20 prs.	53 prs.
	- female	1 prs.	3 prs.	0	3 prs.
		(unclear 3)			
6	KUD member	16 prs.	17 prs.	15 prs.	48 prs.
7	Non member	4 prs.	3 prs.	5 prs.	12 prs.
8	Farmer	18 prs.	17 prs.	20 prs.	55 prs.
9	Other job	6 prs.	8 prs.	4 prs.	18 prs.
		(repeated 5 prs.)	(repeated 6 prs.)	(public servant,	
		trader, repeated 4 prs)			
The main income source of the family					
10	Agriculture	19 prs.	17 prs.	19 prs.	55 prs.
11	Laborer	0 prs.	2 prs.	3 prs.	5 prs.
12	Daily employee	1 prs.	1	2	4 prs.
13	Land rent	1	0	1	2 prs.
14	Others	1 prs.	0 prs.	1	2 prs.

* The samples of the survey were selected by interviewers and the the KUD chairman with special considerations to obtain impartial respondents.

5-2 Rural Community and Rural Economy

- Customs, Ceremonies and Social Life in Rural Community.

Most probably, customs and ceremonies common in other places in Indonesia are also common to East Java's communities. In general, old tradition is giving way to mechanized practices of modern farming. Some activities, however, are still conducted by farmers once in a while, for instance the hunting of rats by the whole village just after harvesting time. Among several traditional local ceremonies which are still preserved are Islamic ceremonies like Idul Fitri, Idul Adha, Mauludan (Muhammad's birthday). Other traditional ceremonies are "Metik" (pray to God before harvest), "Sedekah" (thank's to God after harvest), etc. This is when a small group of farmer pray to God for His protection of their land from such pest as insect and rat. Similar processions, but in larger scale, are the Wayang, Harvesting Party, and Village Cleaning ("Bersih

Desa"), all in December and often include local government officials who join the thanksgiving pray. The KUDs usually take these opportunities to promote their services.

Social life in East Java's villages is similar to that of other places in Indonesia. There has been a gradual change in which people begin to abandon the principle of "gotong royong" (togetherness), although several activities still manifest this principle, i.e erecting traditional houses, cleaning up waterworks, wild boar hunting, etc.

- Prerogatives of Various Economic Entities

Small shops and kiosks are the main economic entities in many villages in East Java, and they play a vital role in providing farmers with daily necessities and input for their production activities. There are several cases in which these entities also act as distribution channels for farmers' products. While home industries have become an alternative for farmers to create added-values for their products and an additional sources of income.

5-3 Agricultural Production

- Distribution of Agricultural Input Material such as Makers and Dealers of Chemicals, Vinyl, Feed-Staff

While the production of most of the agricultural inputs e.g., urea, other chemical fertiliser and paddy seeds remains in the hands of the government-owned companies, the majority of distribution is channelled through the KUD system. Urea is manufactured by several government companies but the coordination for its distribution is done by PT Pusri. Farm chemicals are produced by PT Petrokemia Kayaku, Bayers and Ciba but the distribution is through the open market.

Seeds for paddy are produced and distributed by PT Siangseri, a government company. It produces the seeds through national seeds farms and in collaboration with some seed farmers/progressive farmers. Seeds for other crops are available through the open market. The government operates a number of seeds certification centres throughout the province.

During 1994, the following fertiliser material was distributed in the province:

Particulars	Distributed (Tons)	Used (Tons)	Percent
Urea	711,640	662,505	93.1%
TSP	162,683	327,112	200.6%
ZA	154,065	117,859	75.9%
KCL	26,190	68,654	265.3%
TOTAL	1,154,811	1,176,132	101.8%

The table shows the production of seeds for distribution province during 1993 and 1994:

Particulars/kg	1993	1994
Seed Certi Centres (No)	93	99
Paddy Seeds	13,459,000	12,193,000
Maize Seeds	754,000	925,000
Soybeans	113,000	294,000
Mungbeans	8,000	6,000
Groundnut	20,000	61,000

East Java has several high altitude areas where horticulture is popular. Fruits like apple are also grown. However, the farmers are not using any vinyl sheeting. Some of the farmers in Batu area have started building plastic green houses to produce out-of-season vegetables and some flowers.

Cattle-feed is produced by a number of companies in the province. Some of the prominent producers are: PT Wirifa Sakti, PT Charoen Pokphand, PT Comfeed Ind. PT Alfred C. Topfer, PT Bama Inti Feedmill, PT Nputraco, PT Gold Coin, PT Wonokoyo Feed Mills, PT Masura, PT Cargil and Puskud-Ja'im. The demand for cattle-feed is high. During 1994, Indonesia had imported nearly 1.5 million tons of corn from abroad to cover the demand for manufacture of cattle-feed in the country. The components for the concentrate e.g., molasses, corn, rice/wheat bran, cassava etc. are available within the province itself.

- Distribution of Farm Machines (Makers and Dealers)

Farm machines include 2-wheel tractors, other tractors, pest control equipment, harvesters and processors. The largest number is that of hand-sprayers (167,475), followed by rat fumigators (10,167). Most of the machines and farm equipment are of Japanese origin and were procured under OECF and Kennedy Round Programmes. The KUD procures the machines from the wholesale dealers. Farm households also buy directly either from the KUD or from the wholesale open market.

5-4 Agro-Processing and Its Distribution

- Demand of Major Farm Products (Commodities, Form of Processing, Consumption Areas)

Production of major commodities (agricultural, poultry, livestock and dairying) in East Java for years 1993 and 1994 has been as follows:

Commodity	Year 1993	Year 1994	Percent
Paddy/Rice (T)	8,627,784	8,621,191	99.9%
Corn (T)	2,363,252	3,041,768	128.7%
Cassava (T)	3,625,712	4,014,764	110.7%
Sweet Potato (T)	233,322	242,236	103.8%
Groundnut (T)	158,958	156,975	98.7%
Soybeans (T)	549,713	537,040	97.6%
Mungbeans (T)	74,928	77,037	102.8%
Sorghum (T)	8,428	7,895	93.6%
Red Onion (T)	152,435	174,637	115.1%
Potato (T)	130,364	80,974	62.3%
Cabbage (T)	154,031	162,370	105.1%
Tomato (T)	13,637	15,843	114.2%
Chilies (T)	107,702	133,542	124.0%
Avocado (T)	34,678	28,675	82.8%
Apple (T)	51,615	23,724	45.9%
Durian (T)	15,995	74,278	462.5%
Oranges (T)	101,624	131,673	129.4%
Mango (T)	393,907	459,192	116.5%
Banana (T)	461,757	537,999	116.5%
Rambutan (T)	46,591	66,648	143.0%
Milch Cattle (No)	105,657	107,216	101.4%
Beef Cattle (No)	3,163,096	3,228,494	102.0%
Buffalo (No)	166,491	157,541	94.6%
Goat (No)	2,237,024	2,266,420	101.2%
Sheep (No)	1,072,326	1,158,746	108.1%
Broiler (No)	13,340,327	13,609,747	102.0%
Other Hens (Nos)	64,059,193	66,524,044	103.8%
All Eggs (kg)	128,460,956	136,369,000	106.1%
Milk (kg)	125,359,250	131,766,000	105.1%
All Meat (kg)	214,687,906	218,342,000	101.7%

Sources: Commissioned Survey Report-96;
 Kanwil Pertanian-East Java;
 Dinas Livestock-East Java; GKSI-Jakarta;
 Statistik Indonesia-Year Book 1994-BPS, Jakarta

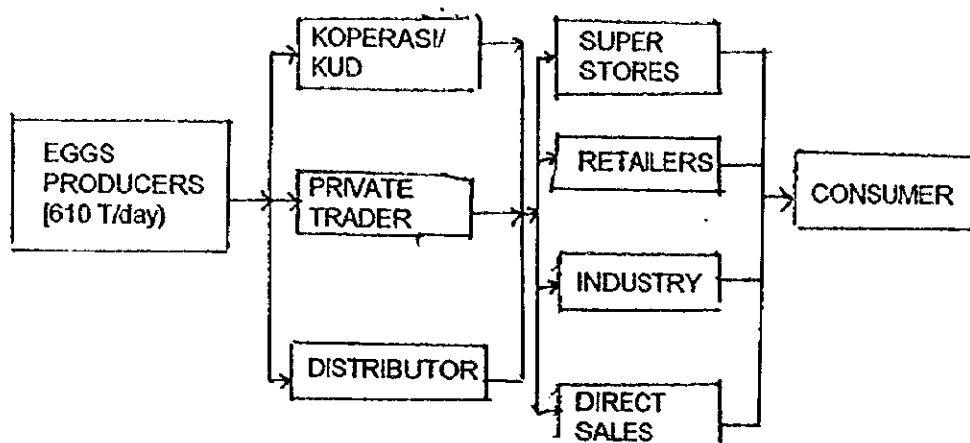
Paddy is procured by the KUD from among the farmer-members, milled and a part of rice is supplied to the government food stock (Dolog). The remaining is sold in the open market and part of it retained by the farmers for their own use. (see table below):

Particulars (Tons)	1993	1994	Percent
Purchased by KUD	813,461	285,229	35.0%
Sold to Dolog	775,731	258,340	33.3%
Sold in Open Market	25,104	26,888	107.1%

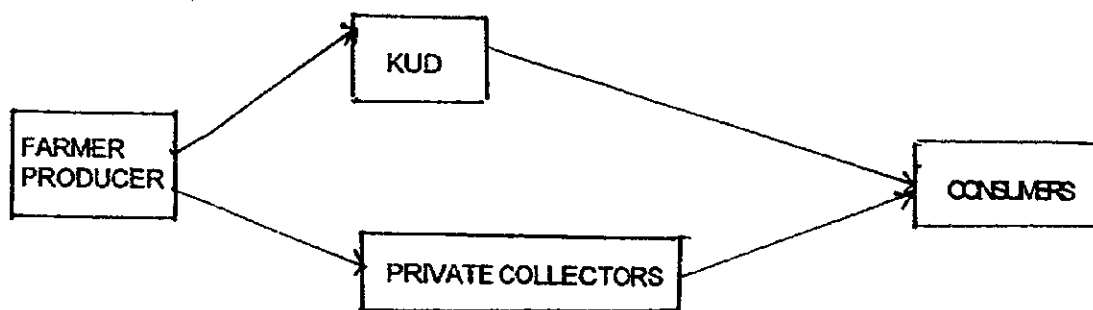
During 1994, a total of 285,229 ton of rice was purchased by KUD out of which 258,340 ton (90.5%) was supplied to the Dolog and the remaining 25,104 tons (8.8%) was sold in the open market.

A total of 8.6 million tons of paddy was handled by 2,640 rice milling units in the province during 1994. The byproduct - rice bran - was used for manufacture of cattle-feed. There are a total of 11 major cattle-feed formulators, including the Puskud, in the province.

Poultry is an important product in the province. KUD members are engaged in this business. The distribution of eggs in the province is shown in the following FLOW CHART:



Other commodities e.g., fresh vegetables and fruits were supplied to the local market for consumption within the province and for other parts of Java. A FLOW CHART on distribution of vegetables in the province is given below.

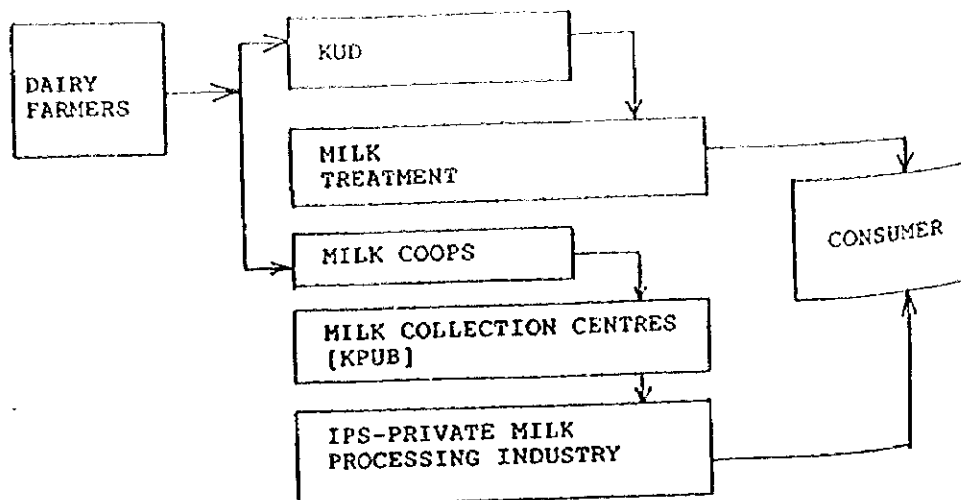


Milk is an important commodity which has become a "profit centre" of KUD and milk cooperatives in the province. Processing of milk is done by both - cooperative and private sector.

The milk production in the province during the period 1990-1994 was as follows:

Milk Production	1990	1993	1994	Percent (Mil. Kg) of 1990
East Java	118.0	125.3	131.7	111.8
National/Total	345.6	412.5	425.3	122.8
National/Coops	294.9	356.5	361.3	122.3
% of East Java to National/Coop	40.0%	35.0%	36.5%	91.8%

A FLOW CHART on the production and distribution of milk in East Java is given below.



There were a total of 202 KUD and Milk Cooperatives in the country in 1994, out of which there were 65 in East Java (32.1%). More and more KUD are taking up to milk and livestock development. More farmers are coming forward to take up cattle-fattening and calf rearing activities. New business institutions have come up to participate in dairying business. The KPUB "Sapi Jaya" at Kandangan is a secondary level cooperative which has in its membership 9 KUD from Kediri and 6 KUD from Jombang districts. It was organised in 1984 and registered in 1990. Its main objective is to promote milk business and livestock development in two districts. It has milk unit, coolers, laboratory, shop, pasteurisation facilities of 300-500 lt/day, transfer tankers and offers credit facilities to member-farmers. Its business profile is as under:

Turnover	1994	Rp	466,667,630	
	1995	Rp	545,246,457	116.8%
Surplus-SHU	1994	Rp	21,396,026	
	1995	Rp	18,057,543	84.3%
Milk Purchased	1995	Rp	5,985,907,288	
Milk sold to PT.NI	1995	Rp	6,066,103,108	

It promotes education and training of dairy farmers and animal care programmes. It sets apart 5% of the SHU for education and development programmes.

Dairy cooperatives and KUD dealing in milk are keenly conscious of arranging training of their employees and education of their members. The facilities for such training are limited. However, the GKSI provides the needed support through its own development programmes. The GKSI does not operate any formal training or education institution to cater to the needs of dairy cooperatives in the country.

There were a total of 312 slaughter houses in the province in 1993 (private 100, government 212). These are all traditional facilities. The production of meat during 1993 was as follows:

Beef	...	...	93,772,712 kg
Buffalo meat	...	...	274,340 kg
Mutton	...	...	19,053,050 kg
Sheep/Domba meat	...	...	9,623,063 kg
Pork	...	...	8,896,910 kg
Horse meat	...	...	4,620 kg

The farm products are collected through the KUD network either at the initiative of the traders and their agents or at the behest of the KUD or its farmers' groups.

- Technical Level of Major Processed Farm Products by Commodities

Major agro-processing is rice milling, sugarcane crushing, processing of cassava, coconut, coffee, cattle-feed manufacture, tahu tempe manufacture and dairying. Except for government sugar mills, all other processing is done in private and cooperative sector. Rice milling is done by 2,640 rice milling units (0.5 to 1 ton per hour capacity). Cattle-feed is manufactured by 11 units. Milk is processed at cooperatives as well as in private sector. The processing of milk by cooperatives is restricted to only cooling and pasteurization of a limited quantity. The processing units are of good quality but small in size.

There is no processing, including handling, grading and shipment, of fruits and vegetables in the cooperative sector. There are private major food processors in East Java, e.g., Indofood, and in other parts of Java which take up tomato, potato and chillies.

-Major Agro-Processing Business Entities, Volume of Production and Facilities

Major agro-processing business entities include government sugar mills, food processors e.g., Indomie, Indofood, and cattle-feed manufacturers including the Puskud. Many of the KUD have their own small cattle-feed formulating units.

The rice milling units (2,640 units in 1994) are within the cooperative and private sector. A total of 8.6 million tons of paddy was processed by them during 1994.

The 312 slaughter houses are owned by the government (212 units) and private enterprises (100 units).

-Marketing Area of Major Farm Products, Distribution System

Major marketing destinations of farm products from East Java are located within the province and other provinces on Java itself. Government food stock agency, Bulog, is a major purchaser of paddy/rice. Jakarta, the national capital, still remains a major consuming area for fruits and cash crops. Surabaya, the provincial capital, is another important consuming area and a principal export point for coffee, cashewnut. Clove is collected by Puskud on behalf of the clove national buffer stock. Bali is another important consuming area for the products from East Java.

-Business Customs and its Practice (Pricing, Accounts Settlement)

These practices are more or less fixed. Some slight variations occur due to the type of commodity and its degree of durability or perishability. The terms are generally cash upon delivery of goods. However, for larger values the transactions can be partly cash and partly through bank instruments. In the case of various commodities, the customs can be enumerated as under:

a) Rice:

The procurement is under the government programme, and in this case the procurement price is fixed by the government. The farmers sell their paddy/rice to the KUD against this fixed price. The KUD pays the farmers generally through their account in the cooperative. The surplus paddy/rice is sold by the farmer in the open market, generally to the trader who comes to his house with cash in hand. In this case the terms are usually cash, and in many cases, a token advance payment is also made to the farmers for the next crop;

b) Vegetables:

The transactions are usually cash-and-carry from the road-head. In the case of farmer bringing the crop to the open market, he returns home with cash in hand;

c) Milk:

The terms are cash-upon-delivery. The farmer brings the milk to the cooperative collection centre where it is received after taking samples. The payment to the farmer is made after the cooperative receives payments from the factory, which is normally every 15 days. In the meantime the farmer can purchase cattle-feed and other supplies from the KUD on a temporary credit basis. The accounts are settled with the farmers once 15 days;

d) Cash crops: Except for clove, all transactions are on cash-and-carry basis; and

e) Poultry:

Generally terms are cash upon collection from the producer. The middleman, in turn, either sells the commodity on cash terms to the retailer or on payment-after-sale basis.

5-5 Actual situation of agriculturist and their demands

(1) Actual situation of agriculturists

- Ownership of Land Area

Based on land ownership, the survey conducted in three KUDs in East Java (Tani Jaya, Satiyam Jayate, and Budi Makmur) shows that the average land owned by farmers in KUD Tani Jaya is about 1.8 ha; 1.9ha in Satiyam Jayate and 0.6ha in Budi Makmur. In addition, farmers in KUD Tani Jaya also lease farmland for their cultivation an average of 0.04ha/farmer and some of the farmers in KUD Budi Makmur also lease farmland in a very little amount.

Table 5-5-1 Number of Household by Ownership of Farmland Area

Farmland Area (000 M ²)	Tani Jaya		Satiyam Jayate		Budi Makmur		Total (3 KUDs)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
< 2.5	5	26.3	-	-	8	40	13	22.0
2.5 - 5.0	3	15.8	2	10	7	35	12	20.3
5.1 - 10.0	2	10.5	4	20	2	10	8	13.6
10.1 - 15.0	3	15.8	2	10	-	-	5	8.4
15.1 - 20.0	-	-	4	20	1	5	5	8.4
> 20.0	6	31.6	8	40	2	10	16	27.1
Total	19	100	20	100	20	100	59	100

Table 5-5-2 Ownership of Farmland Area

		Name of KUD			
		TJ (N=19)	SJ	BM	Total (N=59)
Owned	Total Area	350,138	379,528	126,636	856,302
	Average	18,428	18,976	6,332	14,513.6
	%	82.62	71.14	100	79.0
Leased	Total Area	73,650	154,000	-	227,650
	Average	3,876	7,700	-	3,858
	%	17.38	28.86	-	21.0
Total	Total Area	423,788	533,528	126,636	1,083,952
	Average	22,305	26,676	6,332	18,372
	%	100	100	100	100

- Farm management pattern:

East Java is the most important and advanced province in agricultural production. In many farm products the province ranks the highest performance both in volume as well as productivity (yield). In three (3) KUD where farm household survey was conducted in the province, two (2) are in "high-land" and one (1) is in "irrigated" area in terms of agro-eco system.

Conditions on farmland holding are varied to great extent, e.g., no paddy field is held by member farmer in a KUD (in highland) and average land holding of a KUD's member farmer is extremely small (0.4 ha).

Farm products are broadly diversified and a number of commodities are produced in respective area and even among farms in the same KUD, a variety of crops are cultivated and different kind of livestock are kept. Farm products by member farmers in three KUD are:

Paddy and upland rice;	
Palawija—	maize, cassava;
Vegetable—	white potato, cabbage, carrot;

Fruits——— mango, durian, papaya;
 Cash crops—— Kapok, canesugar;
 Livestock products—— milk, cattle meet, local chicken, egg.

In the background of the variety of agricultural production and consequent farm management pattern, several advantageous conditions exist in the province of West Java, namely, well-developed agricultural infrastructure including irrigation facilities and road, existence of urban consuming centers, etc.

- Cultivated farmland area by commodities, number of livestock.

Farmers in KUD Tani Jaya use their farmland for larger categories, i.e. paddy, upland, orchard, livestock facilities and other important facilities. The largest cultivated area is upland (that is 1.9 ha in average), followed by paddy in average of 0.2 ha, and the rest used for orchard and livestock facilities and other important facilities. In KUD Budi Makmur, average cultivated area for paddy is 730 square meters, and for upland is 0.3 ha. In KUD Satiyan Jayate, there is only one category, i.e. upland commodity, in which the average cultivated area is 1.4 ha. The most interesting finding is that farmers in three KUDs cultivate 89.36% from the whole area for upland commodities. Local chickens are largely raised by the farmers in three KUDs, followed by dairy cattle, goat, sheep, duck and hen layer.

Table 5-5-3 Number of Household by Cultivated Farmland Area

Farmland Area (000 M ²)	Tani Jaya		Satyam Jayate		Budi Makmur		Total (3 KUDs)	
	TJ	SJ	BM	Total	TJ	SJ	BM	Total
<2.5	5	26.3	-	-	11	57.6	16	27.6
2.5 - 5.0	2	10.5	2	10	6	31.6	10	17.2
5.1 - 10.0	2	10.5	4	20	-	-	6	10.3
10.1 - 15.0	2	10.5	3	15	1	5.3	6	10.3
15.1 - 20.0	1	5.3	4	20	-	-	5	8.6
>20.0	7	36.8	7	35	1	5.3	15	25.9
Total	19	100	20	100	19	99.99	58	100.1

Table 5-5-4 Cultivated Farmland Area

		Name of KUD			
		TJ; n=19	SJ; n=20	BM; n=19	Total; N=58
Paddy Field	Total Area	28,250	-	14,600	62,850
	Average	1,487	-	768.4	1,084
	%	10.8	-	20.6	6.5
Upland	Total Area	373,250	433,710	55,995	862,952
	Average	19,645	21,686	2,946.9	14,878
	%	80.3	99.7	79	88.9
Orchard	Total Area	34,450	274	-	34,724
	Average	1,813	14	-	599
	%	7.4	0.1	-	3.4
Livestock Facilities Area	Total Area	5,320	-	-	5,320
	Average	280	-	-	92
	%	1.1	-	-	0.6
Residential Site	Total Area	3,668	1,250	150	5,068
	Average	193	63	7.9	87
	%	0.8	0.3	0.2	0.5
Total	Total Area	464,938	435,234	70,910	971,082
	Average	24,470	21,762	3,545.5	16,743
	%	100	100	100	100

Table 5-5-5 Number of Livestock

Kind of Livestock		Name of KUD			
		TJ; n=20	SJ; n=17	BM; n=16	Total; N=49
Dairy Cattle	Number	54	-	51	105
	Average	2.7	-	3.2	2.14
Beef Cattle	Number	16	40	-	56
	Average	0.8	3.08	-	1.14
Work Cattle	Number	5	-	8	13
	Average	0.25	-	0.5	0.27
Bali Cattle	Number	6	-	3	9
	Average	0.3	-	0.19	0.18
Pig	Number	10	-	-	10
	Average	0.5	-	-	0.2
Local Chickens	Number	521	60	88	669
	Average	26.1	4.62	5.5	13.65
Han Layer	Number	11,980	-	-	11,980
	Average	599	-	-	244.49
Duck	Number	12	-	2	14
	Average	0.6	-	0.13	0.29
Goat	Number	33	9	25	67
	Average	1.65	0.69	1.56	1.37
Other	Number	60	2	-	62
	Average	3	0.15	-	1.27

- Situation of Holdings of Farm Machinery and Facilities

The survey covered 60 farm household families from the area of operation of three KUD in East Java (KUD tari jaya, KUD BUDI MAKMUR and KUD SATYAM JAYATE. Major production of the area has been: vegetables, livestock, dairy and rice. On an average, the gross agricultural income of a farm household is Rp 8,366,666. The income from vegetables and fruits has been 53.6%, from livestock and dairy 25.3%, paddy/rice 10%, cash crops 7%, and from other sources 4%. The farm machines and equipment held by the farm households have been as follows: hand sprayers (40%), hand tractors (31%), threshers and sprinklers (16% each), and 4-wheel tractors (8%).

The farmers also owned some farm produce storage. On an average, there was 80.4m² of farm produce storage, 10.5m² of farm equipment garage, 33m² of cattle sheds, and 37.5m² of poultry house facilities. The farm machines, equipment and the facilities have been rather traditional, and are the minim required for cultivation of vegetables, handling of milk and maintenance of livestock.

- Family Members and number of person engaged in farming

The number of family members ranges from 2 to 9 persons per haoushold. But the most part of the family in three KUDs have 4 to 5 members. From that numbers, persons engaged in farming activities are an average of 2,4 persons.

Table 5-5-6 Number of Household by Number of Family Numbers

Family Member	Tani Jaya		Satyam Jayate		Budi Makmur		Total (3 LUDs)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
1 - 3	4	21.1	7	35	3	15	14	23.7
4 - 6	12	63.2	11	55	14	70	37	62.7
7 - 9	3	15.8	2	10	3	15	8	13.6
>9	-	-	-	-	-	-	-	-
Total	19	100	20	100	20	100	59	100

Table 5-5-7 Number of Household by Number of Family Numbers

	Name of KUD							
	TJ (N=19)		SJ		BM		Total	
	Amount	Ave.	Amount	Ave.	Amount	Ave.	Amount	Ave.
M	43	2.26	44	2.2	48	2.4	135	2.29
F	46	2.42	40	2.0	45	2.25	131	2.22
M + F	89	4.68	84	4.2	93	4.65	266	4.51

Table 5-5-8 Number of Household by Family Number Engaged in Farming

Family Members	Name of KUD				Name of KUD			
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
1 - 2	13	68.4	13	65	9	50	35	61.4
3 - 4	3	15.8	7	35	7	38.9	17	29.8
5 - 6	3	15.8	-	-	1	5.6	4	7.0
>6	-	-	-	-	1	5.6	1	1.8
Total	19	100	20	100	18	100	57	100

Table 5-5-9 Family Number Engaged in Farming

	TJ (N = 19)		SJ (N = 20)		BM (N = 18)		Total (N = 57)	
	Amount	Ave.	Amount	Ave.	Amount	Ave.	Amount	Ave.
M	29	1.5	29	1.45	29	1.6	87	1.5
F	19	1	16	0.8	21	1.2	56	1
M + F	47	2.5	45	2.25	50	2.8	143	2.5

- Farm household income and balance of farm management.

Major farmers in KUD Tani Jaya and KUD Budi Makmur have annual income in average of Rp 0.95 million/farmer. In contrast, major farmers in KUD Satyam Jayate have annual income Rp 8 million or more. It is important to look at agriculture activity cost ratio in these three KUDs as indication of their efficiency. The numbers are 0.23 for KUD Tani Jaya, 0.39 for KUD Budi Makmur and 0.57 for KUD Satyam Jayate.

Table 5-5-10 Number of Household by Annual Household Income

	Name of KUD				Name of KUD			
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
<2.5	5	25	-	-	7	38.9	12	20.7
2.5 - 4.9	5	25	-	-	4	22.2	9	15.5
5.0 - 9.9	6	30	4	20	2	11.1	12	20.7
10.0 - 15.9	2	10	11	55	4	22.2	17	29.3
>15.9	2	10	5	25	1	5.6	8	13.8
Total	20	100	20	100	18	100	58	100

Table 5-5-11 Annual Household Income

		Name of KUD			
		TJ; n=20	SJ; n=20	BM; n=18	Total; N=58
Gross Agri-Income	Amount	119,900,000	287,741,900	61,841,000	469,482,900
	Average	5,995,000	14,387,095	3,435,611	8,094,533
	%	60.0	80.8	56.51	70.55
Annual Family Income	Amount	79,950,000	68,440,000	47,600,000	195,990,000
	Average	3,997,500	3,422,000	2,644,444	3,379,138
	%	40.0	19.21	43.49	29.45
Total Income	Amount	199,850,000	356,181,900	109,441,000	665,472,900
	Average	9,992,500	17,809,095	6,080,055	11,473,671
	%	100	100	100	100

Table 5-5-12 Number of Household by Balance of Farm Management

	Name of KUD				Name of KUD			
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
<2.0	9	45	4	20	9	50	22	37.9
2.0 - 4.9	4	20	5	25	8	44.4	17	29.3
5.0 - 9.9	3	15	8	40	1	5.6	12	20.7
10.0 - 15.9	1	5	2	10	-	-	3	5.2
>15.9	3	15	1	5	-	-	4	6.9
Total	20	100	20	100	18	100	58	100

Table 5-5-13 Balance of Farm Management

		Name of KUD			
		TJ; n=20	SJ; n=20	BM; n=18	Total; N=58
Gross Agri-Income	Amount	219,300,000	323,291,900	61,591,000	604,182,900
	Average	10,965,000	16,164,595	3,421,722	10,416,947
	%	100	100	100	100
Production Expenses	Amount	48,400,000	183,168,000	23,967,000	255,535,000
	Average	2,420,000	9,158,400	1,331,500	4,405,776
	%	22.07	56.66	38.91	42.29
Net Agri Income	Amount	159,000,000	140,123,900	37,624,000	336,747,900
	Average	7,951,500	7,006,195	2,090,222	5,805,998
	%	78.93	43.34	61.09	57.71

- Situation of off-farm and seasonal works

Rural people in East Java are relatively more advanced than their fellow countrymen in other

provinces. They generally possess enough skill to utilize their spare time of off-farm and seasonal works, to get involved in productive activities such as trading (in markets or street vending), transportation services (Java: Ojek), handicrafts, etc. Furthermore, it is a common phenomena that rural people in East Java cultivate in multicropping system. This system gives much more additional activities and, of course, income to the farmer.

- Measures to obtain farming technology (situation of using KUD):

As many as 14 member farmers of a KUD rely on PPL's guidance on farming technology, on one hand, and 13 member farmers belonging to the other KUD obtain such information from family member including parents, on the other. Neighbors also play a role in this regard, (10 respondents in a KUD). Middleman and dealer are not so important to supply technical guidance. Participation in technical meetings seems also not very much meaningful to the member farmers of KUD in the Province.

- Measures of Obtaining Production/Consumer Goods (Situation of Using KUD)

On an average, the gross agricultural income of a household constitutes 66% of its total income. 42% of the gross agricultural income is spent on production-related expenses. The break-up of the agricultural income is as follows: 53.6% from vegetables and fruits, 25.3% from livestock and dairying, 10% from paddy/rice, 7% from cash crops, and 4% from other agricultural activities (see table below).

BREAK-UP (PERCENTAGE) OF AGRICULTURAL INCOME OF FARM-HOUSEHOLDS : 3 KUD AREAS IN EAST JAVA

Source of Income	TANI JAYA	BUDI MAKMUR	SATYAM JAYATE	Av. %
Rice	05	25	--	10.0
Livestock/Dairy	40	27	09	25.3
Fruits & Veg.	40	31	90	53.6
Cash Crops	06	14	01	7.0
Other income	09	03	--	4.0

The highest income-generating activities have been vegetables and fruits (90% from KUD Satyam Jayate), and livestock and dairying (40% from KUD Tani Jaya).

The break-up of household expenses has been as follows: on food 48.6%, education 21%, clothing 11%, housing 6.3%, ceremonies 4%, and 8.6% for general expenses (see table below).

BREAK-UP (PERCENTAGE) OF HOUSEHOLD EXPENSES

Expenses	TANI JAYA	BUDI MAKMUR	SATYAM JAYATE	Av. %
Food	46	62.6	38	48.6
Clothing	10	7.4	16	11.0
Housing	13	0.7	5	6.3
Education	23	26.0	14	21.0
Ceremonies	1	1.3	10	4.0
Others	7	1.8	17	8.6

Households have been making use of their KUD, to procure their production and consumer needs as well as for sale of their products. 65% of them purchased their fertilizer requirements from the KUD, 21.6% pesticides and insecticides, and only 2 farm households purchased their paddy seeds from the cooperative. Only 8.3% of farm households purchased their rice requirements from the KUD. While the milk was sold to the KUD milk units, vegetables were sold to the general traders.

The KUD retail shops (waserdas) have been used to purchase daily household necessities, food items and some simple farm equipments, clothing etc.

- Savings Patterns of Farm Households

The commissioned survey results of savings patterns for farm households in East Java is as follows:

TYPE/PLACE OF SAVINGS	SAVINGS (Rp. Million)	% TOTAL SAVINGS	TOTAL # RES-PONSE	% TOTAL FAMILIES SURVEYED	% TOTAL RES-PONSE	AVE SIZE SAVINGS (Rp.000)
Total Savings	100.6	100.0	26	43.3	100.0	3,868.2
KUD Voluntary Savings	17.4	17.3	11	18.3	100.0	1,579.3
Other Savings	83.2	82.7	20	33.3	100.0	4,160.1
- BRI	25.1		10	-	50.0	2,510.0
- BCA	37.0		4	-	20.0	9,250.0
- BTPN	x					
- BPU	x					
- BM	x					

- Loans Received, Loan Repayment and Loan Repayment Intentions of Farm Households

The commissioned survey results for loans received, loan repayment and loan repayment intentions for farm households in East Java is as follows:

TYPE OF LOANS	LOANS (Rp. Million)	% TOTAL LOANS	TOTAL # RES-PONSE	% TOTAL FAMILIES SURVEYED	% TOTAL RES-PONSE	AVE SIZE OF LOAN (Rp.000)
Total Loans	84.1	100.0	18	30.0	100.0	4,670.0
KUD Loans	18.8	22.3	6	10.0	100.0	3,125.0
Other Loans	65.3	77.7	15	25.0	100.0	4,354.0
- Informal	21.7	25.9	4	-	26.7	5,437.5
- Not Specified	43.6	51.8	11	-	73.3	3,960.0

CATEGORY	TOTAL # RESPONSES	% TOTAL RESPONSE
REPAYMENT OF KUD LOANS:	13	100.0
1. Repaying loan on time	11	84.6
2. Deadline has arrived but repayment is partially overdue	1	7.7

3. Deadline has arrived but unable to repay most of debt	1	7.7
4. Deadline has arrived but have not repaid any of debt	0	0.0
5. Deadline has not yet arrived	0	0.0
INTENTION TOWARD LOAN REPAYMENT:	26	100.0
1. The loan should be repaid exactly by the deadline	23	88.5
2. The loan should be repaid but not necessary to repay exactly on deadline	3	11.5
3. The loan does not have to be repaid (decision of debtor)	0	0.0

(2) Intention For Farm Management

- Key commodities in the future:

The farm products to which member farmers of KUD in the province of East Java pay attention, disperse to some extent among farmers. Vegetables rank on top in a KUD (15 out of 20 respondents). In other KUD, majority member farmers expressed their wish to introduce palawija (12 out of 20). The third item which member farmer indicated rather keen interest is to keep beef cattle (18 among 60 respondents of 3 KUD). Dairy cow also draws attention from a part of the member farmers in a KUD.

- Intention to Introduce Farm Machinery and Facilities

Since the main products of the households have been vegetables, livestock and dairying, their intention to mechanise the farm operations has been as follows: transportation (50%), tilling (23.3%), threshing (18.3%), harvesting and milking (13.3% each), feeding machines (11.6%), and rice transplanting and drying (10% each) (see Table below - based on responses received from 60 farmers).

Intention to Mechanise	TANI JAYA	BUDI MAKMUR	SATYAM JAYATE	Responses Received	Av. %
Tilling	10	02	02	14/60	23.3
Rice Transplanting	04	02	--	06/60	10.0
Harvesting	04	04	--	08/60	13.3
Threshing	05	06	--	11/60	18.3
Drying	02	04	--	06/60	10.0
Transportation	11	07	12	30/60	50.0
Feeding Machines	05	02	--	07/60	11.6
Milking	05	03	--	08/60	13.3
Others	01	05	--	06/60	10.0

- Demand for Credit to Improve Farm Management

The commissioned survey results of credit demand patterns for farm households in East Java is as follows:

CATEGORY	TOTAL # RESPONSES	% TOTAL RESPONSE
HOW IS LOAN SYSTEM FOR SATISFYING YOUR NEEDS?:	23	100.0
a. Sufficient	6	26.1
b. Commodities should be increased	13	56.5
c. Should not be increased	0	0.0
d. Other	4	17.4
- don't know	1	
- never borrowed	3	
- timeliness needed		
- need credit		
HOW EASY IS IT TO BORROW MONEY FROM KUD?:	26	100.0
a. Easy	16	61.5
b. Difficulty of security/guarantor	4	15.4
c. Procedure is complicated	2	7.7
d. Manager/Employee are too severe	0	0.0
e. Other	4	15.4
- don't know	1	
- never borrowed	3	
- KUD credit still needed		
- same as worker's pay		
-		

CATEGORY	TOTAL # RESPONSES	% TOTAL RESPONSE
MAXIMUM LIMIT OF LOAN AMOUNT:	24	100.0
a. Sufficient	10	41.7
b. Too low, should be increased	13	54.2
c. Too high	0	0.0
d. Other	1	4.1
- don't know		
- never borrowed	1	
- can't say		
- don't understand		
LOAN INTEREST RATE:	22	100.0
a. Satisfactory	15	68.2
b. Can't say either way	4	18.2
c. Higher than other banks	2	9.1
d. Other	1	4.5
- don't know		
- never borrowed	1	
- interest is small		
- like bank		
- important for SHU (profit)		

- The field of farming technology demanded

Generally speaking, member farmers of 3 KUD in the province expressed their satisfaction on technical guidance activities in all subjects, i.e., agricultural production, application technology on fertilizer, agricultural chemicals and farm machinery and guidance on post-harvest handling including grading and packaging.

(3) Expectation to KUD

- Condition of Joining the KUD

- There are plural number of members from one household, the average number from one house hold is 1.84 persons. Out of 49 households joining the KUD, there are 22 households with plural members.
- The number of farm household is 57, out of them 10 households are not joining the KUD. The KUD don't cover all farm households in the region.
- Condition of contributions
 - Initial fee is Rp. 1,000, Rp. 3,000, and Rp. 5,000. Out of 45 members of KUD, number of members consider the amount as "proper" is 23 persons (53%), as "cheap" is 9 persons (20%). Out of 9 persons who respond "cheap" 8 persons are from Satyam Jayate. The other KUD set the amount properly.
 - Considering the compulsory savings, the number of KUD members consider the amount as "proper" is 21 persons (47%), to be "cheap" is 11 persons (24%). There was no gap among the KUD, it is generally set at lower level"

- Evaluation and Wish to the Structural Operation of the KUD
- a. Considering the usefulness of the KUD (whether it is useful or not), 19 persons (42%) of KUD members said "very useful", 22 persons (49%) said "useful", and 4 persons said "no opinion".
- b. Considering the rate of reliance to the KUD, 13 persons (29%) of KUD members said "highly reliable", 29 persons (64%) said "can be relied", and 2 persons said "no idea".
- c. Considering the satisfaction of the members to KUD's activity, 27 persons said "satisfied", 13 persons said "no idea", and there is no one said "unsatisfied".
- d. Considering the frequency of officer to visit the members, 62% of members said that during the last 1 year they got more than two visits, while 8 persons of KUD members said that during the last 1 year they didn't get any visit. In the future, the visiting activity will be necessary.
- e. Considering the reflection of members' opinion, whether it is reflected or not, 67% of the KUD members valued said it is "reflected very well".
- f. Considering the conveniency of KUD's facility, there was no response from Budi Makmur. Considering the other 2 KUD, 50% of members was satisfied and said "the present condition is good". However, 50% of the members said the structure is "small" or "since it has been old, repairment is necessary". The most of respondents said it is "small".

Table 5-5-14 Evaluation to the KUD
(respondent: 60 persons, 46 of them are members)

	Budi Makmur	Tani Jaya	Satyam Jayate	Total	Ratio
- very useful	10	9	5	24	40.0%
(Of which : member)	9	7	3	19	42.2
- highly reliable	5	9	2	16	26.7
(Of which : member)	5	7	1	13	28.9
- satisfied on the activity	9	12	8	29	48.3
(Of which : member)	8	11	8	27	60.0

- Evaluation and wishes to the officials and employees

- a. Considering the employees, 28 persons (62%) of KUD members said "working hard", but there is also one persons said "not working hard".
- b. Considering the accuracy of office work, 29 persons (64%) of the members said "accurate", while considering promptness of the employees, 24 persons (53%) said "prompt", 1 person said "not correct", and 3 persons said "delayed", a relatively poor evaluation.

Table 5-5-15 The evaluation on the office work of KUD
(respondent: 60 persons, 46 of them are members)

	Budi	Tani Jaya	Satyam	Total	Ratio
- accurate	7	15	11	33	55.0
(Of which : member)	6	13	10	29	64.4
- not accurate	0	0	0	1	1.7
(Of which : member)	0	0	1	1	2.2
- prompt	4	17	7	28	46.7
(Of which : member)	3	14	7	24	53.3
- delayed	2	0	1	3	5.0
(Of which : member)	2	0	1	3	6.7

- Attendance to the General Meeting and Other Gatherings

- a. The condition of attendance to the general meeting is good for every KUD, 85% of KUD surveyed said "attended" the general meeting. This is probably because they have attended the regional "preliminary general meeting".
- b. Considering the participations to gatherings other than the general meeting, 19 persons said that they participated actively. The contents are; monthly conference : 8 persons; kelompok tani gathering : 3 persons; agricultural orientations, etc.
- c. Considering the reasons for joining KUD are matters related to the improvement of their individual farm management. Out of 27 persons who responded, 6 persons noted "introduction of fertilizers", 3 persons "use of service", 3 persons "use of purchasing, financing", 3 persons "improve living", 9 persons "for the KUD development, to form organization, for the sake of society, agriculture society," etc.

It is observed that the KUD members have strong determination on their individual business, and determination to participate in or have a deep understanding on the KUD's activity, in line with the usage of its facility.

- d. The reason for being a member of KUD is almost the same as the reason for joining, the contents are : "financial" for 3 persons, "good service", and "the payment of electricity bill".

- The Role of the number in KUD

- a. The results of the question related to the condition of assuming of officials among the KUD members, 3 persons said it is fortunate to assume the officers. One of them is director, noted a steadfast respond "because elected by the general assembly" and "to improve the quality".

- Evaluation and Demand for Business Activities (Purchasing, marketing, processing, joint shipment, joint use facilities, terms of loan, farm guidance, better-living guidance and others)

The table below gives in details the demands or expectations of the farm-households from their KUD:

EXPECTATIONS OF THE FARM-HOUSEHOLDS FROM THEIR KUD

Expectations	Av. %
-Upgrading Kiosks and Waserda	34.0
-Kiosks: Expansion of Items Range.....	45.0
-Waserda: Expansion of Items Range.....	45.0
-Establishing Joint Purchasing.....	35.0
-Establishing Joint Marketing.....	35.0
-Establishing Joint-Use Facilities.....	35.0
-Renovate and Expand Rice Milling Facilities..	20.0
-Improve/Expand Warehousing Capacity...	26.6
-Improve/Expand Assembly Hall.....	35.0
-Expand Loan Variety	26.6
-Increase Existing Credit Limits.....	21.6
-Increase Farm Production Guidance.....	20.0
-Increase Fertilizer Guidance.....	20.0
-Increase Better-Living Guidance.....	20.0

The farm households have said that purchasing and marketing facilities, equipment including the transportation were inadequate and needed either upgrading or renovations. Kiosks and waserda (34%), expansion of range of items available (45%), needed to be brighter (33.3%), establishment of joint purchasing, joint marketing and joint use facilities (35%). There are no grading or processing activities available to the household. Need for improving rice milling facilities (20%), warehousing facilities (26.6%), and improvement of assembly hall (35%). Although most of them have expressed their satisfaction with the loan availability, the variety of loans should be expanded (26.6%), the maximum credit limit should be increased (21.6%). 20% wanted more of guidance on production, guidance on use of fertilizer and grading and packaging. No regular or formal better-living activities are being carried out for the households by any of the three cooperatives.

- Questions for Non Members

- Among 15 of non members, 11 persons said they want to be a member. Also, about the merit they expect to KUD, 13 persons responded, the contents are "purchasing fertilizer", "financial", "use of facility", "useful", "profitable for the society", etc
- The reason for not joining is responded by 12 persons. The contents are "don't know about the role of KUD", "there was no chance to join", etc.

6 THE SUMMARY OF THE RESULT OF THE COMMISSIONED SURVEY (Lampung)

6-1 Outline of the Respondent

	Usaha Bersama	Kencana Jaya	Tri Widodo	TOTAL	

Condition of Respondent					
1	Number of respondent family	20 fam.	20 fam.	20 fam.	60 fam.
2	Number of respondent	20 prs.	20 prs.	20 prs.	60 prs.
	- male	19 prs.	18 prs.	20 prs.	57 prs.
	- female	1 prs.	2 prs.	0	3 prs.
3	KUD Member	14 prs.	15 prs.	16 prs.	45 prs.
4	Non member	6 prs.	5 prs.	4 prs.	14 prs.

Condition of the Family Head					
5	Number of family head	20 prs.	20 prs.	20 prs.	60 prs.
	- male	20 prs.	18 prs.	20 prs.	58 prs.
	- female	0	2 prs.	0	2 prs.
6	KUD member	14 prs.	15 prs.	16 prs.	45 prs.
7	Non member	6 prs.	5 prs.	4 prs.	15 prs.
8	Farmer	17 prs.	12 prs.	18 prs.	47 prs.
9	Other job	3 prs.	8 prs.	4 prs.	15 prs.
	(public servant 1, trader 2 prs.)		(repeated respons, public servant, trader)		

The main income source of the family					
10	Agriculture	18 prs.	8 prs.	18 prs.	44 prs.
11	Laborer	2 prs.	10 prs.	2 prs.	14 prs.
12	Daily employee	5 prs.	1 prs.	1 prs.	7 prs.
13	Land rent	0	0	0	0
14	Others	1 prs.	1 prs.	2 prs.	4 prs.

* The samples of the survey were selected by interviewers and the the KUD chairman with special considerations to obtain impartial respondents.

6-2 Rural Community and Rural Economy

- Customs, Ceremonies and Social Life in Rural Community

Most probably, customs and ceremonies common in other places in Indonesia are also common to Lampung's communities. In general, old tradition is giving way to mechanized practices of modern farming. Some activities, however, are still conducted by farmers once in a while, for instance the hunting of rats by the whole village just after harvesting time. Among several traditional local ceremonies which are still preserved is the Lotang in September or October. This is when a small group of farmer pray to God for His protection of their land from such pest as insect and rat. Similar processions, but in larger scale, are the Wayan, Harvesting Party, and Maccera Ase, all in December and often include local government officials who join the thanksgiving pray. The KUDs usually take these opportunities to promote their services.

Social life in Lampung's villages is similar to that of other places in Indonesia. There has been a gradual change in which people begin to abandon the principle of "gotong royong" (togetherness), although several activities still manifest this principle, i.e erecting traditional houses, cleaning up waterworks, wild boar hunting, etc.

- Prerogatives of Various Economic Entities.

Small shops and kiosks are the main economic entities in many villages in Lampung Province, and they play a vital role in providing farmers with daily necessities and input for their production activities. There are several cases in which these entities also act as distribution channels for farmers' products. While home industries have become an alternative for farmers to create added-values for their products and an additional sources of income.

6-3 Agricultural Production

- Distribution of Agricultural Input Material such as Makers and Dealers of Chemical, Vinyl, Feed-stuff

While the production of most of the agricultural inputs e.g., urea, other chemical fertilizer and paddy seeds remains in the hands of the government-owned companies, the majority of distribution is channeled through the KUD system. Farm inputs for plantation/estate crops is done through the PT Pertani.

The vinyl sheeting is mainly used as protective against rains, nurseries and packaging. Several private companies have been producing the vinyl sheets, bottles and bulk material as follows:

Vinyl sheets	64,000,000 m2 sheets/year
-"-bottles	7,200,000 per year
-"-bulk material	1,380 Tons/year

Most of the material produced is consumed in South (20 million m2), Central (480 Tons), and Bandar Lampung (44 million m2 sheet, 7.2 million bottles and 900 tons of bulk material).

In 1994, a total of 991 tons of compound-feed was produced by 10 private formulators using a variety of ingredients e.g., banana chips, bakery, fish and shrimp flour, and cassava. The additional requirements are imported from outside the province. Some of the KUD have small cattle-feed units but the production is small. The distribution of farm inputs and cattle-feed is done through the network of TPKs operated by the KUDs.

- Distribution of Farm Machinery (Makers and Dealers)

The following table indicates that KUD farm households own a large number and variety of farm machines in the province:

Farm Machines	1985	1990	1994	% of 1990
Tractors	693	937	1,437	153.3
Combines	847	973	1,252	128.6
Dryers	762	899	1,277	142.0
Power sprayers	1,231	1,398	1,597	114.2
Pumps	385	427	737	172.5
Threshers	671	681	1,372	201.4
Engines	231	421	537	127.5
Small Trucks	103	127	197	155.1

Source: Kanwilkop, Lampung 1995

Most of the farm machines are Japanese origin - either imported in 100% form or locally assembled. Some of the farm machines and equipment have been given to KUD under OECF and Kennedy Round Programmes. Farm machines are available in the open market or are bought from Jakarta market. KUD do not sell these machines except for some small farm equipment and implements. Servicing and spare parts are easily available.

- Demand of Major Farm Products (Commodities, Form of Processing, Consumption Areas)

Because of its close proximity to Jakarta, Lampung supplies a variety of farm products to the national capital. It has been a significant contributor of rice to the national food-stock (Bulog). Production of major commodities of Lampung in 1994 has been as follows:

Commodity	Production (Tons)	Distributed in Province	Distributed outside Province
Rice	1760,450	1760,441	-
Corn	843,151	513,443	231,308
Soybeans	204,978	30,243	73,135
Cassava	2304,524	1691,031	613,493

Source: Department of Agriculture, Lampung 1995

Most of the agricultural products have been consumed within the province itself.

Except for some rice milling, there is no other agro-processing activity in the province.

Other agricultural products include vegetables and some fruits. Most of the products are sold to wholesalers for shipment to Jakarta. The balance is consumed within the province itself. The production and distribution of vegetables and fruits in the year 1994 is given below.

Commodity	Production (Tons)	Distribution in Lampung	Distributed outside Lampung
Vegetables	1356,904	604,106	762,098
Onions	2,035	757	1,278
Cucumber	2,401	2,401	-
Chilly	24,404	19,866	4,538
Banana	115,657	25,275	90,382

Source: Department of Agriculture, Lampung Province, 1995

The farm products are collected through the KUD network either at the initiative of the traders and

their agents or at the behest of the KUD or its farmers groups.

- **Technical level of Major Processed Farm Products by Commodities**

Rice is the major farm product followed by vegetables and some cash crops. Rice production is distributed in the open market and to the national food-stock (Bulog). Vegetables are consumed in the local market, and the remaining is shipped to Jakarta through private traders. Cash crops are collected by private traders and some through the KUD network. There is no agro-processing industry within the cooperative sector. Milk production is insignificant, and whatever is produced is consumed locally.

No processing of poultry is undertaken in the cooperative sector, except that they help procure the raw material including eggs, and ship it to the consumer centre of Jakarta through traders and their agents.

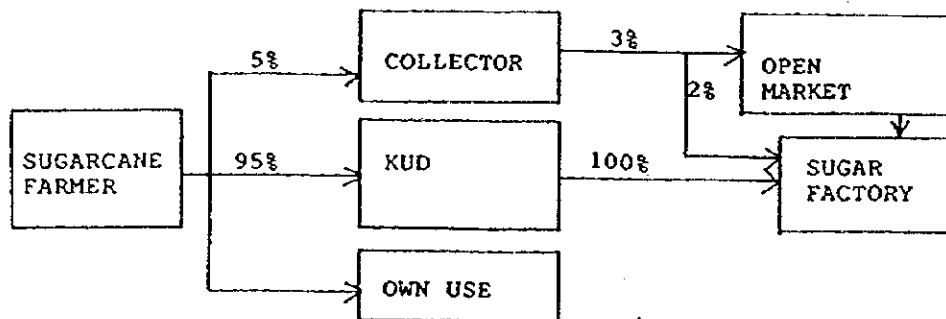
- **Major Agro-Processing Business Entities, Volume of Production and Facilities**

Major agro-processing industry in the province is the rice processing and production of cattle-feed. In 1994 there were 112 KUD which owned rice milling units of 0.5 ton/hour capacity each. There were 10 private enterprises producing a total of about 991 tons per year.

In 1994 Lampung had a traditional slaughtering capacity of 19,026 heads per year and it was 100% utilized. Part of the product was shipped to Jakarta through private traders. There was no proper processing facility in the province.

- **Marketing Area of Major Farm Products, Distribution System**

Major marketing destinations of farm products from Lampung have been Jakarta, and Lampung itself. Cash crops, vegetables and fruits generally move into Jakarta. A typical sample of marketing of sugarcane (KUD Karya Maju) is given below:



- Business Customs and its Practice (Pricing, Accounting Settlement)

These practices are more or less fixed. Some slight variations occur due to the type of commodity and its degree of durability. The terms are generally cash-upon-delivery of goods. However, for larger values the transactions can be partly cash and partly through bank instruments. In the case of various commodities, the customs can be enumerated as under:

a) Rice:

The procurement is under the government programme. The procurement price is fixed by the government. The farmers sell their paddy/rice to the KUD against this fixed price. The KUD pays the farmers in cash and rarely through their account in the cooperative. The surplus paddy/rice is sold by the farmer in the open market, generally to the trader who comes first to his house with cash in hand. In this case the terms are usually cash. In many cases, a token advance payment is also made to the farmers for the next crop.

b) Vegetables:

The transactions are cash-and-carry from the road head. In the case of farmer bringing the crop to the open market, he returns home with cash in hand. The KUD in the province do not deal in vegetable business. The transactions are between the KT/households and the traders. In some cases the KUD organises contacts between the traders and the farmers.

c) Cash Crops:

Except for clove, all transactions are on cash-and-carry basis.

6-4 Actual Situation of Agriculturists and their demands

(1) Actual situation of agriculturist

- Ownership of farmland area

Farmers in KUD Usaha Bersama have farmland area about 3.1 ha/farmers. The number in KUD Kencana Jaya is almost the same with Usaha Bersama, that is 3 ha/farmer, while in KUD Tri Widodo just 0.83 ha. Not all of cultivated land to which 60 farmers in three KUDs cultivate is belong to themselves. The proportion of farmland leased by the farmers in KUD Usaha Bersama is 2.39% from total farmland, 3% in KUD Kencana Jaya, while farmers in KUD Tri Widodo have bigger proportion of farm leased, that is 25.71% from total farmland they cultivate.

Size of Farmland Area (000 M ²)	Frequency				Percent			
	Name of KUD				Name of KUD			
	UB	KJ	TW	Ttt	UB	KJ	TW	Ttt
< 2.5	2	2	3	7	10	10	15	11.7
2.5 - 5.0	1	2	2	5	5	10	10	8.3
5.1 - 10.0	3	4	8	15	15	20	40	25.0
10.1 - 15.0	3	4	4	11	15	20	20	18.3
15.1 - 20.0	2	4	3	9	10	20	15	15
> 20	9	4	-	13	45	20	-	21.7
TOTAL	20	20	20	20	100	100	100	100

		Name of KUD			
		UB (n=17)	KJ (n=20)	TW (n=20)	Total
Owned	Total Area	613,634	578,002	123,944	1,315,580
	Average	30,682	28,900	6,197	21,926
	Percent	97.6	97	74.3	94.6
Leased	Total Area	15,000	17,900	42,900	75,800
	Average	750	895	2,195	1,263
	Percent	2.4	3.0	25.7	5.4
Total	Total Area	628,634	595,902	166,844	1,391,380
	Average	31,432	29,795	8,342	23,190
	Percent	100	100	100	100

- Farm management patterns :

In the province of Lampung, KUD Kencana Jaya is in kabupaten Lampung Utara and KUD Usaha Bersama and KUD Tri Widodo belongs to kabupaten Lampung Tengah. According to the classification on agro-eco system, kabupaten Lampung Utara is " Low-land " and Lampung Tengah is " Irrigated ". Cultivated land by member farmers in 3 KUD is 1.1 ha, 2.5 ha and 0.8 ha in an average respectively. The upland field cultivated by member farmers in two (2) KUD shares 31 % and 47 % in total cultivated land respectively, on one hand, and other KUD member farmer cultivate wet land which shares 80 % of the total cultivated land.

Pest/disease control equipment, main item of which is hand sprayer, are used by majority member farmers (40 out of 60 respondents). Other farm machinery e.g., water pump, tractor, thresher and cart are also in use but the number of respondent member farmer is limited. Cattle and water buffalo which are used for farm works like tilling, carrying, threshing, etc., are also raised by member farmers in 3 KUD but the number is small (11 respondents out of 60 member farmers raise 17 heads in total).

Reflecting conditions on farming, especially land utilization pattern, member farmers in 3 KUD in the province produce a variety of agricultural products including paddy, palawija, fruits and other cash crops. Particularly to those member farmers in 3 KUD, fruits would be one of the promising items. Quite a few member farmers grow such fruits as avocado, ransa, rambutan (total 16.2 tons by 26 member farmers out of 60 respondents) and banana. Member farmers commonly keep local chickens, too. Average feeding number is 16 birds by 47 member farmers in KUD. Many cash crops like rubbers, coconuts, coffee, cocoa, pepper, etc. are also grown by member farmers in KUD, among which coconut is an important farm product to the member farmers. Majority member farmers of KUD in the province apply considerable amounts of fertilizer and pesticide, and nearly half of the member farmers in 2 KUD (9 and 12 respondents in both KUD, respectively) purchased paddy seeds mainly through KUD.

- Cultivated farmland area by commodities and Number of livestock

Paddy becomes the most important commodity, as it takes the largest area comparing with upland and orchard. In KUD Usaha Bersama paddy takes 46.80% from total area, upland 45.45% and orchard 6.95%. In KUD Tri Widodo, paddy 78.75%, upland 8.68% and orchard 11.50% from total area. Furthermore, in KUD Kencana Jaya the proportion among commodities are: paddy 43.90%, upland 30.56% and orchard 6.16%. Fewer area in that three KUDs used for residential site, livestock and other important facilities. Their main crops are paddy, maize, and cassava. Some of the farmers also cultivate sweet potatoes, dry land rice and rubber.

Local chicken becomes the most largest poultry farmers rease (in average of 18 local chickens/farmers) followed by duck. Another animals are goat, water buffalo and bali cattle. A number of pig also being raised by the farmers particularly in KUD Usaha Bersama and Tri Widodo.

Size of Farmland Area (000 M ²)	Frequency				Percent			
	Name of KUD				Name of KUD			
	UB	KJ	TW	Ttd	UB	KJ	TW	Ttd
< 2.5	1	1	2	4	5.6	5.9	10.5	7.4
2.5 - 5.0	1	4	5	10	5.6	23.5	26.3	18.5
5.1 - 10.0	5	4	6	15	27.8	23.5	31.6	27.8
10.1 - 15.0	2	5	4	11	11.1	29.4	21.1	20.4
15.1 - 20.0	2	1	2	5	11.1	2.9	10.5	9.3
> 20	7	2	-	9	38.9	11.8	-	16.7
TOTAL	18	17	19	54	100	100	100	100

		Name of KUD			
		UB (n=18)	KJ (n=17)	TW (n=19)	Total (n=54)
Paddy Field	Total Area	225,000	96,250	122,645	443,895
	Average	12,500	5,662	6,455	8,220
	Percent	46.8	43.9	79.7	52
Upland	Total Area	218,500	67,000	13,400	298,900
	Average	12,139	3,941	705	5,535
	Percent	45.5	30.6	8.7	35.0
Orchard	Total Area	33,400	13,500	17,770	64,670
	Average	1,856	794	935	1,198
	Percent	6.9	6.2	11.5	7.6
Reside-	Total Area	3,700	5,000	60	8,760

Site	Average Percent	206 0.8	294 2.3	3.2 0.04	162 1.03
Livestock Facilities Area	Total Area Average Percent	- - -	- - -	28 1.5 0.02	28 0.5 0.003
Other	Total Area Average Percent	- - -	37,500 2,206 17.1	- - -	37,500 694 4.4
Total	Total Area Average Percent	480,600 26,700 100	219,250 12,897 100	153,903 8,100 100	853,753 15,810 100

Number of livestock

		Name of KUD			
		UB (n=17)	KJ (n=20)	TW (n=20)	Total
Work Cattle	Amount Average	2 0.1	7 0.35	- -	9 0.15
Water Buffalo	Amount Average	3 0.15	- -	5 0.25	8 0.13
Bali Cattle	Amount Average	4 0.2	3 0.15	- -	7 0.12
Pig	Amount Average	21 1.05	- -	65 3.25	86 1.43
Local Chicken	Amount Average	453 22.65	357 17.85	255 12.75	1,065 17.75
Duck	Amount Average	22 1.01	38 1.9	77 3.85	137 2.28
Sheep	Amount Average	- -	15 0.75	- -	15 0.25
Goat	Amount Average	38 1.9	21 1.05	20 1	79 1.32
Other	Amount Average	20 1	- -	5 0.25	25 0.42

- Situation of Holding of Farm Machinery and Facilities

81.66% of the 60 farm households surveyed in the area of operation of three KUD (KUD Usaha Bersama, KUD Kencana Jaya and KUD Triwidodo) were engaged in farming. The main family income is also from farming. On an average 49% of the family income is derived from paddy cultivation (the highest being 74.6% in the case of KUD Triwidodo area and the lowest 32% being in KUD Usaha Bersama area). The other crops, though insignificant, are maize, cassava, sweet potatoes, some fruits like rambutans, bananas and some cash crops like coconut, coffee, cocoa and pepper. The farmer-members have acquired some farm machineries, equipment and facilities. Among the most expensive ones are 4-wheel tractors

(Triwidodo-2 and Usaha Bersama-1). The highest concentration of farm machinery was in respect of pest control - hand sprayers-41, mist blowers-23 and power sprayers-25. There were some harvesting and storage equipment e.g., fan-mills-6, comb threshers-7 and containers-7. the highest concentration of farm machinery has been among the household families of KUD Triwidodo.

Produce storage facilities owned by the household members of the three KUD include, on an average: Farm produce storage 1450 m²; farm equipment garage 36.6 m²; cattle shed 174 m²; and poultry house 151 m².

Except for the 4-wheel tractors, rest of the farm machinery and equipment is locally assembled in Indonesia. Most of the farm machinery has been purchased from private traders. Two farm households out of ten in the Triwidodo area have purchased their farm machines on 100% basis from their cooperative. Similarly only one farm household from among 20 of the Usaha Bersama KUD, had purchased its farm machinery on 100% basis from the cooperative.

• **Number of family members and persons engaged in farming.**

The least number of family member is 3 and the largest is 9 persons. But the major family (53,33% from 60 family in three KUDs) has 4-6 members. In addition, the major number of family member engaged in farming activity is 2-3 persons.

(A) Number of family members

Number of Family Members	Frequency				Percent			
	Name of KUD				Name of KUD			
	UB	KJ	TW	TU	UB	KJ	TW	TU
1 - 3	3	5	5	03	15	25	25	21.7
4 - 6	10	12	12	34	50	60	60	56.7
7 - 9	7	1	2	10	35	5	10	16.7
> 9	-	2	1	3	-	10	5	5
TOTAL	20	20	20	60	100	100	100	100

		Name of KUD			
		UB (n=17)	KJ (n=20)	TW (n=20)	Total
Male	Amount	58	49	47	154
	Average	2.9	2.45	2.35	2.57
Female	Amount	48	48	42	138
	Average	2.4	2.4	2.1	2.3
Male and Female	Amount	106	97	89	292
	Average	5.3	4.85	4.4	4.87

(B) Number of family members engaged in farming

Number of Family Members	Frequency				Percent			
	Name of KUD				Name of KUD			
	UB	KJ	TW	Tt	UB	KJ	TW	Tt
1 - 2	12	7	13	32	66.7	50	72.2	64
3 - 4	6	5	3	14	33.3	35.7	16.7	28
5 - 6	-	-	1	1	-	-	5.6	2
> 6	-	2	1	3	-	14.3	5.6	6
TOTAL	18	14	18	50	100	100	100	100

		Name of KUD			
		UB (n=18)	KJ (n=14)	TW (n=18)	Total (n=50)
Male	Amount	26	26	27	79
	Average	1.4	1.9	1.5	1.6
Female	Amount	19	17	20	56
	Average	1.1	1.2	1.1	1.1
Male and Female	Amount	45	43	47	135
	Average	2.5	3.1	2.6	2.7

• **Annual family income and balance of farm management**

The highest average household income in three KUDs is in KUD Usaha Bersama, that is Rp 4.83 million/farmer, followed by Kencana Jaya Rp 3.03 million and farmers in KUD Tri Widodo earned Rp 1.76 million per farmer. Agriculture has great contribution to the farmers annual income in two KUDs; i.e. 77.08% from total income in KUD Usaha bersama and 74.62% in Tri Widodo, while in KUD Kencana Jaya the percentage of agriculture income is 51.34% from total income farmers earned. It is also important to explain cost ratio of agriculture activity in three KUDs; there are 0.30 in KUD Kencana Jaya, 0.31 in Usaha Bersama and 0.37 in Tri Widodo.

(A) Annual Family Income

Annual Family Income (000,000)	Frequency				Percent			
	Name of KUD				Name of KUD			
	UB	KJ	TW	TH	UB	KJ	TW	TH
<2.5	6	11	15	32	35.3	55	75	56.1
2.5 - 4.9	5	4	5	14	29.4	20	20	24.6
5.0 - 9.9	5	5	-	10	29.4	25	-	17.5
10.1 -15.9	1	-	-	1	5.9	-	-	1.8
TOTAL	17	20	20	57	100	100	100	100

		Name of KUD			
		UB (n=17)	KJ (n=20)	TW (n=20)	Total
Net Agri Income	Amount	74,480,000	29,575,000	26,352,000	130,407,000
	Average	4,381,176	1,478,750	1,317,600	2,287,842
	Percent	77.1	48.7	74.5	67.7
Non-Agri Income	Amount	22,150,000	31,200,000	9,010,000	62,360,000
	Average	1,302,941	1,560,000	450,500	1,094,035
	Percent	22.9	51.3	25.5	32.3
Total Annual Income	Amount	96,630,000	60,775,000	35,362,000	192,767,000
	Average	5,684,118	3,038,750	1,768,100	3,381,877
	Percent	100	100	100	100

(B) Balance of farm management

Annual Family Income (000,000)	Frequency				Percent			
	Name of KUD				Name of KUD			
	UB	KJ	TW	TH	UB	KJ	TW	TH
<1	2	7	13	22	11.8	41.2	65	40.7
1.0 - 2.9	10	8	7	25	58.8	47.1	35	46.3
3.0 - 4.9	3	2	-	5	17.6	11.8	-	9.3
5.0 - 6.9	1	-	-	-	5.9	-	-	1.9
7.0 - 8.9	1	-	-	1	5.9	-	-	1.9
TOTAL	17	17	20	54	100	100	100	100

		Name of KUD			
		UB (n=17)	KJ (n=20)	TW (n=20)	Total
Gross Agri Income	Amount	58,950,000	33,725,000	26,852,000	130,407,000
	Average	3,467,647	1,988,823	1,342,600	2,213,463
	Percent	100	100	100	100
Production Expenses	Amount	18,750,000	10,011,000	9,985,000	38,746,000
	Average	1,102,941	588,882	499,749	717,585
	Percent	31.8	29.7	37.2	32.4
Net Agri Income	Amount	40,200,000	23,714,000	16,867,000	80,781,000
	Average	2,364,706	1,394,941	834,350	1,495,944
	Percent	68.2	70.3	62.8	67.6

- Measures to obtain farming technology (situation of using KUD):

Forty six (46) out of 60 respondents of 3 KUD reported that they rely on PPL's technical guidance, on one hand, and 15 respondents refer the KUD as technical source. Although a few entries have been found by respondents to the dependence on parents and neighbors, quite a few numbers of member farmers (20) participated in the technology related meetings and gatherings.

- Measures for Obtaining Production/Consumer Goods (Situation of Using KUD)

The KUDs have been used by the members to sell bulk of their paddy at government-guaranteed prices (using the Bulog/Dolog channels). The KUDs have also been used by the members to purchase some of the controlled commodities which are sold by the KUD at regulated prices. Otherwise the farmers have been free to use any channel which appears to them to be more economically advantageous. 91.5% of the farmers purchased chemical and organic fertilizer from their KUDs. 46.6% of the farm household purchased their 100% requirements from their cooperatives. 55% of the members had purchased their other requirements from their KUD, but only 21.6% of the household purchased their 100% requirements from their cooperatives. These requirements included: paddy seeds, farm machines, small farm tools, packaging material, consumption items like rice, fish, other food stuff and some clothing. The highest utilization of the KUD facilities has been to purchase fertilizer and farm chemicals including some seeds.

On an average, farmers get 49% of their agricultural income from rice cultivation; 19% from cash crops; 8.3% from vegetables and fruits; 5.3% from livestock, dairy and poultry, and 17% from other agricultural operations (see table below).

BREAK-UP (PERCENTAGE) OF AGRICULTURAL INCOME OF FARM HOUSEHOLDS : 3 KUD AREAS IN LAMPUNG PROVINCE

Source of Income	USAHA BERSAMA	KENCANA JAYA	TRIWIDODO	Av. %
Rice	74.6	42.0	32.0	49.0
Livestock/Dairy	11.0	3.5	2.0	5.3
Fruits & Veg.	4.4	1.7	19.0	8.3
Cash crops	3.7	26.5	28.0	19.0
Other income	6.3	26.5	19.0	17.0

The highest income-generating factor has been paddy, followed by cash crops and a few other factors.

The household expenses, on an average, have been found to be as follows: Food 54%; Clothing 13%; Education 11.6%; Housing 6.3%; Ceremonies and social activities 5.3%; and others 9.6%. The table below shows the break-up of household expenses:

BREAK-UP (PERCENTAGE) OF HOUSEHOLD EXPENSES

Expenses	USAHA BERSAMA	KENCANA JAYA	TRIWIDODO	Av. %
Food	66.7	47.1	49.2	54.0
Clothing	12.7	11.7	14.4	13.0
Housing	4.6	6.6	7.0	6.3
Education	6.8	9.9	18.0	11.6
Ceremonies	4.3	8.4	3.6	5.3
Others	4.3	15.8	7.8	9.6

In the life of a farm household KUD's two outlets, the Waserda and the Kiosk, play an important role - where from the goods are purchased and where the goods are sold. The farmer needs not only the farm inputs but also the animal/poultry feed.

The farm households have been making use of the small consumer stores, waserdas or kiosks owned by their 3 KUDs. Although the members have expressed their satisfaction with the existence of these stores (sales outlets), they have made some comments on their operations. Some of the observations have been: they are of an average type (18.3%), they stock too few items (25%), they should be brighter (6.6%). Several respondents wanted these waserdas to be renovated to be useful.

In addition, the farm households have made use of the purchasing business facilities of their KUD in the form of kiosks and warehouses. Members have found these to be good but expressed that they all needed improvement: these are too small and too far (31.6%); and these need renovations to be useful and effective (35%).

- Savings Patterns of Farm Households

The commissioned survey results of savings patterns for farm households in Lampung is as follows:

TYPE/PLACE OF SAVINGS	SAVINGS (Rp. Million)	% TOTAL SAVINGS	TOTAL # RES-PONSE	% TOTAL FAMILIES SURVEYED	% TOTAL RES-PONSE	AVE SIZE SAVINGS (Rp.000)
Total Savings	21.7	100.0	38	63.3	100.0	572.8
KUD Voluntary Savings	4.3	19.9	36	60.0	100.0	120.3
Other Savings	17.4	80.1	25	41.7	100.0	697.6
- BRI	14.4	66.0	15	-	60.0	957.3
- Farmer Group	2.5	11.5	4	-	16.0	627.5

- Loans Received, Loan Repayment and Loan Repayment Intentions of Farm Households

The commissioned survey results for loans received, loan repayment and loan repayment intentions for farm households in Lampung is as follows:

TYPE OF LOANS	LOANS (Rp. Million)	% TOTAL LOANS	TOTAL # RES-PONSE	% TOTAL FAMILIES SURVEYED	% TOTAL RES-PONSE	AVE SIZE OF LOAN (Rp.000)
Total Loans	26.1	100.0	30	50.0	100.0	869.7
KUD Loans	4.3	16.6	13	21.7	100.0	333.4
Other Loans	21.8	83.4	24	40.0	100.0	906.6
- Bank	0.6	2.3	2	-	8.3	300.0
- Informal	19.0	72.7	16	-	66.7	1,186.3
- Not Specified	0.2	0.7	3	-	12.5	59.3
- Fertilizr	2.0	7.7	3	-	12.5	666.7

CATEGORY	TOTAL # RESPONSES	% TOTAL RESPONSE
REPAYMENT OF KUD LOANS:	29	100.0
1. Repaying loan on time	22	75.9
2. Deadline has arrived but repayment is partially overdue	4	13.8
3. Deadline has arrived but unable to repay most of debt	0	0.0
4. Deadline has arrived but have not repaid any of debt	0	0.0
5. Deadline has not yet arrived	3	10.3
INTENTION TOWARD LOAN REPAYMENT:	50	100.0
1. The loan should be repaid exactly by the deadline	47	94.0
2. The loan should be repaid but not necessary to repay exactly on deadline	3	6.0
3. The loan does not have to be repaid (decision of debtor)	0	0.0

- Merchandise Ratio and Marketing Methods of Farm Products (Situation of Using KUD)

Main crops which are on procurement list of the government for purposes of national food-stock are generally offered by the farmer-members to their KUDs. These are sold by the members at government-designated prices. Whatever is left behind, the members sell in the open market on "cash and carry" basis because they needed money for their own use and for next cultivation. 31.6% had distributed their products through padding in the market. All others sold their products in the open market or to their favoured traders.

In the case of cash crops, fruits and vegetables, poultry and dairy products, the members sold their products directly to the concerned dealers because the prices they received were always in cash. Some of the members carried their farm products themselves to the nearby town centres and sold them there against cash.

(2) Intention for farm management

- Key commodities in the future:

Palawija followed by poultry are the main farm products to which member farmers attach importance to introduce, if there would be an opportunity. (entry is 41 and 24 respectively). A few member farmers expressed their preference in introducing fruits and vegetable, but none refers to pig and dairy cow.

- Intention to Introduce Farm Machinery and Facilities

Some of the farm households have been using power-driven farm machines with a view to conserve energy and to increase the agricultural production. Farmers of Triwidodo and Usaha Bersama have been ahead of KUD Kencana Jaya. In view of expanding situation of industrial development, farm labour shortage is increasingly felt. Introduction of farm machines, though simple ones, can help overcome the farm labour shortage. In response to the survey, the farm household members had indicated the mechanization of some of the farm operations (see table below).

FARM HOUSEHOLDS' INTENTION TO MECHANISE FARM OPERATIONS

Intention to Mechanise	USAHA BERSAMA	KENCANA JAYA	TRIWIDODO	Responses Received	Av. %
Tilling	04	08	08	20/60	33.3
Rice Transplanting	11	04	02	17/60	28.3
Harvesting	09	04	03	16/60	26.6
Threshing	06	06	06	18/60	30.0
Drying	06	01	04	11/60	18.0
Transportation	02	02	05	09/60	15.0
Feeding Machines	02	01	04	07/60	11.6
Milking	--	--	--	--	--
Others	01	--	--	01/60	--

These responses out of 60 were: Tilling-20 persons 33.3%; Threshing-18 persons 30%; Rice transplanting-17 persons 28.3%; Harvesting-16 persons 26.6%; Drying-11 persons 18%; Transportation-9 persons 15%; Feeding Machines-7 persons 11.6%.

With the increase of farm machines and the projected mechanization of farm operations, there would also be the need for setting up farm machines service centres/automobile workshops etc. There will also be the need for providing appropriate training to the farm machine operators besides instituting some vocational training to the members of households.

- Demand for Credit to Improve Farm Management

The commissioned survey results of credit demand patterns for farm households in Lampung is as follows:

CATEGORY	TOTAL # RESPONSES	% TOTAL RESPONSE
HOW IS LOAN SYSTEM FOR SATISFYING YOUR NEEDS?:		
a. Sufficient	57	100.0
b. Commodities should be increased	17	29.8
c. Should not be increased	37	64.9
d. Other	1	1.8
- don't know	2	3.5
- never borrowed		
- timeliness needed	1	
- need credit		
HOW EASY IS IT TO BORROW MONEY FROM KUD?:		
a. Easy	53	100.0
b. Difficulty of security/guarantor	48	90.6
c. Procedure is complicated	0	0.0
d. Manager/Employee are too severe	1	1.9
e. Other	0	0.0
- don't know	4	7.5
- never borrowed		
- KUD credit still needed		
- same as worker's pay		
MAXIMUM LIMIT OF LOAN AMOUNT:		
a. Sufficient	55	100.0
b. Too low, should be increased	32	58.2
c. Too high	22	40.0
d. Other	0	0.0
- don't know	1	1.8
- never borrowed		
- can't say		
- don't understand		
LOAN INTEREST RATE:		
a. Satisfactory	53	100.0
b. Can't say either way	41	77.3
c. Higher than other banks	6	11.3
d. Other	3	5.7
- don't know	3	5.7
- never borrowed		
- interest is small	1	
- like bank	2	
- important for SHU (profit)		

- The field of farming technology demanded:

As to member farmers in two (2) KUD, they seem satisfactory to the present technical services on production, application of fertilizer /pesticide and grading etc., but member farmer of another KUD has split in opinion on this subject. Namely as to the technical guidance on the two fields i.e., production and fertilizer/ pesticide application, pro and con to sufficiency is halved, but as to grading/ packaging majority satisfy current condition.

{3} Expectation to KUD

- Condition of Joining the KUD

- a. There are plural number of member from one household, the average number from one house hold is 1.88 persons. Out of 50 households joining the KUD, there are 30 households with plural members.
 - b. The number of response farm household is 50, out of them 9 households are not joining the KUD. The total agricultural family is not grasped by KUD.
 - c. Condition of contributions
- Initial fee is Rp. 2,500 or Rp. 6,000. The number of KUD members consider the amount as "proper" is 39 persons out of 48 persons of KUD members, the standard is set at an appropriate level.
- The number of KUD members considere the amount of the compulsory savings as "proper" is 35 persons (covers 78%), as "cheap" is 8 persons. Probably it was set with low level.

- Evaluations and wishes to the management of the KUD

- a. Considering the existence of the KUD (whether it is useful or not), 33 persons (73%) of KUD members said "very useful", 12 persons said "useful". It was valued highly.
- b. Considering the reliability of the KUD, 17 persons (38%) of KUD members said "highly reliable" and 28 persons (62%) said "can be relied".
- c. Considering the satisfaction of the members to KUD's activity, 40 persons (89%) said "satisfied", 5 persons said "no idea" and no one said "unsatisfied".
- d. Considering the frequency of KUD staff to visit the members, 71% of members said that during the last 1 year they got two visits. At USAHA BERSAMA, 10 persons of KUD members said more than 5 times, while TRI WIDODO there were 7 persons of KUD members said that during the last 1 year they did not visit. There was a big gap between KUD.
- e. Considering the reflection of members' opinion, whether it is reflected or not, 91% of the KUD members said that, it is "reflected very well", it was highly valued
- f. Considering the conveniency of KUD's facility, 76% of member respondents said "the present codition is good", the convinieny was good. However, 56% said "the structure is good", but 27% of the members said "small" or "since it has been old, renovation is necessary".

Table 1. Evaluation to the KUD
(respondent: 60 persons, 45 of them are members)

	Usaha Bersama	Kencana Jaya	Tri Widodo	Total	Ratio
- very useful	16	15	13	4	73.3%
(Of which : member)	11	13	9	33	73.3
- highly reliable	7	12	6	25	41.7
(Of which : member)	5	9	3	17	37.8
- satisfied on the activity	16	18	19	53	88.3
(Of which : member)	10	15	15	40	88.9

- Evaluations and wishes to the officials and employees

- Considering the officers, 89% of KUD members said "work hard", it was a high value.
- Considering the accurateness of office work, 82% said "accurate", while considering promptness of the officers, 71% said "prompt", the management was valued highly. The evaluation from non-members is also high.

Table 2. The evaluation on the office works of KUD
(respondent: 60 persons, 45 of them are members)

	Usaha Bersama	Kencana Jaya	Tri	Total Widodo	Ratio (%)
- accurate	18	16	15	49	81.7
(Of which : member)	12	13	12	37	82.2
- not accurate	0	0	1	1	1.7
(Of which : member)	0	0	1	1	2.2
- prompt	17	16	11	44	73.3
(Of which : member)	11	13	8	32	71.1
- delayed	0	0	2	2	3.3
(Of which : member)	0	0	2	2	4.4

- Attendance to the General Meeting and Other Gatherings

There was no response concerning the conditions of attendance to each level of the general meeting for being a member of

- The Role of KUD

There was no respons for the condition of assuming the officials of KUD.

- Questions for Non Members

- Out of 15 persons of non-members, 11 persons willing to be a member. Considering the difficulty for

joining, 1 person responded, that there was no difficulties. Considering the question whether there is good merit to becomes a member, 19 persons (including 5 persons of KUD members) responded, the contents were ; "loan" : 4 persons; "use of facility" : 3 persons; "useful" : 4 persons; "vending" : 1 person ; "low price of sold goods" : 2 persons; "the purchase of fertilizers; etc.

- b. The reason for not joining was responded by 2 persons. The contents were "don't know about the role of KUD".
- Evaluation and Demand for Business Activities (Purchasing, marketing, processing, joint shipment, joint-use facilities, terms of loan, farm guidance, better-living guidance and others)

In the light of the results of the farm household surveys carried out on a selected group of members (60 households) of three KUDs, it has been found that the members desire to enhance the operations of their KUDs so that they are able to get better and timely economic services (see the table below).

EXPECTATIONS OF THE FARM-HOUSEHOLDS FROM THEIR KUD

Expectations	Av. %
-Upgrading Kiosks and Waserda	46.6
-Kiosks: Expansion of Items Range	35.0
-Waserda: Expansion of Items Range	35.0
-Establishing Joint Purchasing	81.6
-Establishing Joint Marketing	81.6
-Establishing Joint-Use Facilities	81.6
-Renovate & Expand Rice Milling Facilities...	35.0
-Improve/expand Warehousing Capacity	35.0
-Improve/Expand Assembly Hall	31.6
-Expand Loan Variety	61.6
-Increase Existing Credit Limits	61.6
-Increase Farm Production Guidance	31.6
-Increase Fertilizer Guidance	21.6
-Increase Better-Living Guidance	11.6

Warehousing and kiosks facilities are too small and need expansion (46.6%); range of goods and their quality need improvement (26.6%); waserdas are too small and need further expansion and improvement (35%); joint marketing, joint purchasing and joint-use facilities through KUD need to be encouraged (81.6%); variety of loans extended and the maximum credit limit to be increased (61.6%); to help overcome the problem of low fertility of land and proper shipment of agricultural produce, intensive farm guidance activities need to be instituted, e.g., better farming techniques 31.6%), fertilizer application (21.6%), and grading and packaging (11.6%); to promote a greater interaction with the member and their family members, and the assembly halls need expansion and improvement (31.6%). No regular better-living guidance exists.

7 THE SUMMARY OF THE RESULT OF THE COMMISSIONED SURVEY (West Nusa Tenggara)

7-1 Outline of the Respondent

	Kita	Karya Utan	Doro Cumpa	TOTAL
Condition of Respondent				
1 Number of respondent family	20 fam.	20 fam.	20 fam.	60 fam.
2 Number of respondent	20 prs.	20 prs.	20 prs.	60 prs.
- male	19 prs.	19 prs.	19 prs.	57 prs.
- female	1 prs.	1 prs.	1 prs.	3 prs.
3 KUD Member	15 prs.	15 prs.	15 prs.	45 prs.
4 Non member	5 prs.	5 prs.	5 prs.	15 prs.
Condition of the Family Head				
5 Number of family head	20 prs.	20 prs.	20 prs.	60 prs.
- male	19 prs.	20 prs.	19 prs.	58 prs.
- female	1 prs.	0 prs.	1 prs.	2 prs.
6 KUD member	15 prs.	15 prs.	15 prs.	45 prs.
7 Non member	5 prs.	5 prs.	5 prs.	15 prs.
8 Farmer	17 prs.	18 prs.	8 prs.	43 prs.
9 Other job	3 prs. (carpenter, transport, laborer)	2 prs. (public servant, others)	12 prs. (public servant, trader, construction)	17 prs.
The main income source of the family				
10 Agriculture	20 prs.	20 prs.	20 prs.	60 prs.
11 Laborer	2 prs.	1 prs.	8 prs.	11 prs.
12 Daily employee	3 prs.	1 prs.	3 prs.	7 prs.
13 Land rent	0	0	0	0
14 Others	4 prs.	2 prs.	0	6 prs.

* The samples of the survey were selected by interviewers and the the KUD chairman with special considerations to obtain impartial respondents.

7-2 Rural Community and Rural Economy

- Customs, Ceremonies and Social Life in Rural Community

The influence of Balinese culture on Lombok's society is noticeable, especially in the form of traditional rituals and Balinese houses of worship. This culture was brought here by migrants from Bali who came to Lombok a long time ago, or who have just come in through transmigration programs. It lives side by side with the culture of natives of Lombok, the Sasak tribe, which is heavily influenced by Islam.

In Sumbawa, Balinese culture is not as obvious as in Lombok, although it is increasingly noticeable as the number of Balinese migrants is also increasing. Like the Sasak in Lombok, the native of Sumbawa

is also predominantly Moslem.

Generally speaking, the different cultures in this region get along quite well with each other, especially in rural areas where they work together to solve community problems they commonly shares. However, it should also be noted that there are several customs which have negative effect upon peasants in rural areas. People of the Greater Sumbawa are accustomed to travelling to other areas, and sometimes to places outside the island, to visit relatives. They leave right after harvesting time, avoiding the dry season because they do not have enough expertise to deal with lack of water. Just before the rainy season, they come back to start to burn the coarse grass that have been growing in the abandoned land. When the rain finally fall, they start to plant the seed (without tilling the land) and leave afterward to let nature play its course, and come back just before harvesting time.

The Dompu regency has its own peculiarity; one that has something to do with "the honor of a family". Less than a decade ago, the prestige of a family is measured by how many buffalos or cows does this family own. Nowadays, there is a different measurement, which is "how many members of the family can go to higher education", irrespective of the school's whereabouts and no matter what is the economic consequences.

Based on the results of KUD Survey, there are some customs and ceremonies in West Nusa Tenggara as below:

- Not only wealthy farmers can give high-school education in others big cities for their children. The reason of this fact is the role of high education as the most important symbol of family honor, especially in Dompu Regency;
- "Buka Tanah" ceremonies (individual Islamic ceremony) done before planted their land;
- "Tedup Tanam" customs (collective Islam ceremony) in Lombok Tengah Regency;
- "Gotong Royong" in irrigation cleaning, road cleaning, and house repairing;
- Small farmers solidarity to help each other.

- Prerogatives of Various Economic Entities

Small shops and kiosks are the main economic entities in many villages in West Nusa Tenggara, and they play a vital role in providing farmers with daily necessities and input for their production activities. There are several cases in which these entities also act as distribution channels for farmers' products. While home industries have become an alternative for farmers to create added-values for their products and an additional sources of income.

7-3 Agricultural Production

- Distribution of Agricultural Input Material such as Makers and Dealers of Chemical, Vinyl, Feed-stuff

While the production of most of the agricultural inputs e.g., urea, other chemical fertilizer and paddy seeds remains in the hands of the government-owned companies, the majority of distribution is channelled through the KUD system. Farm inputs for plantation/estate crops is done through the PT Pertani.

Farm chemicals, vinyl sheets, feed-stuff are brought in from East Java and Bali. There are few producers of cattle-feed, mainly for fisheries and poultry. The distribution of these products is done through the private trade and, in a limited way, through the KUD TPK. Livestock and dairy sectors are weak in the province.

- Description of Farm Machinery (Makers and Dealers)

The following table indicates the availability of farm machines in WNT during 1993 and 1994:

Farm Machines	1993	1994	% of 1993
2-wheel Tractors (all types)	484	813	167.9%
Tractors/all others	42	56	133.3%
Hand Sprayers	18,950	19,611	103.4%
Other Pest Control Eqpt	642	554	86.2%
Threshers	2,057	1,860	90.4%
Paddy Processors	1,607	1,631	101.4%
(out of which RMU)	(752)	(882)	(117.2%)
Water Pumps	173	131	75.7%

Source: Statistik Indonesia-Year Book 1994. BPS Jakarta.

Most of the farm machines are of Japanese origin while some were locally produced or made in Surabaya. Some of the farm machines and paddy processing equipment were given under OECF and Kennedy Round Programmes.

7-4 Agro-Processing and Its Distribution

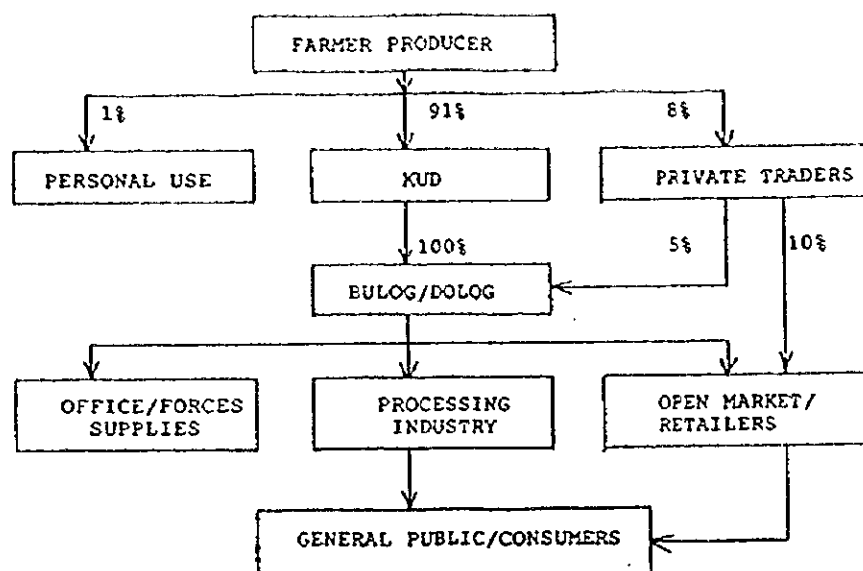
- Demand of Major Farm Products (Commodities, Form of Processing, Consumption Areas)

Major farm products of the WNT province during 1994 have been the following:

Paddy/Rice	...	...	1,187,500 Tons
Soybean	...	...	130,300 Tons
Cassava	...	...	108,200 Tons
Maize	...	...	51,600 Tons
Mungbean	...	...	16,500 Tons

Except for Cassava and mungbean, rest of the products come under national food procurement programme. Rice is procured by the KUD from the farmer-members and sold to the Bulog for national food stock. The Bulog/Dolog, in turn, releases rice for open market as well as for supplies to offices and forces. It releases most of its stock in the open market to maintain supplies and prices.

A FLOW CHART on the procurement and distribution of rice in the province is given below:



The processing of these products is done locally. Except for some rice milling, there is no other agro-processing activity in the province. Soybean is processed in tahu and tempe. Rest of the items move out of the province for various formulations e.g., cattle-feed, cassava chips.

Other agricultural products include vegetable, and some cash crops. Most of the products are sold to wholesalers for shipment to East Java and Bali. The balance is consumed within the province itself.

Commodity	1992	1993	Percent
Paddy/Rice (Tons)	1,141,300	1,186,926	103.9%
Maize (T)	37,548	51,650	137.5%
Soybeans (T)	121,176	132,752	109.5%
Chicken (all type)	2,708,800	3,240,090	119.6%
Eggs (all type) (T)	4,936	4,931	99.8%
Banana (T)	63,090	21,840	34.6%
Tomato (T)	13,272	4,730	35.6%
Red Onion (T)	38,519	43,086	111.8%
Cassava (T)	77,862	124,464	159.8%
Chilies/Cabe (T)	10,047	14,759	146.8%
Coffee (T)	1,343	1,642	122.2%
Coconut (T)	33,450	37,700	112.7%
Cloves (T)	120	325	270.8%

The farm products are collected through the KUD network either at the initiative of the traders and their agents or near by the KUD or its farmers groups.

- Technical Level of Major Processed Farm Products by Commodities

Rice is the major farm product followed by vegetables and some cash crops. Rice production is distributed in the open market and the national food-stock (Bulog).

Vegetables are consumed in the local market, and the remaining is shipped to Java through private traders. Cash crops are collected by private traders and some through the KUD network. There is no agro-processing industry in the cooperative sector in the province. Milk production is insignificant, and

whatever is produced is consumed locally.

No processing of poultry is undertaken in the cooperative sector, except that they help procure the raw material including eggs, and ship it to the consumer centres in Java through traders.

- Major Agro-Processing Business entities Volume of Production and Facilities

Major agro-processing industry in the province is the rice milling, coconut, coffee and cassava processing. Out of a total of 1,631 rice processing units in WNT in 1994, there were 882 rice milling units of 0.5 ton/hour capacity each.

- Marketing Area of Major Farm Products, Distribution System

Major marketing destinations of farm products from WNT have been Bali, Java and WNT itself. Cash crops and vegetables generally move into Java.

- Business Customs and its Practice (Pricing, Accounting Settlement)

These practices are more or less fixed. Some slight variations occur due to the type of commodity and its degree of durability. The terms are generally cash upon delivery of goods. However, for larger values the transactions can be partly cash and partly through bank instruments. In the case of various commodities, the customs can be enumerated as under:

a) Rice:

The procurement is under the government programme, and in this case the procurement price is fixed by the government season to season. The farmers sell their paddy/rice to the KUD against this fixed price. The KUD pays the farmers generally through their account in the cooperatives. The surplus paddy/rice is sold by the farmer in the open market generally to the trader who comes to his house first with cash in hand. In this case the terms are usually cash, and in many cases, a token advance payment is also made to the farmers for the next crop.

b) Vegetables:

The transactions are usually cash and carry from the road-head. In the case of farmer bringing the crop to the open market, he returns home with cash in hand. The KUD in the province do not deal in vegetable business. The transactions are between the KT/households and the traders. In some cases the KUD organises contacts between the traders and the farmers.

c) Cash crops:

Except for clove, all transactions are on cash-and-carry basis.

7-5 Actual Situation of Agriculturists and their demands

(1) Actual Situation of Farmers

- Ownership of farmland area

Farmers in KUD Karya Utan have 1.3 ha farmland in average include 16.1% land leased. Farmers in KUD Doro Cumpa have an average of 1.47 ha farmland and they lease farmland in a very little amount. Farmers in KUD Kita have the larger average of farmland area than KUD Karya Utan and KUD Doro Cumpa, that is 3.46 ha/farmer. The most part (33.3%) of total sample in this KUD survey own 1-1.5 hectare farmland.

Table 7-5-1 Number of Household by Ownership of Farmland Area

Farmland Area (000 M ²)	Kita		Karya Utan		Doro Cumpa		Total (3KUDs)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%

<5.0	0	0	0	0	1	5	1	1.7
5.0 - 9.9	1	5	2	10	2	10	5	8.3
10.0 - 14.9	3	15	6	30	11	55	20	33.3
15.0 - 19.9	0	0	4	20	2	10	6	10
20.0 - 24.9	3	15	3	15	1	5	7	11.7
25.0 - 29.9	0	0	0	0	0	0	0	0
30.0 - 34.9	4	20	0	0	2	10	6	10
35.0 - 39.9	2	10	0	0	0	0	2	3.3
> 39.9	7	35	5	25	1	5	13	21.7
Total	20	100	20	100	20	100	60	100

Fr. = frequency

Table 7-5-2 Ownership of Farmland Area

Kind of Ownership		Name of KUD			
		Kita	Karya Utan	Doro Cumpa	Total
Owned	Total Area	691,558	364,325	289,909	1,345,792
	Average*	34,578	18,216	14,495	22,430
	%	100	83.88	98.3	94.72
Leased	Total Area	-	70,000	5,000	75,000
	Average*	-	3,500	250	1,250
	%	-	16.12	1.7	5.28
Total	Total Area	691,558	434,325	294,909	1,420,792
	Average*	34,578	21,716	14,745	23,680
	%	100	100	100	100

* = average per household

- Farm Management Pattern

Member farmers of three (3) KUD in the province of West Nusa Tenggara were covered by farm household survey. Kabupaten Sumbawa and Dompu where the KUD locate are classified to "low-land" in terms of agro-eco system. Both kabupatens are also covered by the Third Umbrella projects area with an emphasis on high-value added agricultural products.

An average farm holding of member farmer in 3 KUD is 3.3 ha, 1.8 ha and 1.2 ha respectively. Although wet land shares main portion of total holding, in a KUD average upland is 1.2 ha. This means that member farmers' farming activities diversified widely.

As is seen in other provinces under survey, farm machinery is not extended yet with an exception of hand sprayer (24 farm household out of 60 respondents).

One of the most important characteristics is that relatively large number of cattle (beef and draft) and buffalo are raised by member farmers in 3 KUD. As to beef cattle 2 farmers keep 23 head in a KUD water buffalo is kept by 26 out of 40 member farmers in two KUD and the number of head reached to 136. Local chicken and broiler are also kept, though the number of member farmer is limited.

In an average of member farmers in each KUD (namely 20 respondents in a KUD), 7.2 tons, 8.7 tons and 8.3 tons of paddy are produced. In palawija, beans are considered to be another important farm products in this area and produced in considerable amount by many member farmers of KUD under survey in the province. In particular, soyabean is produced by 16 member farmer in a KUD, amounting 24 tons and corresponding figures for other 2 KUD are 12 member farmers /9.8 tons and 15 member farmers /10.4 tons respectively (among 20 member farmers in each KUD).

- Cultivated land area by commodities and Number of livestock

Looking at commodities that they cultivate, paddy takes the largest area (91.1% from total area) in KUD Karya Utan followed by upland (4.7%). KUD Doro Cumpa and KUD Kita have the same type of the largest cultivated land area (paddy field and upland). In KUD Doro Cumpa, percentage of the two cultivated land area, respectively, are 80.8% and 16.90%. While in KUD Kita, the figure are 64.8% and 35.18%, respectively. The rest area used for residential site, livestock facilities and other usages. Moreover, 20% of total sample (12 households) have 4 ha and over cultivated land area. Among 3 KUDs surveyed, KUD Kita has the biggest percentage of household who cultivated land area, that is 35% or 7 households.

The most general poultry raised by the farmer in three KUDs is Local chicken in average of 8/farmer. Broiler largely also be raised by fewer farmers particularly in KUD Kita and Doro Cumpa. Some water buffalo also be raised by the farmers in three KUDs, and fewer hen layer in KUD Kita, bali cattle, goat, and horses particularly in KUD Kita and Doro Cumpa.

Table 7-5-3 Number of Household by Cultivated Farmland Area

Farmland Area (000 M ²)	Kita		Karya Utan		Doro Cumpa		Total (3 KUDs)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
< 5.0	0	0	1	5	1	5	2	3.3
5.0 - 9.9	2	10	2	10	4	20	8	13.3
10.0 - 14.9	2	10	6	30	9	45	7	11.7
15.0 - 19.9	0	0	5	25	4	20	9	15
20.0 - 24.9	3	15	1	5	1	5	5	8.3
25.0 - 29.9	1	5	0	0	0	0	1	1.6
30.0 - 34.9	5	25	0	0	0	0	5	8.3
35.0 - 39.9	0	0	1	5	0	0	1	1.7
> 39.9	7	35	4	20	1	5	12	20
Total	20	100	20	100	20	100	60	100

Fr. = frequency

Table 7-5-4 Cultivated Farmland Area

(Unit: m²)

Kind of Commodity		Kita	Karya Utan	Doro Cumpa	Total
Paddy Field	Large	428,850	409,700	191,250	1,029,800
	Average*	21,443	20,485	9,563	17,163
	%	64.75	91.08	80.78	76.3
Upland	Large	233,000	21,100	40,000	294,100
	Average*	11,650	1,055	2,000	4,902
	%	35.18	4.69	16.90	21.8
Orchard	Total	-	1,500	500	2,000
	Average*	-	75	25	33
	%	-	0.33	0.21	0.15
Livestock Facility Area	Total	500	-	-	500
	Average*	25	-	-	8
	%	0.07	-	-	0.15
Other Land Area	Total	-	5,000	5,000	10,000
	Average*	-	250	250	167
	%	-	1.11	2.11	0.74
Total	Total	662,350	449,800	236,750	1,348,900
	Average*	33,118	22,490	11,837	22,482
	%	100	100	100	100

* = average per household

Table 7-5-5 Number of Livestock

(Unit: head)

Kind of Livestocks		Kita	Karya Utama	Doro Cumpa	Total
Work Cattle	Amount	-	8	14	22
	Average*	-	0.4	0.7	0.37
Water Buffalo	Amount	84	52	3	139
	Average*	4.2	2.6	0.15	2.32
Bali Cattle	Amount	5	-	31	36
	Average*	0.25	-	0.15	0.6
Horse	Amount	12	7	4	23
	Average*	0.6	0.35	0.2	0.38
Local Chickens	Amount	64	161	310	535
	Average*	3.2	8.05	15.5	8.92
Hen Layers	Amount	360	-	-	360
	Average*	18	-	-	6
Boiler	Amount	3,000	-	500	3,500
	Average*	1,500	-	25	58.33
Duck	Amount	5	-	60	65
	Average*	0.25	-	3	1.08
Goat	Amount	11	-	19	30
	Average*	0.55	-	0.95	0.5
Beef Cattle	Amount	-	-	23	23
	Average*	-	-	1.15	0.38
Dairy Cattle	Amount	-	-	3	3
	Average*	-	-	0.15	0.05

* = average per household

- Situation of Holdings of Farm Machinery and Facilities

The survey covered 60 farm households from the area of operation of three KUD in West Nusa Tenggara (NTB), (KUD KITA, KUD KARYA UTAN, and KUD DORO CUMPA). Major production of the area has been paddy/rice. On an average, income of a farm household from rice has been 66.6%, livestock (3.3%) and from other sources (12.6%). Consequently the farmers have not invested much in farm machines. In order to carry on with the traditional farming, the households have some simple farming tools: 4-wheel tractors 6 units, 28 units of hand tractors and hand sprayers, 13 units of mist blowers, and threshers. Other equipment included: 5 containers, and 7 oxcarts. The farmers also possessed on an average: farm produce storage (27.45m²), cattle sheds (13.6m²), and poultry houses (33.3m²).

- Number of family members and number of persons engaged in farming.

The major part of family in three KUDs have 4-6 members, that is 60% from total family which have been investigated; and family members of the rest range from 1-3. Furthermore, the number of family members involved in farming activities is about 1-3 persons/family. Fewer family have 4-6 members who involved in farming.

Table 7-5-6 Number of Household by Number of Family Members

Family Members	Kita		Karya Utan		Doro Cumpa		Total (3 KUD)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
1 - 3	3	15	3	15	5	25	11	18.33
4 - 6	14	70	12	60	10	50	36	60
7 - 9	3	15	5	25	5	25	13	21.67
10 & over	-	-	-	-	-	-	-	-
Total	20	100	20	100	20	100	60	100

Table 7-5-7 Number of Family Members

Sex	Kita		Karya Utan		Doro Cumpa		Total (3 KUD)	
	Amount	Ave.	Amount	Ave.	Amount	Ave.	Amount	Ave.
M	57	28.5	56	2.8	42	2.1	155	2.58
F	54	2.7	45	2.7	55	2.75	163	2.72
M+F	111	5.55	110	5.5	97	4.85	318	5.3

Table 7-5-8 Number of Household by Number of Family Engaged in Farming

Amount of Family Members	Kita		Karya Utan		Doro Cumpa		Total (3 KUD)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
1 - 3	13	65	11	55	16	80	40	66.67
4 - 6	6	30	9	45	4	20	19	31.67
7 - 9	1	5	-	-	-	-	1	1.67
Total	20	100	20	100	20	100	60	100

Table 7-5-9 Number of Family Engaged in Farming

Sex	Kita		Karya Utan		Doro Cumpa		Total (3 KUD)	
	Amount	Ave	Amount	Ave	Amount	Ave	Amount	Ave
M	35	1.75	38	1.9	24	1.2	97	1.62
F	31	1.55	32	1.6	28	1.4	91	1.8
M+F	66	3.3	70	3.5	52	2.6	188	3.12

- Farm household income and balance of farm management

Average income of the farmers in three KUDs almost the same. It ranges from Rp4.80-4.95 million per farmer. In other word, 60% from total farmers which have been investigated in three KUDs, every family earned annual income ranges between Rp2.5-4.9 million. Agricultural activity gives significant contribution to the farmers' annual income. KUD Karya Utan for example, 90.19% total income of the farmers comes from agriculture activity; and farmers in KUD Kita have little bit smaller, that is 82.52% than farmers in KUD Doro Cumpa 72.79%. Agriculture activity cost ratio in these three KUDs are 0.27 for KUD Kita, 0.30 for KUD Karya Utan and 0.23 for KUD Doro Cumpa.

Table 7-5-10 Number of Household by Annual Family Income

Family Income (Rp 000,000)	Kita		Karya Utan		Doro Cumpa		Total (3 KUDs)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
< 0.5	2	10	4	20	1	5	7	11.67
2.5 - 4.9	13	65	9	45	14	70	36	60
5.0 - 9.9	4	20	4	20	5	25	13	21.67
10.0 - 14.9	0	0	3	15	0	0	3	5
>15	1	5	0	0	0	0	1	1.67
Total	20	100	20	100	20	100	60	100

Fr. = frequency

Table 7-5-11 Annual Family Income (Unit:Rp)

Family Income		Kita	Karya Utan	Doro Cumpa	Total
Gross Agri-Income	Total	81,672,500	88,281,000	69,902,000	239,855,500
	Average*	4,083,625	4,414,050	3,495,100	3,997,592
	%	82.52	90.19	72.79	81.89
Non Agri Income	Total	17,302,000	9,600,000	26,126,000	53,028,000
	Average*	865,100	480,000	1,306,300	883,800
	%	17.48	9.80	27.21	18.11
Annual Family Income	Total	98,974,500	97,881,000	96,028,000	292,883,500
	Average*	4,948,725	4,894,050	4,801,400	4,881,392
	%	100	100	100	100

* = average per household

Table 7-5-12 Number of Household by Income class

Family Income (Rp 000,000)	Kita		Karya Utan		Doro Cumpa		Total (3 KUDs)	
	Fr.	%	Fr.	%	Fr.	%	Fr.	%
< 1.0	-	-	1	5	-	-	1	1.67
1.0 - 2.9	16	80	13	65	13	65	42	70
3.0 - 4.9	2	10	3	15	7	35	12	20
5.0 - 6.9	1	5	1	5	0	-	2	3.33
> 6.9	1	5	2	10	0	-	3	5
Total	20	100	20	100	20	100	60	100

Fr. = frequency

Table 7-5-13 Balance of Farm Management (Unit:Rp)

		Kita	Karya Utan	Doro Cumpa	Total
Gross Agri-Income	Total	81,672,500	88,281,000	69,902,000	239,855,500
	Average*	4,083,625	4,414,050	3,495,100	3,997,592
	%	100	100	100	100
Production Expenses	Amount	21,827,500	26,125,800	16,059,500	64,012,800
	Average*	1,091,375	1,306,290	802,975	1,066,880
	%	36.73	29.65	22.98	26.69
Net Agri Income	Amount	59,845,000	62,155,200	53,842,500	175,842,700
	Average*	2,992,250	3,107,800	2,692,125	0
	%	73.27	70.35	77.03	2.930.712
					73.31

* = average per household

- Savings Patterns of Farm Households

The commissioned survey results of savings patterns for farm households in East Java is as follows:

TYPE/PLACE OF SAVINGS	SAVINGS (Rp. Million)	% TOTAL SAVINGS	TOTAL # RES-PONSE	% TOTAL FAMILIES SURVEYED	% TOTAL RES-PONSE	AVE SIZE SAVINGS (Rp.000)
Total Savings	100.6	100.0	26	43.3	100.0	3,868.2
KUD Voluntary Savings	17.4	17.3	11	18.3	100.0	1,579.3
Other Savings	83.2	82.7	20	33.3	100.0	4,160.1
- BRI	25.1		10	-	50.0	2,510.0
- BCA	37.0		4	-	20.0	9,250.0
- BTPN	x					
- BPU	x					
- BM	x					

- Situation of off-farm and seasonal works

Considering the way people spend their spare time between two seasons (planting and harvesting), rural communities in WNT can be divided into two: (1) the Lomboks and (2) the Sumbawaneses.

The Lomboks are relatively more advanced than their Sumbawaneses friends because they use their spare times to do various off-farm activities in order to get some additional income. Besides, the advance of tourism in Lombok has also provided additional jobs.

This is not the case for Sumbawaneses people, except for some of them who traditionally inherit the skill to weave the famous Sumbawa cloth. Sumbawaneses communities, especially those who live in Greater Sumbawa and Bima, used to spend their money in going for a trip to Java and other parts of Indonesia right after the planting season. The presence of Balinese migrants has slowly eroded this tradition, and has initiated a new habit among the native to use their spare time for productive activities. However,

without interference or some social treatment, it will take a long time for Sumbawaneese to leave their unproductive habits for good.

- Measures to obtain farming technology (situation of using KUD)

Overwhelming member farmers in 3 KUD (57 among 60 respondents) obtain farming technique from agricultural extension field worker (PPL). DEPKOP employees like PKL (Field Consultant Worker) are limited source of technical information on farming, and other source including parents, neighbors and middleman/dealer is also not so remarkable. Member farmers of 3 KUD in the province seldom attended to meetings and gatherings with the subject on farming technology.

- Measures for Obtaining Production/Consumer Goods (Situation of Using KUD)

On an average the gross agricultural income of the household constitutes 81.6% of its total income. 26.3% of the gross agricultural income goes on production expenses. The break-up of the agricultural income of a household is as follows:

BREAK-UP (PERCENTAGE) OF AGRICULTURAL INCOME OF FARM HOUSEHOLDS : 3 KUD AREAS IN WEST NUSA TANGGARA (NTB)

Source of Income	KITA	KARYA UTAN	DORO CUMPA	Av. %
Rice	51.2	71.0	78.0	66.6
Livestock/Dairy	--	3.0	6.0	3.0
Fruits and Veg.	--	1.0	--	--
Cash Crops	--	3.0	--	--
Others	--	22.0	16.0	12.6

The breakdown of the household expenses is as follows:

Expenses	KITA	KARYA UTAN	DORO CUMPA	Av. %
Food	54.0	60.0	63.0	59.0
Clothing	11.0	13.0	09.0	11.0
Housing	06.0	07.0	08.0	07.0
Education	14.0	12.0	12.0	12.06
Ceremonies	09.0	05.0	04.0	06.0
Others	06.0	03.0	04.0	04.3

On an average 59% goes towards food expenses; clothing 11%; education 12.6%; 7% towards housing, ceremonies 6%; and 4.3% towards other general expenses.

Households have been making use of their KUD, to some extent, to procure their production and consumer needs as well as for sale of their products. 93.3% of the households purchased their chemical fertilizer, and 71.6% pesticides from their KUD. Very few of them purchased their farm machines from the cooperatives. 58.6% of the members purchased their paddy seeds requirements from the KUD. Other purchases made included: rice, fish and other foodstuffs. The KUD retail shop has been used to purchase the daily needs, some simple farm equipment, clothing etc.

- Loans Received, Loan Repayment and Loan Repayment Intentions of Farm Households

The commissioned survey results for loans received, loan repayment and loan repayment intentions for farm households in East Java is as follows:

TYPE OF LOANS	LOANS (Rp. Million)	% TOTAL LOANS	TOTAL # RES- PONSE	% TOTAL FAMILIES SURVEYED	% TOTAL RES- PONSE	AVE SIZE OF LOAN (Rp.000)
Total Loans	84.1	100.0	18	30.0	100.0	4,670.0
KUD Loans	18.8	22.3	6	10.0	100.0	3,125.0
Other Loans	65.3	77.7	15	25.0	100.0	4,354.0
- Informal	21.7	25.9	4	-	26.7	5,437.5
- Not Specified	43.6	51.8	11	-	73.3	3,960.0

CATEGORY	TOTAL # RESPONSES	% TOTAL RESPONSE
REPAYMENT OF KUD LOANS:	13	100.0
1. Repaying loan on time	11	84.6
2. Deadline has arrived but repayment is partially overdue	1	7.7
3. Deadline has arrived but unable to repay most of debt	1	7.7
4. Deadline has arrived but have not repaid any of debt	0	0.0
5. Deadline has not yet arrived	0	0.0
INTENTION TOWARD LOAN REPAYMENT:	26	100.0
1. The loan should be repaid exactly by the deadline	23	88.5
2. The loan should be repaid but not necessary to repay exactly on deadline	3	11.5
3. The loan does not have to be repaid (decision of debtor)	0	0.0

- Merchandise Ratio and Marketing Methods of Farm Products (Situation of Using KUD)

Not all the households used their KUD to market their farm products. The major marketing commodities have been: 65.6% of paddy/rice and 27.3% of other produce e.g., pulses, beans.

None of the households or any of their KUD owned any grading, packaging and warehousing facilities. Households have expressed that the KUD-owned TPK and waserdas need upgrading. Members have suggested their renovations and expansion (80%), too far a location (23.3), too old (36.6%), and the range of items available was limited (80%).

(2) Intention for farm management

- Key commodity in the future:

Nearly half of the respondents (29 out of 60) have presented their wish to introduce palawija, but the specific items are not revealed in the questionnaire. Fruits and poultry have attracted interest of member farmers in 3 KUD to some extent i.e., 12 and 16 respondents respective items out of 60 member farmers under survey.

- Intention to Introduce Farm Machinery and Facilities

The households suggested mechanization of certain steps of agriculture i.e., tilling (56.6%), threshing (33.3%), rice transplantation (26.6%), and harvesting (20%). (see table below):

FARM HOUSEHOLDS' INTENTION TO MECHANISE FARM OPERATIONS

Intention to Mechanise	KITA	KARYA UTAN	DORO CUMPA	Responses Received	Av. %
Tilling	12	17	05	34/60	56.6
Rice Transplanting	08	03	05	16/60	26.6
Harvesting	02	04	06	12/60	20.0
Threshing	15	01	04	20/60	33.3

- The field of farming technology demanded

As to guidance on agricultural production technology, more than half of member farmers in 3 KUD (33 respondents) are of the opinion with dissatisfaction, on the contrary, 31 respondents feel sufficient to the guidance on application of fertilizer/pesticide.

Generally speaking, with regard to technology on grading and packaging, more farmers feel insufficient to guidance concerning that field.

(3) Expectation to KUD

- Condition of Joining the KUD

- a. There are plural number members from one household and the average number from one house hold is 1.43 persons. Out of 46 member farm households, there are 17 households with plural members.
- b. The number of farm households is 60, out of them 14 households are not joining the KUD, so that agricultural family is not grasped.
- c. Condition of contributions
 - Initial fee is Rp. 1,500 or Rp. 2,000. Out of 45 persons of the KUD members, the number who consider the amount as "proper" is 24 (53%) persons, as "cheap" is 19 persons (42%), it was set at a relatively low standard.
 - Considering the compulsory savings, the number of KUD members considered the amount to be "proper" is 35 persons (78%), as "cheap" is 10 persons (22%), it was set at a relatively low standard.

- Evaluations and wishes to the management of the KUD

- a. Considering the usefulness of the KUD (whether it is useful or not), 17 persons (38%) of KUD members said "very useful", 27 persons (60%) said "useful", and 2 persons said "no idea".
- b. Considering the reliability of the KUD, 11 persons (24%) of KUD members said "highly reliable", 34 persons (76%) said "can be relied".
- c. Considering the satisfaction of the members to KUD's activity, 20 persons said "satisfied", 13 persons said "no idea", and 12 persons said "unsatisfied", the evaluation was relatively poor.
- d. Considering the frequency of KUD staff to visit the members, 69% said that during the last 1 year they got at least two visits, while 4 persons said that they got no visit.
- e. Considering the members' opinion, whether it is reflected or not, 78% of the KUD members valued that it is "reflected very well", but there was 4 person said "KUD does not listen to members".
- f. Considering the conveniency of KUD's facility, 91% of members was satisfied and said "the present condition is good". However, 44% considered it need improvement and 53% of the members said "the structure is small" or "since it has been old, repairment is necessary".

Evaluation to the KUD
(respondent 60 persons, 45 of them are members)

	Kita	Karya Utan	Doro Cumpa	Total	Ratio
very useful	8	4	6	18	30.0%
(Of which : member)	8	3	6	17	37.8
- highly reliable	5	3	3	11	18.3
(Of which : member)	5	3	3	11	24.4
- satisfied on the activity	8	6	7	21	35.0
(Of which : member)	8	5	7	20	44.4

- Evaluations and wishes to the officials and employees

- a. Regarding the employees 58% of KUD members said "working hard", but 22% said "not working hard", it was a low evaluation. It was the same for 3 KUD.
- b. Considering the accurateness of office works 67% of the members said "accurate", while considering promptness of the employees 64% said "prompt". But, 11% said "incorrect" and "delayed", it was a relatively low evaluation.

. The value on the administration management of KUD
(respondent: 60 persons, 46 of them are members)

	Kita	Karya Utan	Doro Cumpa	Total	Ratio
- accurate	10	9	11	30	50.0%
(Of which : member)	10	9	11	30	66.7
- not accurate	2	1	2	5	8.3
(Of which : member)	2	1	2	5	11.1
- prompt	9	9	11	29	48.3
(Of which : member)	9	9	11	29	64.4
- delayed	2	1	3	6	10.0
(Of which : member)	2	1	2	5	11.1

- Attendance to the General Meeting and Other Gatherings

- a. The condition of attendancy to the general meeting is good for every KUD, 84% of KUD members surveyed said "attended" the general meeting. This is probably because they attempt to attend the regional "preliminary general meeting".
- b. Considering the participations to gatherings other than the general meeting, 31 persons said that they participated actively in many gatherings, such as, kelompok tani gathering, explanation meeting of KUT, KUD members orientation, and many kinds of guidance meetings.
- c. Considering the reasons for joining KUD, out of 38 persons who responded, 13 persons said "use of service", 11 persons said "use of business such as financial and trading", 9 persons said "use of facility and payment of public utility charges", and "every kind of guidances". Also, 8 persons for "as a center for agriculture activities".
It is observed that the KUD members have strong concern for their individual business or have a good understanding on the KUD's activity.
- d. The reason for being a member of KUD is almost the same as the reason for joining, the contents were, "use of business and facility", "good service", etc..

- The Role of the member in KUD

- a. The results of the questions related to the condition of assuming as officials, 4 persons assume the officials responded "since elected by the KUD members", also noted a steadfast responsibility "for the development of the KUD".
- Evaluation and Demand for Business Activities (Purchasing, marketing, processing, joint shipment, joint-use facilities, terms of loan, farm guidance, better-living guidance and others)

The farm households have said that purchasing and marketing facilities, equipment including the rice milling units were inadequate and needed either renovations or upgrading. A summary of the expectations of the households from their KUD is given in the table below.

EXPECTATIONS OF THE FARM HOUSEHOLDS FROM THEIR KUD

Expectations	Av. %
-Upgrading Kiosks and Waserda	80.0
-Kiosks: Expansion of Items Range	43.3
-Waserda: Expansion of Items Range... ..	55.0
-Establishing Joint Purchasing	26.6
-Establishing Joint Marketing	65.0
-Establishing Joint-Use Facilities	26.6
-Renovate & Expand Rice Milling Capacity	43.3
-Improve/Expand Warehousing Capacity	26.6
-Improve/Expand Assembly Hall	43.3
-Expand Loan Variety	60.0
-Increase Existing Credit Limits	58.0
-Increase Farm Production Guidance... ..	55.0
-Increase Fertilizer Guidance	30.0
-Increase Guidance on Grading & Packaging	60.0
-Increase Better-Living Guidance	21.6

Kiosks and waserda (80% wanted renovations), expansion of range of items (80%). There are no processing or warehousing facilities. 65% households suggested adoption of joint marketing 26.6% joint-use facilities through the KUD. 60% suggested increasing the variety of loans, and 58% asked for increasing the credit limit of loans. 55% wanted more of farm production guidance, 30% more guidance on fertilizer, and 60% wanted more extension and guidance on grading and packaging. 43.3% wanted expansion of assembly hall and meeting facilities. No regular or formal better-living activities (21.6%) were being carried out for the household farmers.

- Questions for Non Members

- a. Out of 15 non-members, 14 persons said they want to be a member. Considering difficulties to join, 5 persons responded "no difficulty for joining". Also, if they finally joined, the merit they would expect are ; "good service" : 4 persons; "loan" : 3 persons; "use of facility" : 1 person; "constant price of goods" : 3 persons, and "purchase of fertilizer".
- b. The reason for not joining is responded by 15 persons. The contents are "don't know about the role of KUD" by 3 persons, "never obtain explanation from officers" 4 persons, "don't feel the necessity" 3 persons, "just begin farming" 2 persons, etc. One person said "can't rely on the officials".