

SSRU RESEARCH REPORT SERIES, NO. 2

JANUARY 1974

RICE-FARM HARVESTS AND PRACTICES IN CAMARINES SUR:  
DO COMPACT FARMS, MASAGANA 99, AND THE SAMAHANG NAYON  
MAKE A DIFFERENCE?

**CONTENTS REVISED**

Frank Lynch, S.J.

AS OF SEPTEMBER 17, 1974

**ABSTRACT.** In mid-October 1973, 600 rice farmers of Camarines Sur were interviewed regarding their organizational membership, farm areas, harvests, and farming practices. Analysis of the data indicates that with relatively few exceptions, farmers have no organizational attachments other than the Samahang Nayon (SN) or a compact farm (CF). Since the SN is such a new creation (half of those who belong to it had joined the SN less than four months before being interviewed), it is not surprising that neither improved yields nor better farming practices are associated with membership in it. Belonging to a CF, however, and receiving Masagana 99 assistance are associated with these advances, especially where the borrower is farming rainfed riceland. In view of these and other findings, certain changes are suggested for the M99 program. Appended to the report is a recently written history of compact farming in Camarines Sur.

It is an historical fact, developed briefly in the appendix to this report, that without compact farming there would probably have been no Bicol River Basin Development Program--not at this time at any rate. This realization alone should make us curious about the efficacy of the compact farm. Again, we have read and heard so much about the Masagana 99 rice-production program and about the government-sponsored network of barrio associations, or Samahang Nayon, that we would have to be dull indeed not to wonder just how much

---

This research report is based principally on findings made in the SSRU's Quick-Look Survey 1 (mid-October 1973). A technical summary of QL1 will be found in Appendix A of the "SSRU Research Report Series," No. 1, but is also available separately on request. The author of this report is the director of the SSRU.

good they are doing. This report attempts a limited assessment of their worth in Camarines Sur as of mid-October 1973; it is understood, of course, that, for better or worse, the state of rural affairs might have changed considerably in the months that have passed since the research was done.

#### PURPOSE AND SOURCES OF THE REPORT

This report concerns important differences that may exist between the following kinds of rice farmers in Camarines Sur.

1. Those who belong to compact farms and those who do not;
2. Those who belong to the Samahang Nayon and those who do not;
3. Those who received Masagana-99 rice-production loans and those who did not;
4. Those who farmed irrigated parcels and those who farmed rainfed parcels; and
5. Those whose farms were in one district of Camarines Sur and those whose farms were in another.

The differences we are especially interested in are these: (a) size of rice-land parcel being worked by the farmer; (b) total net harvest reported; (c) total gross harvest; (d) gross harvest per hectare; (e) use of high-yielding seed varieties; and (f) the practice of modern farming techniques. For purposes of this study we take the position that in these six characteristics there will probably be no significant differences (null hypothesis) between the different kinds of farmers.

The data on which the report is based were gathered in mid-October 1973 in 33 municipalities of Camarines Sur (all but the Caramoan Peninsula towns of Caramoan, Garchitorona, Presentacion, and Siruma). Interviewed were 600 rice farmers, two-thirds of them chosen randomly from the lists of Samahang Nayon (SN) and Compact Farm (CF) membership lists. Three classes of respondent were distinguished, namely: Class A, members of both the SN and CF; Class B, members only of a CF; Class C, members only of the SN. A fourth class (D) was composed of those farmers named by the Class A-C respondents as barrio-

mates known to them but belonging to neither the SN nor a CF. For a detailed description of the respondents and the manner in which they were selected, the reader is referred to SSRU Research Report Series, No. 1 (December 1973), esp. pp. 4-11.

#### EXPLANATION OF MAJOR VARIABLES

Before presenting the study's findings, we insert here a few paragraphs of explanation regarding the organizational and behavioral variables with which we are concerned.

#### Compact Farms, Masagana 99, and the Samahang Nayon

Compact farming has been practiced in Camarines Sur since 1970, when it was successfully introduced in Inginan, Minalabac.<sup>1</sup> Although two kinds of compact farm are currently distinguished, adaptation to local conditions has resulted in an endless variety of arrangements. The one element which seems to characterize all compact farms is the acceptance by its members of joint responsibility for the production loans they receive. Ordinarily this credit is supervised, but beyond this requirement little else is consistently demanded in practice. Thus promembership training may or may not be required. The number of members per compact farm (which in 1973 actually averaged about seven in Camarines Sur) may be fixed, or may be determined in the particular case on grounds of efficiency. The farmer-members may or may not be neighbors, and may or may not work adjoining farms; consequently, their aggregate holdings may or may not be operated as a single production unit. Farms may be irrigated or rainfed. Produce may be pooled for marketing, with the proceeds of sale prorated among the members after deduction of the loan repayment, or the members may handle sales and loan payments separately. In October 1973 an estimated 18,000 rice farmers of Camarines Sur followed one or

---

<sup>1</sup>For a brief history of compact farming in Camarines Sur, see the Appendix, below.

the other of these various alternatives, or a convenient combination of both. Two-thirds of them had been compact farmers only since July, four months earlier. Only one out of seven had joined a unit earlier than May 1973.

The Masagana 99 rice-production program, formally launched by the Philippine government on May 21, 1973, had two general objectives: (1) to offset the temporary setbacks in rice production caused by a series of typhoons and floods in central and southern Luzon, and by drought in Mindanao; and (2) to anticipate the critical rice-supply shortage that normally occurs during the early months of every cropping year.

At its inception the program covered approximately 500,000 hectares of irrigated and 100,000 hectares of rainfed land in 43 major rice-producing provinces. Production loans were to be granted to farmers agreeing to accept a recommended technology package of high-yielding rice varieties (HYVs), fertilizers, pesticides, and herbicides. The duration of the program was to be only one year.<sup>2</sup> Program implementation would be executed by the National Food and Agriculture Council (NFAC), in cooperation with the National Economic and Development Authority (NEDA), the United States Agency for International Development (USAID), the Philippine National Bank (PNB), the Agricultural Credit Administration (ACA), and the Central Bank (CB) of the Philippines. The full use of the recommended package of technology was to be carried out through a supervised credit scheme of participating rural banks (RBs), PNB branches and agencies, and ACA farmers' cooperatives. The farmer-cooperators had to be members of compact farms and were supervised and guided by technicians hired by the government, the rural banks, and the PNB.

The maximum loan under the M99 supervised credit scheme was set at P700 per hectare, budgeted as follows: a maximum of P380 (as determined by the Production Technician) for fertilizer, pesticides, and herbicides; and a maximum of P320 for the cost of certified seed, irrigation fees, and labor for trans-

---

<sup>2</sup>In view of the reportedly high rate of M99 loan repayments (78 percent), President Marcos in May 1974 extended the life of the program.

planting, spraying, and subsistence. Loan proceeds were to be released in one lump sum and automatically credited to a Special Savings Deposit (SSD) account in the name of the farmer-borrower in either the PNB or a rural bank.

In Camarines Sur, for the crop season ending in October 1973, a total of over P14.7 million was released to 17,408 farmer-borrowers cultivating a total of 24,474 hectares.<sup>3</sup> Of the 600 SSMU respondents interviewed in mid-October 1973, almost all who had received M99 loans testified that their loans were released at the time they needed them.

The Samahang Nayon (SN), or Barrio Association, was conceived by the New Society as a barrio-level organization to provide one foundation for a nationwide cooperative institution which, in turn, was envisioned as "a means of attaining a more equitable distribution of income and wealth and providing the common man a dignified level of existence" (Presidential Decree No. 175, dated April 14, 1973). The SN was to be a "pre-cooperative" organization preparing the way for the Kilusang Bayan, the national cooperative movement.

According to its charter, the SN is a "body corporate composed primarily of small farmers residing and/or farming within the geographical limits of a barrio" (Letter of Implementation No. 23, dated July 9, 1973). The SN's general objective is to help barrio residents, especially small farmers, to improve the quality of their lives; more specifically, to assist them in increasing agricultural production and in bettering the social and cultural aspects of their lives.

In even more practical terms, the SN is meant to (1) facilitate the processing of land transfer certificates (LTCs), (2) catalyze the building up of barrio capital, (3) channel or coordinate services for the barrio, (4) offer training in the practice of formal organization and self-government, and (5) teach cooperative principles and practices.

---

<sup>3</sup>At the beginning of May 1974, the loan repayment rate in Camarines Sur stood at 65 percent.

Table RS02.01. Median and mean measures of riceland areas and harvests, by kind of rice-land and respondent class of cultivator (Camarines Sur, mid-October 1973)

Characteristic and measure	Irrigated					Rainfed				
	A <sup>a</sup>	B	C	D	Total	A	B	C	D	Total
1. <u>Total area of sample parcel</u> (in hectares)										
Median	.92	.80	.60	.42	.72	.87	.84	.68	.72	.79
Total N <sup>b</sup>	75	84	43	82	284	51	60	72	86	269
Mean	1.25	1.06	.79	.73	.97	1.18	1.16	1.03	1.08	1.10
S.D. <sup>c</sup>	.83	.64	.51	.52	.68	.80	.75	1.00	1.03	.91
C.V.	.66	.60	.65	.71	.70	.68	.65	.97	.95	.83
Total N	75	84	43	82	284	51	60	72	86	269
2. <u>Total net harvest</u> (in cavans of palay)										
Median	29.39	28.83	20.00	14.00	23.29	24.35	17.61	12.56	15.50	16.68
Total N	72	77	41	80	270 <sup>d</sup>	49	58	66	83	256 <sup>d</sup>
Mean	40.28	37.12	28.15	25.90	33.48	30-61	31.97	19.98	23.51	25.65
S.D.	31.79	27.70	24.78	28.42	29.19	20.67	40.52	17.06	33.87	30.01
C.V.	.79	.75	.88	1.10	.87	.68	1.27	.85	1.44	1.17
Total N	72	77	41	80	270 <sup>d</sup>	49	58	66	83	256 <sup>d</sup>

<sup>a</sup>Symbols for respondent class are as follows: A - member of compact farm (CF) and Samahang Nayon; B - member of CF but not of SN; C - member of SN but not of CF; D - member of neither CF nor SN

<sup>b</sup>By "Total N" is meant the number of respondents in the particular sample.

<sup>c</sup>Abbreviations for names of measures are as follows: S.D. - standard deviation; C.V. - coefficient of variation (S.D./mean).

Table RSO2.01 (cont'd)

Characteristic and measure	Irrigated					Rainfed				
	A	B	C	D	Total	A	B	C	D	Total
3. <u>Total gross harvest (in cavans of palay)</u>										
Median	68.30	49.10	33.00	23.30	43.92	48.90	41.00	26.00	27.00	34.20
Total N	72	77	41	80	270 <sup>d</sup>	49	58	66	83	256 <sup>d</sup>
Mean	73.74	62.86	43.63	38.05	55.74	58.29	55.76	35.14	39.89	45.25
S.D.	46.58	46.69	34.48	36.34	44.44	31.53	53.11	27.42	46.82	42.29
C.V.	.63	.74	.79	.96	.80	.54	.95	.78	1.17	.93
Total N	72	77	41	80	270 <sup>d</sup>	49	58	66	83	256 <sup>d</sup>
4. <u>Gross harvest per hectare (in cavans of palay)</u>										
Median	58.30	56.70	59.70	52.90	56.60	49.60	46.30	39.80	37.70	42.70
Total N	71	77	41	80	269 <sup>d</sup>	49	58	66	83	256 <sup>d</sup>
Mean	61.39	60.07	58.78	55.46	58.79	56.55	55.55	45.55	42.33	48.68
S.D.	22.64	25.53	22.25	29.65	25.61	26.91	29.52	23.94	20.46	25.57
C.V.	.37	.43	.38	.53	.44	.48	.53	.53	.48	.53
Total N	71	77	41	80	269 <sup>d</sup>	49	58	66	83	256 <sup>d</sup>

<sup>d</sup>Sample size was reduced by elimination of respondents for whom appropriate data were lacking, incomplete, or doubtful.

RS02.02. Median and mean measures of riceland areas and harvests, by kind of riceland and M99- loan status of cultivator (Camarines Sur, mid-October 1973)

Characteristic and measure	Irrigated			Rainfed		
	M99	Non-M99	Total	M99	Non-M99	Total
<b>1. <u>Total area of sample parcel</u> (in hectares)</b>						
Median	.87	.48	.72	.88	.68	.79
Total N <sup>a</sup>	141	143	284	105	164	269
Mean	1.20	.76	.97	1.17	1.05	1.10
S.D. <sup>b</sup>	.76	.51	.68	.74	1.01	.91
C.V.	.63	.67	.70	.63	.96	.83
Total N	141	143	284	105	164	269
<b>2. <u>Total net harvest</u> (in cavans of palay)</b>						
Median	30.13	16.64	23.29	21.18	14.40	16.68
Total N	134	139	273 <sup>c</sup>	106	155	261 <sup>c</sup>
Mean	39.75	27.29	33.48	31.48	21.66	25.65
S.D.	30.33	26.81	29.19	32.97	27.20	30.01
C.V.	.76	.98	.87	1.05	1.26	1.17
Total N	134	139	273 <sup>c</sup>	106	155	261 <sup>c</sup>

<sup>a</sup>See note b, Table RS02.01.

<sup>b</sup>See note c, Table RS02.01.

<sup>c</sup>See note d, Table RS02.01.



Table RS02.02 (cont'd)

Characteristic and measure	Irrigated			Rainfed		
	M99	Non-M99	Total	M99	Non-M99	Total
<b>3. Total gross harvest (in cavans of palay)</b>						
Median	62.70	28.80	43.92	45.90	26.40	34.20
Total N	134	139	273 <sup>c</sup>	106	155	261 <sup>c</sup>
Mean	70.67	41.16	55.74	56.90	37.28	45.25
S.D.	48.03	35.31	44.44	44.73	38.71	42.29
C.V.	.68	.86	.80	.79	1.04	.93
Total N	134	139	273 <sup>c</sup>	106	155	261 <sup>c</sup>
<b>4. Gross harvest per hectare (in cavans of palay)</b>						
Median	58.60	54.70	56.60	47.90	39.10	42.70
Total N	133	139	272 <sup>c</sup>	106	155	261 <sup>c</sup>
Mean	60.45	57.03	58.79	54.97	44.29	48.68
S.D.	24.34	26.76	25.61	27.49	23.27	25.57
C.V.	.40	.47	.44	.50	.53	.53
Total N	133	139	272 <sup>c</sup>	106	155	261 <sup>c</sup>

Table RS02.03. Mean measures of irrigated riceland areas and harvests, by district and by M99-loan status of cultivator (Camarines Sur, mid-October 1973)

Characteristic and district	M99				Non-M99			
	Mean	S.D. <sup>b</sup>	C.V.	Total N <sup>c</sup>	Mean	S.D. <sup>b</sup>	C.V.	Total N <sup>c</sup>
1. <u>Total area of sample parcel</u> (in hectares)								
1 <sup>a</sup>	1.34	.73	.54	20	0.50	0.49	.98	11
2	1.37	1.04	.76	32	0.81	0.40	.49	31
3	1.22	.79	.65	9	0.61	0.35	.57	16
4	1.31	.70	.53	23	1.32	0.62	.47	15
5	1.20	.44	.37	26	0.83	0.52	.63	43
6	.72	.47	.65	24	0.45	0.29	.64	24
Total	1.20	.76	.63	134	.76	.51	.67	140
2. <u>Total net harvest</u> (in cavans of palay)								
1 <sup>a</sup>	41.40	39.58	.96	20	20.36	27.63	1.36	11
2	44.94	28.54	.64	32	29.97	26.53	.89	31
3	45.33	34.55	.76	9	30.75	30.62	1.00	16
4	34.91	25.19	.72	23	42.14	30.72	.73	14
5	47.35	25.76	.35	26	27.60	26.65	.97	43
6	25.75	28.97	1.13	24	15.46	17.29	1.12	24
Total	39.75	30.33	.76	134	27.29	26.81	.98	139

<sup>a</sup>Symbols for districts are as follows: 1 - Sipocot; 2 - Naga; 3 - Magarao; 4 - Milaor; 5 - Goa; 6 - Iriga.

<sup>b</sup>See note c, Table RS02.01.

<sup>c</sup>See note b, Table RS02.01.

Table RS02.03 (cont'd)

Characteristic and district	M99				Non-M99			
	Mean	S.D. <sup>b</sup>	C.V.	Total N <sup>c</sup>	Mean	S.D. <sup>b</sup>	C.V.	Total N <sup>c</sup>
<b>3. Total gross harvest (in cavans of palay)</b>								
1 <sup>a</sup>	82.50	53.89	.65	20	29.64	32.87	1.11	11
2	82.50	53.96	.65	32	47.71	32.93	.69	31
3	62.22	46.30	.74	9	36.13	31.90	.88	16
4	74.74	45.65	.61	23	54.71	33.21	.61	14
5	73.54	36.69	.50	26	46.42	40.85	.88	43
6	41.21	39.26	.95	24	24.00	25.52	1.06	24
Total	70.67	48.03	.68	134	41.16	35.31	.86	139
<b>4. Gross harvest per hectare (in cavans of palay)</b>								
1 <sup>a</sup>	58.10	19.57	.34	20	74.64	38.49	.52	11
2	66.42	25.00	.38	31	60.32	25.82	.43	31
3	52.78	21.45	.41	9	56.25	29.05	.52	16
4	56.57	19.27	.34	23	45.86	16.16	.35	14
5	61.73	20.45	.33	26	54.40	20.97	.39	43
6	59.92	34.73	.58	24	56.46	32.08	.57	24
Total	60.45	24.34	.40	133	57.03	26.76	.47	139

Table RS02.04. Mean measures of rainfed riceland areas and harvests, by district and by M99-loan status of cultivator (Camarines Sur, mid-October 1973)

Characteristic and district	M99				Non-M99			
	Mean	S.D. <sup>b</sup>	C.V.	Total N <sup>c</sup>	Mean	S.D.	C.V.	Total N
1. <u>Total area of sample parcel</u> (in hectares)								
1 <sup>a</sup>	1.70	0.84	.49	18	1.41	1.26	.89	28
2	0.75	0.35	.47	2	0.85	0.92	1.08	17
3	1.19	0.73	.61	31	1.47	1.35	.92	37
4	1.17	0.68	.58	36	0.87	0.49	.56	30
5	0.75	0.52	.69	6	0.58	0.40	.69	12
6	0.70	0.55	.79	15	0.70	0.58	.83	32
Total	1.17	.74	.63	108	1.05	1.01	.96	156
2. <u>Total net harvest</u> (in cavans of palay)								
1	45.67	49.68	1.09	18	22.93	16.35	.71	28
2	20.00	14.14	.71	2	19.94	15.63	.78	17
3	23.87	29.78	1.25	31	26.68	48.60	1.82	37
4	35.88	30.64	.85	34	26.10	15.65	.60	29
5	24.00	14.68	.61	6	15.92	9.54	.60	12
6	24.73	20.62	.83	15	13.81	13.83	1.00	32
Total	31.48	32.97	1.05	106	21.66	27.20	1.26	155

a, b, c See notes a, b, and c, Table RS02.03.

Table RSO2.04 (cont'd)

Characteristic and district	M99				Non-M99			
	Mean	S.D.	C.V.	Total N	Mean	S.D.	C.V.	Total N
3. <u>Total gross harvest (in cavans of palay)</u>								
1	88.28	70.49	.80	18	41.21	29.24	.71	28
2	34.00	24.04	.71	2	35.24	23.88	.68	17
3	49.26	35.08	.71	31	48.11	63.53	1.32	37
4	58.50	37.44	.64	34	37.80	21.63	.57	30
5	43.17	23.28	.54	6	26.00	14.89	.57	12
6	39.93	30.52	.76	15	25.81	29.90	1.16	31
Total	56.90	44.73	.79	106	37.28	38.71	1.04	155
4. <u>Gross harvest per hectare (in cavans of palay)</u>								
1	60.33	25.24	.42	18	39.68	19.96	.50	28
2	59.50	60.10	1.01	2	57.41	30.99	.54	17
3	45.32	21.37	.47	31	36.43	15.15	.42	37
4	54.56	24.33	.45	34	48.77	23.11	.47	30
5	62.83	18.87	.30	6	52.83	24.53	.46	12
6	65.67	41.70	.63	15	43.00	25.55	.59	31
Total	54.97	27.49	.50	106	44.29	23.27	.53	155

Table RS02.05. Significance of differences in riceland areas and harvests between respondents of different M99 loan statuses, by kind of riceland (Camarines Sur, mid-October 1973)

Characteristic and measure	Irrigated (M99 vs. Non-M99)	Rainfed (M99 vs. Non-M99)
1. <u>Total area of sample parcel</u> (see Table RS02.02.1)		
Mean <sup>a</sup>	0.001 (M99) <sup>c</sup>	n.s.
Median <sup>b</sup>	0.01 (M99)	0.01 (M99)
2. <u>Total net harvest</u> (see Table RS02.02.2)		
Mean	0.001 (M99)	0.02 (M99)
Median	0.01 (M99)	0.01 (M99)
3. <u>Total gross harvest</u> (see Table RS02.02.3)		
Mean	0.001 (M99)	0.001 (M99)
Median	0.01 (M99)	0.01 (M99)
4. <u>Gross harvest per hectare</u> (see Table RS02.02.4)		
Mean	n.s.	0.01 (M99)
Median	n.s.	0.01 (M99)

<sup>a</sup>The t test for the significance of differences between means was applied.

<sup>b</sup>The Median test for the significance of differences between two samples was applied.

<sup>c</sup>The category enclosed in parentheses has the significantly greater riceland area or harvest.

Table RS02.06. Significance of differences in mean riceland areas and harvests between respondents of different districts (but all with an M99 loan), by kind of riceland (Camarines Sur, mid- October 1973)

Characteristic and district	Irrigated					Rainfed				
	2	3	4	5	6	2	3	4	5	6
1. <u>Total area of sample parcel</u> (see Tables RS02.03.1 and RS02.04.1)										
1 <sup>b</sup>	n.s.	n.s.	n.s.	n.s.	0.01 (1) <sup>c</sup>	n.s.	0.05 (1)	0.05 (1)	n.s.	0.001 (1)
2		n.s.	n.s.	n.s.	0.01 (2)		n.s.	n.s.	n.s.	n.s.
3			n.s.	n.s.	n.s.			n.s.	n.s.	0.02 (3)
4				n.s.	0.01 (4)				n.s.	0.02 (4)
5					0.001 (5)					n.s.
2. <u>Total net harvest</u> (see Tables RS02.03.2 and RS02.04.2)										
1	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
2		n.s.	n.s.	n.s.	0.02 (2)		n.s.	n.s.	n.s.	n.s.
3			n.s.	n.s.	n.s.			n.s.	n.s.	n.s.
4				n.s.	n.s.				n.s.	n.s.
5					0.01 (5) <sup>c</sup>					n.s.

<sup>a</sup>The t test for the significance of differences between means was used throughout.

<sup>b</sup>Symbols for districts are as follows: 1 - Sipocot; 2 - Naga; 3 - Magarao; 4 - Milaor; 5 - Goa; 6 - Iriga.

<sup>c</sup>The district indicated by the number in parentheses (below the significance-level figure) has the significantly greater area or harvest.

Table RS02.06 (cont'd)

Characteristic and district	Irrigated					Rainfed				
	2	3	4	5	6	2	3	4	5	6
3. <u>Total gross harvest</u> (see Tables RS02.03.3 and RS02.04.3)										
1	n.s.	n.s.	n.s.	n.s.	0.01 (1)	0.05 (1)	0.05 (1)	n.s.	0.05 (1)	0.02 (1)
2		n.s.	n.s.	n.s.	0.01 (2)		n.s.	n.s.	n.s.	n.s.
3			n.s.	n.s.	n.s.			n.s.	n.s.	n.s.
4				n.s.	0.02 (4)				n.s.	n.s.
5					0.01 (5)					n.s.
4. <u>Gross harvest per hectare</u> (see Tables RS02.03.4 and RS02.04.4)										
1	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.05 (1)	n.s.	n.s.	0.05 (6)
2		n.s.	n.s.	n.s.	n.s.		n.s.	n.s.	n.s.	n.s.
3			n.s.	n.s.	n.s.			n.s.	0.05 (5)	n.s.
4				n.s.	n.s.				n.s.	n.s.
5					n.s.					n.s.



Table RSO2.07. Significance of differences in mean riceland areas and harvests between respondents of different districts (but all without M99 loans), by kind of riceland, (Camarines Sur, mid-October 1973).<sup>a</sup>

Characteristic and district	Irrigated					Rainfed				
	2 <sup>b</sup>	3	4	5	6	2	3	4	5	6
1. <u>Total area of sample parcel</u> (see Tables RSO2.03.1 and RSO2.04.1)										
1 <sup>b</sup>	n.s.	n.s.	0.001 (4)	n.s.	n.s.	n.s.	n.s.	0.05 (1)	0.01 (1)	0.01 (1)
2		n.s.	0.01 (4)	n.s.	0.001 (2) <sup>c</sup>		n.s.	n.s.	n.s.	n.s.
3			0.001 (4)	n.s.	n.s.			0.02 (3)	0.001 (3)	0.01 (3)
4				0.01 (4)	0.001 (4)				n.s.	n.s.
5					0.001 (5)					n.s.
2. <u>Total net harvest</u> (see Tables RSO2.03.2 and RSO2.04.2)										
1	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.05 (1)
2		n.s.	n.s.	n.s.	0.02 (2)		n.s.	n.s.	n.s.	n.s.
3			n.s.	n.s.	n.s.		n.s.	n.s.	n.s.	
4				n.s.	0.01 (4)				0.02 (4)	0.01 (4)
5					0.05 (5)					n.s.

<sup>a</sup>The *t* test for the significance of differences between means was used throughout.

<sup>b</sup>Symbols for districts are as follows: 1 - Sipocot; 2 - Naga; 3 - Magarao; 4 - Milaor; 5 - Goa; 6 - Iriga.

<sup>c</sup>The district indicated by the number in parentheses (below the significance-level figure) has the significantly greater area or harvest.

Table RS02.07 (cont'd)

Characteristic and district	Irrigated					Rainfed				
	2	3	4	5	6	2	3	4	5	6
3. <u>Total net harvest</u> (see Table PS02.03.3 and RS02.04.3)										
1	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.05 (1)	0.05 (1)
2		n.s.	n.s.	n.s.	0.01 (2)		n.s.	n.s.	n.s.	n.s.
3			n.s.	n.s.	n.s.			n.s.	n.s.	n.s.
4				n.s.	0.01 (4)				0.05 (4)	n.s.
5					0.01 (5)					n.s.
4. <u>Gross harvest per hectare</u> (see Tables RS02.03.4 and RS02.04.4)										
1	n.s.	n.s.	0.05 (1)	n.s.	n.s.	0.05 (2)	n.s.	n.s.	n.s.	n.s.
2		n.s.	0.05 (2)	n.s.	n.s.		0.01 (2)	n.s.	n.s.	n.s.
3			n.s.	n.s.	n.s.			0.02 (4)	0.01 (5)	n.s.
4				n.s.	n.s.				n.s.	n.s.
5					n.s.					n.s.

Table RS02.08. Proportion of rice farmers using selected modern varieties and techniques, by kind of riceland and respondent class of cultivator (Camarines Sur, mid-October 1973)

Characteristic	Irrigated					Rainfed				
	A <sup>a</sup>	B	C	D	Total	A	B	C	D	Total
1. <u>Farmers using modern rice varieties<sup>b</sup></u>										
Proportion	.79	.61	.60	.67	.67	.80	.83	.63	.63	.71
Total N <sup>c</sup>	75	84	43	82	284	51	60	72	86	269
2. <u>Farmers using modern weeding techniques</u>										
Proportion	.83	.87	.79	.73	.81	.73	.70	.49	.38	.55
Total N	75	84	43	82	284	51	60	72	86	269
3. <u>Farmers using modern seed-testing techniques</u>										
Proportion	.77	.76	.79	.71	.75	.78	.80	.52	.58	.65
Total N	75	84	43	82	284	51	60	72	86	269
4. <u>Farmers using modern land-preparation techniques</u>										
Proportion	.93	.93	.93	.81	.89	.86	.83	.64	.52	.69
Total N	75	84	43	82	284	51	60	72	86	269
5. <u>Farmers using modern transplanting techniques</u>										
Proportion	.85	.87	.83	.79	.84	.88	.85	.53	.45	.64
Total N	75	84	43	82	284	51	60	72	86	269

<sup>a</sup>See note a, Table RS02.01.

<sup>b</sup>By modern rice varieties is meant the tungro-resistant high-yielding varieties (HYVs) which include the C, BPI, and IR varieties (except IR8).

<sup>c</sup>See note b, Table RS02.01.

Table RSO2.08 (cont'd)

Characteristic	Irrigated					Rainfed				
	A	B	C	D	Total	A	B	C	D	Total
<u>6. Farmers using modern pest-control techniques</u>										
Proportion	1.00	.96	.95	.85	.94	.98	.97	.82	.79	.87
Total N	75	84	43	82	284	51	60	72	86	269
<u>7. Farmers using modern weed-control techniques</u>										
Proportion	.84	.88	.84	.66	.80	.96	.90	.78	.75	.83
Total N	75	84	43	82	284	51	60	72	86	269
<u>8. Farmers using modern fertilizers</u>										
Proportion	.96	.90	.68	.52	.78	.86	.72	.36	.21	.49
Total N	75	84	43	82	284	51	60	72	86	269

Table RSO2.09. Proportion of rice farmers using selected modern varieties and techniques, by kind of riceland and M99-loan status of cultivator (Camarines Sur, mid-October 1973)

Characteristic	Irrigated			Rainfed		
	M99	Non-M99	Total	M99	Non-M99	Total
<b>1. <u>Farmers using modern rice varieties<sup>a</sup></u></b>						
Proportion	.72	.63	.67	.84	.62	.71
Total N <sup>b</sup>	141	143	284	105	164	269
<b>2. <u>Farmers using modern weeding techniques</u></b>						
Proportion	.85	.76	.81	.77	.44	.55
Total N	141	143	284	105	164	269
<b>3. <u>Farmers using modern seed-testing techniques</u></b>						
Proportion	.76	.75	.75	.79	.56	.65
Total N	141	143	284	105	164	269
<b>4. <u>Farmers using modern land-preparation techniques</u></b>						
Proportion	.94	.85	.89	.86	.58	.69
Total N	141	143	284	105	164	269
<b>5. <u>Farmers using modern transplanting techniques</u></b>						
Proportion	.85	.83	.84	.87	.50	.64
Total N	141	143	284	105	164	269
<b>6. <u>Farmers using modern pest-control techniques</u></b>						
Proportion	.98	.90	.94	.97	.81	.87
Total N	141	143	284	105	164	269

<sup>a</sup>By modern rice varieties is meant the tungro-resistant high-yielding varieties (HYVs) which include the C, BPI, and IR varieties (except IR8).

<sup>b</sup>See note b, Table RSO2.01.

Table RS02.09 (cont'd)

Characteristic	Irrigated			Rainfed		
	M99	Non-M99	Total	M99	Non-M99	Total
<u>7. Farmers using modern weed-control techniques</u>						
Proportion	.86	.74	.80	.93	.76	.83
Total N	141	143	284	105	164	269
<u>8. Farmers using modern fertilizers</u>						
Proportion	.94	.61	.78	.79	.29	.49
Total N	141	143	284	105	164	269

Table RS02.10. Significance of differences of proportions of rice farmers using selected modern varieties and techniques, by kind of riceland, by respondent class, and by M99-class status of cultivator (Camarines Sur, mid-October 1973)<sup>a</sup>

Characteristic	Irrigated			Rainfed		
	A vs. B	C vs. D	M99 vs. Non-M99	A vs. B	C vs. D	M99 vs. Non-M99
1. <u>Farmers using modern rice varieties</u> <sup>b</sup>						
Significance	0.05 <sup>c</sup>	n.s.	n.s.	n.s.	n.s.	0.01 <sup>c</sup>
2. <u>Farmers using modern weeding techniques</u>						
Significance	n.s.	n.s.	n.s.	n.s.	n.s.	0.01 <sup>c</sup>
3. <u>Farmers using modern seed-testing techniques</u>						
Significance	n.s.	n.s.	n.s.	n.s.	n.s.	0.01 <sup>c</sup>
4. <u>Farmers using modern land-preparation techniques</u>						
Significance	n.s.	n.s.	n.s.	n.s.	n.s.	0.01 <sup>c</sup>
5. <u>Farmers using modern transplanting techniques</u>						
Significance	n.s.	n.s.	n.s.	n.s.	n.s.	0.01 <sup>c</sup>
6. <u>Farmers using modern pest-control techniques</u>						
Significance	n.s.	0.01 <sup>c</sup>	n.s.	n.s.	n.s.	n.s.
7. <u>Farmers using modern weed-control techniques</u>						
Significance	n.s.	n.s.	n.s.	n.s.	n.s.	0.05 <sup>c</sup>
8. <u>Farmers using modern fertilizers</u>						
Significance	n.s.	n.s.	0.01 <sup>c</sup>	n.s.	0.01 <sup>c</sup>	0.01 <sup>c</sup>

<sup>a</sup>The Difference-of-proportions test was used throughout.

<sup>b</sup>By modern rice varieties is meant the tungro-resistant high-yielding varieties (HYVs) which include the C, BPI, and IR varieties (except IR8)

<sup>c</sup>Where a significant difference occurs the respondent category with the larger proportion is invariably A, C, or M99.

An SN may be formed by 25 or more Filipino citizens, whether farmers or not, who are 15 years of age or older. They must be residing or farming in the geographical area where the SN will operate, and are generally heads of households and farmers. Since each SN has a maximum membership of 200, only rarely will a barrio need a second SN to accommodate all those who wish to belong to the organization.

Acceptance into the SN requires completion of a membership training course. For an applicant to gain full membership he must also (1) pledge to adopt improved farming practices, (2) pledge to comply with a savings program called the Barrio Savings Fund (BSF), which receives from the lending institution 5 percent of any production loan approved for an SN member, (3) agree to contribute one cavan of palay per hectare per harvest, or the equivalent in cash, for the Barrio Guarantee Fund (BGF), (4) pay the required one-time membership fee of P10.00, and (5) contribute P5.00 annually, a fee which goes to the general fund of the SN for operational expenses.

The Bureau of Cooperatives of the Department of Local Governments and Community Development (DLGCD) provides a model to be used in preparing documents for the incorporation and registration of an SN. In this process, a minimum of 15 incorporators must sign the appropriate articles. A registered SN is one which has been incorporated, with the necessary papers submitted and approved; such an SN has acquired a juridical personality. A barrio association which has not yet been incorporated remains at the level of an organized SN.

As of October 31, 1973, there were 19,350 members belonging to a registered or organized SN in Camarines Sur. About half of them had become members less than five months before. Membership in the 136 registered SNs totaled 5,634. There were 13,716 members in 391 organized barrio associations. Membership fees collected as of that date (P111,192) indicated that 57 percent of the SN members had met this first financial obligation. Only 18 percent had paid their annual dues, however, an understandably low ratio in view of the fact



that most had been in the SN for only a few months.<sup>4</sup> The Barrio Savings Fund stood at P6,457.50 as of October 31; the Barrio Guarantee Fund, at P1,808.60.

### Areas, Harvest, and Practices

One area measurement and three productivity figures were sought from respondents. The approximate size of the farm parcel selected for discussion, as well as the cavans of palay which he and his household got from it, were elicited by direct questions. The total harvest from the parcel was arrived at indirectly. The procedures used are explained in the following paragraphs.

Area of sample parcel. Each respondent was asked how many contiguous pieces, or parcels, of riceland he was operating as of the interview period (mid-October 1973). If the answer was just one (as it was for 56 percent of the respondents) this parcel was inquired about. If the answer was more than one, and an M99 loan had been obtained for one or more, the parcel, or one of the parcels so benefited, was selected for discussion. If no M99 loan had been received, a simple random selection was made.

Total net harvest. Relative to the sample parcel, each respondent was asked how much "went to yourself" (an napassimo). This was understood as the net harvest in cavans of palay after the payment of all shares and other claims.

Total gross harvest. After giving the total net harvest, the respondent was asked what payments he had made (or would make) out of the harvest. These amounts were listed, along with the reason for each of them. The sum of them added to the net harvest, was taken as the gross harvest for the riceland parcel, expressed in cavans of palay.

Gross harvest per hectare. The per-hectare yield was gotten by dividing the total gross harvest in cavans of palay (above) by the size of the sample parcel. Since in every case almost the entire area was planted to rice, there was no need to distinguish the total area of the parcel from the total planted area.

<sup>4</sup> By the end of February 1974, the total membership of the Camarines Sur SNs had risen to 22,534, of whom 63 percent had paid membership fees and 38 percent, their annual dues.

Respondents were also asked if they had practiced certain modern farming techniques in the current crop season.<sup>5</sup> If they said they had not, they were asked if they were at least aware of them. In either case, the source of their knowledge was sought out. Findings regarding these sources will be discussed in SSRU Research Report Series, No. 3 (February 1974). In this report we address ourselves only to the question of who had adopted the following practices and who had not.

Modern weeding techniques. By this phrase (modernong paghilamon) was understood simply the use of a rotary weeder, without discussion of the time of its application.

Modern seed-testing techniques. Signifies the 24-hour immersion of seeds in carbofuran solution, and proper seedbed preparation.

Modern land-preparation techniques. Plowing and successive harrowing (or the use of a mechanical rotary cultivator) to kill the weeds and prepare the soil for transplanting.

Modern transplanting techniques. Following the "Wasagana-Margate" system (20 x 20 cm. planting for rainfed ricelands or 25 x 25 cm. planting for irrigated ricelands).

Modern pest-control techniques. Regular inspection of the growing paddy and proper application (through spraying or broadcasting) of recommended pesticides and insecticides.

Modern weed-control techniques. Proper application of herbicides and weedicides, without specification of submersion of rice plants after transplanting.

Modern fertilizers. Application of recommended fertilizers without specification of times of application.

---

<sup>5</sup> Starting definitions of modern farming practices were derived from the M99 pamphlet on the subject, as well as from Brian Fegan, "The lessee's alternatives and peasantization," in View from the paddy, ed. Frank Lynch, S.J. (Quezon City: Philippine Sociological Society and the Institute of Philippine Culture, 1972), 134-41.

### Districts

For survey purposes, the 33 municipalities of Camarines Sur covered by the SSRU are divided into six districts. Each such district is composed of four to seven contiguous municipalities, as follows.

<u>District name</u>	<u>Constituent municipalities</u>
1. <u>Sipocot</u>	Sipocot, Cabusao, Del Gallego, Libmanan, Lupi, Ragay
2. <u>Naga</u>	Naga City, Baa, Bula, Ocampo, Pili
3. <u>Magarao</u>	Magarao, Bombon, Calabanga, Canaman
4. <u>Milaor</u>	Milaor, Camaligan, Gainza, Minabac, Pamplona, Pasacao, San Fernando
5. <u>Goa</u>	Goa, Lagonoy, Sangay, San Jose, Tigaon, Tinambac
6. <u>Iriga</u>	Iriga City, Balatan, Bato, Buhí, Nabua

While the basic criterion for inclusion in the same district is here taken to be geographical proximity, the Sipocot, Goa, and Iriga districts also represent traditional groupings. It is hoped that as new data accumulate we may come up with alternative divisions based on other empirical grounds.<sup>6</sup>

---

<sup>6</sup>One source of such a rearrangement will be the information gathered in a recent (January 1974) SSRU survey of municipalities. Another will be the findings of the SSRU's province-wide annual panel survey. Still another will be the study of Virgilic C. Aganon, geographer on the staff of the Cooperative Regional Development Project of the National Development Research Center, University of the Philippines. The purpose of Aganon's research (to be completed in May 1974) is to use factor-analytic procedures to discover development subregions within the six Bicol provinces.

## FINDINGS

I mentioned at the very beginning of the report (page 2) that in this study four classes of respondent were distinguished, A through D. Classes A and B are compact-farm members; classes C and D are not.<sup>7</sup> According to the official guidelines prevailing in Camarines Sur at the time our respondents received their M99 loans, these loans were not to be given to applicants who did not belong to a compact farm (called selda, or damayan). Fortunately, however, our sample includes 17 cases in which CF nonmembers reported an M99 loan. I say fortunately because, had the rules been followed strictly (as apparently they were not in these cases), we should have no respondents in the upper-right quadrant of this two-by-two matrix of our sample.

M99 loan	Classes A and B	Classes C and D	Total
Yes	262	17	279
No	25	296	321
Total	287	313	600

Thanks to the inclusion of these unexpected cases, along with the 25 in the lower-left quadrant (CF members without M99 loans), we can make small-sample tests of the probable effects of M99 assistance on both CF members and nonmembers, and of the probable effects of CF membership on those who received M99 help and those who did not.

The results of these small-sample comparisons are given in Findings 1-4, and may be summarized as follows: although no differences between yields are significant, CF membership and M99 assistance both appear to have a positive effect on the average size of harvests; further, CF membership appears to contribute more to this effect than an M99 loan. These statements are

<sup>7</sup>Class A respondents are also SN members, as are Class C members. Class D respondents belong to neither a CF nor the SN.

implicit in the first four findings below, as well as in this tabular summary.

<u>Variables</u>	<u>Average harvest (cavans of palay)<sup>a</sup></u>
CF alone	58
CF + M99	55
M99 alone	50
Neither	44

<sup>a</sup>Irrigated and rainfed combined.

When we report that the differences in average harvests are not significant, we mean that, despite the appearances we have noted, statistical tests do not eliminate the possibility that the relationship we find in our sample may not be present in the population of rice farmers from which this sample was drawn. In other words, our sample is in this respect only dubiously representative of Camarines Sur rice farmers in general.

For Findings 1-4 only small samples (17 or 25) were used. From Finding 5 on, though much larger samples were employed, we never used more than 553 out of the 600 cases, and sometimes fewer. Excluded from the analyses were farmers reporting upland or mixed cultivation (both irrigated and rainfed) and those who were not members of a CF but reported M99 loans.<sup>8</sup>

Differences related to M99 assistance alone

1. Among CF members, those who received M99 assistance report approximately the same yields as those who received no such help.

<sup>8</sup>Since in Findings 6-10 an "M99" respondent is always a CF member and a "Non-M99" respondent almost always a CF nonmember, we are here really reporting on the effects of a Composite Variable (M99/CF). This is expressly stated in the findings, but not in the related M99/Non-M99 tables (02-07 and 09-10).

The combined irrigated-rainfed average per-hectare yield for CF members with M99 assistance is 55 cavans of palay; without this assistance, 58 cavans. The difference is not significant.<sup>9</sup>

2. Among CF nonmembers, those who received M99 assistance report approximately the same yields as those who did not receive such help.

The combined irrigated-rainfed average per-hectare yield for CF nonmembers with an M99 loan is 50 cavans; without a loan, 44 cavans. The difference is not significant.<sup>10</sup>

Differences related to CF membership alone

3. Among those farmers who received M99 assistance, CF members report about the same yields as nonmembers.

CF members average 55 cavans of palay per hectare; nonmembers, 50 cavans. The difference between the means is not significant.<sup>11</sup>

4. Among those farmers who did not receive M99 assistance, CF members report about the same yield as nonmembers.

CF members averaged 58 cavans of palay per hectare; nonmembers, only 44 cavans. However, the difference between the means is not significant.<sup>12</sup>

<sup>9</sup>The t test for equal samples was used. To match the 25 CF/Non-M99 cases, 25 CF/M99 respondents were randomly selected for the comparison of means. Because of the small samples being compared, irrigated and rainfed harvests were not distinguished in the analysis.

When we say that a difference is "not significant," we mean that despite one average's being lower or higher than the other, we cannot be sure that the same relationship exists in the population from which the samples were drawn.

<sup>10</sup>There were 17 Non-CF/M99 cases. The procedure described in note 8 was also followed here.

<sup>11</sup>There were 17 Non-CF/M99 cases. The procedure described in note 8 was followed here.

<sup>12</sup>There were 25 Non-M99/CF respondents. The procedure described in note 8 was followed here. Despite the difference of 14 cavans between CF members

5. Length of membership in a compact farm shows no correlation with per-hectare yields.

It was suggested (by Douglas Tinsler) that the veteran members of compact farms might report larger per-hectare yields than the recent recruits to the movement. The available data allowed us to compare 228 respondents who joined a compact farm before May 1973 with 35 who joined during the period May-September 1973.

No correlation exists between length of membership and size of harvest. The mean gross harvests per hectare for irrigated plots, by month when the operator joined the CF, are as follows: April 1973 or earlier, 58 cavans; May 1973, 70; June, 72; July, 54; August, 56; September, 75. For rainfed parcels the corresponding means are 46 cavans, 60, 60, 57, 51, and 48.

Although no linear trend is evident, the most recently recruited CF members (September 1973) do better than those who joined in April 1973 or earlier. For irrigated parcels the difference is significant (75 vs. 58 cavans per hectare; 0.05 level, using the  $t$  test); for rainfed parcels the difference is not significant (48 vs. 46 cavans).

Differences related to M99 assistance and CF membership combined

6. M99/CF farmers have bigger parcels than others. This is especially true of those whose riceland is irrigated, for while their average (mean) parcel is over one hectare in size, the irrigated parcels of non-compact farmers average only about three-fourths of a hectare (Table RS02.01.1).<sup>13</sup>

and nonmembers, the results of the  $t$  test warn us that the same may not be true of the population from which the samples were drawn.

<sup>13</sup> Difference is significant at the 0.001 level (Table RS02.05.1).

7. As should be expected (since they work bigger parcels), M99/CF farmers report bigger total harvests, both net and gross.<sup>14</sup> Their mean net and gross figures, respectively, are about 38 and 70 cavans for irrigated parcels, and 31 and 57 for rainfed (Table RS02.01.2-3).
8. However, M99/CF farmers report significantly bigger per-hectare yields only for rainfed parcels. Thus, all irrigated parcels average about 59 cavans of palay per hectare, and all rainfed, about 49 (means). Only in the latter case do M99/CF farmers do notably better, getting about 55 cavans per hectare, on the average, vs. 44 for Non-M99 respondents (Table RS02.02.4).<sup>15</sup> For irrigated parcels M99/CF farmers report an average of 60 cavans; other farmers, 57 cavans (the difference is not significant).
9. M99/CF farmers working irrigated parcels are no more modern than others cultivating the same kind of riceland, except in the greater tendency to use fertilizers (Tables RS02.08.1-8 and RS02.10.1-8).
10. However, among operators of rainfed rice farms M99/CF farmers stand out as being much more modern, that is, much more likely than others to use modern farming techniques (Tables RS02.09.1-8 and RS02.10.1-8).

Differences related to SN membership only

11. A comparison of farmers belonging to the Samahang Nayan and a compact farm (Class A) with those belonging only to a compact farm (Class B) reveals no important differences between the two kinds of farmers in farm area, gross or net harvest, or per-hectare yield (Table RS02.01.1-4). The same is true of farm practices, with the one exception of modern rice

<sup>14</sup>Significant at the 0.001 or 0.02 level in all four cases--irrigated and rainfed, net and gross (Table RS02.05.2-3). For the meaning of the terms net and gross, see page 25.

<sup>15</sup>Significant at the 0.001 level (Table RS02.05.4).



varieties--reportedly used more frequently by Class A respondents with irrigated farms (Tables RS02.08.1-8 and RS02.10.1-8). In other words SN membership is here associated with only one significant difference.

12. Comparing Class C (SN alone) with Class D (neither SN nor CF) generally reveals no important differences in farm area, harvest, or per-hectare yield (Table RS02.01.1-4). Only two exceptions to this rule occur in the matter of farm practices: SN members working irrigated parcels practice pest control more often than do Class D respondents; on rainfed parcels SN members use more fertilizer (Tables RS02.08.1-8 and RS02.10.1-8).

#### Differences related to district

13. To begin with, Iriga generally has smaller parcels than the other five districts, and in most cases the difference is significant (Tables RS02.01.1-04.1 and 06.1-07.1). Generally larger than others are the parcels in Sipocot, Milaor, and Magarao, in that order (ibid.).<sup>16</sup>
14. The total gross harvest reported understandably follow the same trend--Iriga reports the smallest ones; Sipocot, the largest (Tables RS02.03.3-04.3 and 06.3-07.3).
15. Total net harvests are much the same everywhere, but Milaor does significantly better than other districts in three out of 20 comparisons--all in the Non-M99/CF riceland categories (Tables RS02.03.2-04.2 and 06.2-07.2).
16. Gross harvest per hectare show few meaningful interdistrict differences --and none at all on irrigated land assisted by the M99 program (Tables RS02.03.4-.04.4 and 06.4-07.4).

<sup>16</sup> Twenty interdistrict comparisons were made; five for each of the four categories of land considered, namely, irrigated (M99 or non-M99) and rainfed (M99 or non-M99). Sipocot parcels were significantly larger in seven cases; Milaor parcels, in six; Magarao, in four; Naga, in two; and Goa, in one (Tables RS02.03.1-04.1 and 06.1-07.1).

## CONCLUSIONS

Conclusions result from a mixture of findings, on the one hand, and, on the other, selected additional information such as premises, assumptions, goals, purposes, norms, preferences, or just plain facts. Conclusions vary with the questions which the analyst asks of the data. Uppermost in my own mind as I contemplated the above 16 findings were the goals of the Bicol River Basin Development Program. Chief among them are these three, namely, increased income, increased agricultural productivity, and increased employment--with the manner of these increases further specified. In keeping with one of the basic principles of the nation's current Four-Year Development Plan (FY 1974-77), these increments must be such as will result in a more equitable distribution of income. Hence this question: What do the study's findings suggest relative especially to increased agricultural productivity and to increased and more equitable income distribution?

First, they tell us that as of mid-October 1973 Masagana 99 loans were benefiting the relatively better-off farmers more than their less fortunate fellows. This is implied in the fact that M99-assisted parcels are generally bigger than the Non-M99 parcels, and consequently have larger net and gross yields (Findings 6-7). The same conclusion was suggested by a finding published in SSRU Research Report Series, No. 1 (page 16), namely, that M99 farmers have two or more pieces of riceland much more often than do farmers without M99 loans.

That this tendency to favor the more substantial farmers is a deliberate tactic is indicated by the guidelines determining who should receive M99 loans. At least in Camarines Sur, lending operations for Phase I of the Masagana 99 program (regular crop, May-October 1973) gave official priority to irrigated farms, certified as such by personnel of the National Irrigation Administration or (later in Phase I) by an M99 production technician. Further, of the 23,000 hectares planned for coverage in Phase I, 20,000 were to be irrigated

(For insertion into SSRU Research Report Series, No. 2, at page 35)

**FARMERS WORKING IRRIGATED RICELAND REPAY M99 LOANS  
FASTER THAN THOSE WHO HAVE RAINFED PARCELS.**

PROJECT NO.           

In SSRU Research Report Series, No. 2 (note 18, page 35), it is stated that the author "can only presume that farmers with irrigated land repay their loans more quickly than those with rainfed land." For while repayment figures were available, they did not distinguish the two kinds of farmer.

Because of the importance of the question, and the practical impossibility of getting data from the lending agencies, on September 30, 1974, J. V. Barrameda sought the help of Nicanor S. Clasio, NFAC provincial program officer. Fortunately, a seminar-conference was in progress at the time and Mr. Barrameda was invited to explain the problem to the technicians who were present. Reporting on the 129 farmers about whom he inquired, the technicians gave the following information regarding the M99 loans status of their farmer-advisees.

Riceland type	M99 loan status as of 9/30/74 <sup>a</sup>			
	Fully paid	Partly paid	Unpaid	Total
Irrigated	60 (75%)	14 (17%)	6 (8%)	80 (100%)
Rainfed	25 (51%)	11 (22%)	13 (26%)	49 (99%)

<sup>a</sup>Loans were for Phase I (May-October 1973)

df = 2      Chi-square = 10.499      p < 0.01

Rainfed farmers repay their loans less quickly than others, it is true, but they do repay them.

October 5, 1974

RECEIVED

9 OCT 1974

Ans'd.....

FRANK LYNCH, S.J.

RECEIVED

and only 3,000 (17 percent) rained. The actual fact, support was given to 29,154 hectares, of which all but 4,300 (16 percent) were irrigated.<sup>17</sup> As of 1973, rained riceland represented about 40 percent of the rained-or-irrigated area of Camarines Sur.

Now, irrigated farms, which may be harvested twice or even three times a year, are obviously more productive than rained riceland. As a matter of fact, we found that whereas an irrigated farm without an M99 loan averaged 57 cavans of palay per hectare (and presumably could double or triple this in a year's time), an unassisted rained farm produced only 44 cavans per hectare--once a year.

It follows that, by giving preference to irrigated riceland, the M99 program is helping the relatively better-off farmers more often than the presumably poorer ones who work rained land. From the viewpoint of a conservative lending agency, the policy of supporting irrigated land more than rained seems to make good sense, but it does not square with the goal of more equitable distribution of income. For the practical outcome of these guidelines is that the M99 program widens the very income gap which the government has vowed to close.

Perhaps it might be argued that giving most loans to irrigated farms is not just a question of a low-risk lending policy.<sup>18</sup> It is demanded by the

<sup>17</sup> These guidelines and data were made available by Nicanor S. Clasio, NFAC Provincial Program Officer. He and San Jose were interviewed September 16, 1974, by J. V. Barrameda, Jr., SSRU Publications Officer.

M99-Loan applicants were by the official guidelines supposed to belong to a selda, or compact farm, whether their riceland was irrigated or rained. Since in both the ACA and RB formulas it is stipulated that CF members must work irrigated land, I confess to a little confusion here (see item A.2 in Table 1 on page 6 of the Appendix, below). However, as will become clearer in subsequent paragraphs, I applaud the granting of M99 loans for rained parcels.

<sup>18</sup> I can only presume that farmers with irrigated land repay their loans

government's commitment to increased agricultural productivity. Since rainfed parcels are relatively unproductive, loans should not be allowed them except in very special circumstances.

The fact of the matter is--and this is the second lesson we learn from the study--the government's goal of increased rice production will probably be better served by giving preference to rainfed farms. This statement should not surprise the reader, for it is implicit in the finding that, while the M99/Non-M99 difference is only three cavans per hectare for irrigated parcels (60 vs. 57), it is 11 cavans (55 vs. 44) for rainfed. Supporting one rainfed cropping per year can add more to the annual rice production figure than supporting two or even three irrigated crops.<sup>19</sup> Hence if increase is the goal, loan preference should be given to rainfed farms, because they contribute more to this increment than irrigated farms, and do so at one-half the cost (one loan per year versus two). Helping rainfed farms is more productive and costs less.<sup>20</sup>

---

more quickly than those with rainfed land. As of August 13, 1974, 72 percent of the Phase I M99 loans in Camarines Sur had been repaid, but Mr. Clasio's report (dated September 10, 1974) does not distinguish repayments by kind of riceland involved.

<sup>19</sup>The M99-Non-M99 difference in yield is not significant for irrigated parcels (Finding 8). The same observation has been made for a sample of irrigated farms in Cavite, where the average harvest was 49 cavans of palay for M99 farms and 42 for Non-M99. See Marlin Van Der Veen, "The Philippine Masagana 99 rice production program of 1973: A cursory view from Cavite rice paddies" (ms., July 1974), page 26.

<sup>20</sup>A hypothetical example may help. Suppose we have 1000 hectares of riceland, 500 of which are irrigated and 500, rainfed. Assume that the productivity of all farms follows the average figures we derived from our study, and that loans are given twice a year for irrigated farms or once a year for rainfed, always at P700 per hectare.

If we give no loans at all, the total production for the 1000 hectares over a six-year period (say, 1974-80) will be 474,000 cavans (342,000 from the irrigated hectares and 132,000 from the rainfed). Now, if we give loans twice a year for the irrigated parcels, this will up the total six-year production figure to 492,000 cavans, an increase of only 18,000 cavans. Further

There is no doubt that in the long run both the nation and the individual farmer will be better served by the multiplication of irrigated parcels. But we should be careful not to confuse growing more rice (with the present distribution of irrigated and rainfed farms) and creating more irrigated rice-land. The first involves a small-loan program aimed at increased rice production here and now; the second is a long-term infrastructure program aimed at gradual land conversion. Both are important, and both are underway. But they call for quite different approaches.

In the preceding paragraphs I draw two conclusions that seem to follow from the study's findings. The first is that the M99 loan program, by favoring irrigated farms over rainfed, widens the income gap between those who have a little and those who have more. The second conclusion is that the government's rice production program might be better served by giving preferential support to rainfed farms.

I should like to suggest that policy-makers consider these conclusions and the findings from which they are partially derived. If, despite the deficiencies that will certainly be noted, there appears to be some merit in my

---

we will have done this at a cost in loans of P4,200,000. In other words, we will have paid for this increment in production at a rate of P233 per cavan.

However, if we support the rainfed parcels only once a year for the six-year period, the total production figure will be 507,000, an addition of 33,000 cavans. Further, this will have been accomplished at a loan cost of only P2,100,000, or P64 per added cavan. Clearly, supporting rainfed parcels adds more to the total harvest than supporting irrigated parcels, and does it more cheaply.

argument, perhaps changes in the Masagana 99 program may be called for, at least on an experimental basis. For we are surely all agreed that increased agricultural production must be accomplished with the least possible expense and the greatest possible closure of the income gap.<sup>21</sup>

<sup>21</sup> Copies of an earlier version of this report were sent to the Executive Director (Oscar M. Ravanera) and Deputy Directors (Benjamin V. Gaon, Salvador P. Pejo, and Crisanto A. Gimpaya) of the Bicol River Basin Development Program. While I profited from their comments and those of Douglas Tinsler (USAID), the conclusions are my own.

Appendix

COMPACT FARMING IN CAMARINES SUR

Jose V. Barrameda, Jr.



## COMPACT FARMING IN CAMARINES SUR

Jose V. Barrameda, Jr.

The first time compact farming was tried in the Philippines was in 1964, in Cotabato. Generally credited with the conception and introduction of the idea is Romeo Serquiña, then the Cotabato branch manager of the Agricultural Credit Administration (ACA).<sup>1</sup> Serquiña's reason for pushing this form of cooperative farming appears to have been that for which the ACCFA was created in 1952: to help blunt the threat of insurgency and to bring dissident farmers back to the government fold.

Cooperative farming found enthusiastic acceptance and support among Cotabato farmers, so much so that the following year (1965) several ACA branch managers were brought to the province to observe and learn from the experiment there. That same year saw the formation of similar organizations in several provinces, among them Iloilo (where the farmers' associations were known as tiklos), and Pangasinan (saranay).

The most successful of these was the "people-oriented" saranay in Pangasinan. While it sought to strengthen the base of the Farmers' Cooperative Marketing Associations (Facomas), and to improve collections and the quality of membership in the cooperatives, the saranay introduced two novel concepts: that of a joint liability group, and proximity of residence as the basis for membership in the compact-farm coll.

### The Camarines Sur Experience

In 1969, Camarines Sur entered the CF age by two parallel routes. In that year, then ACA regional accountant Jose C. Morano, apparently having developed his own concept of compact farming, tried to translate his ideas into reality

---

The author is Publications Officer of the Social Survey Research Unit, Bicol River Basin Development Program.

in Borongborongan, Minalabac, where the Milaor-Minalabac Facoma had a warehouse. His interest in trying to set up CF groups sprang from the ACA problem in-credit collection--a problem of which the ACA regional accountant was keenly aware. However, the project did not materialize.

In that same year, the Nueva Caceres Archdiocesan Secretariat for Social Action (ASSA), headed by Msgr. Jose T. Sanchez, held a congress at the Ateneo de Naga. Out of that congress there evolved a committee charged with the task of drawing up a blueprint for organizing farmers into groups through which they could revive their flagging confidence in democratic institutions, and at the same time learn self-reliance.<sup>2</sup> The idea was to lessen the farmers' stifling overdependence on the embattled government for their economic and social upliftment.

The committee's strategy, designed as well to stem the inroads made by a foreign ideology, was twin-pronged. The church was to go about regaining the confidence of the peasantry by involving herself directly and actively in social action; the lay group was to assure the farmers that rural-bank (RB) credit would be readily available to them if they would follow the modern farming practices recommended by technicians.

The committee then set the criteria for choosing the locale in which to implement its plans. The place had to be an economically depressed area, the farms had to be irrigated, and the farmers no longer acceptable to government agricultural financing institutions as good credit risks. With the criteria thus delineated, the committee became an implementing task force.<sup>3</sup>

In the meantime Morano, further inspired by the Israeli moshav type of farm cooperative, had reintroduced his idea in Inginan, Minalabac, in an area serviced by pumping facilities provided by the government Irrigation Service Unit (ISU). In this attempt, Morano acknowledges the help of Rogelio Borja, who introduced him to the farmers there.

The RB-type CF. Since Inginan fitted the criteria set by the ASSA committee, and Morano was a member of the social action task force, the ASSA decided to

join its organizational theories to Morano's practical experience. In the ensuing Inginan experiment, undertaken in 1970, Morano and the ASSA task force shifted the principal stress from production to social solidarity, and so laid the groundwork for what is now referred to as the rural bank (RB) type of CF in Camarines Sur. In keeping with this social orientation, the Inginan prototype was planned along the sarayan line, i.e., proximity of residence was required of members, who were jointly and severally liable for their loans. Specifically, the members had to be neighbors, which Morano interpreted as meaning "with houses a stone's throw from one another." About 10 groups were soon organized, and the term "compact farming" began to gain currency. The Rural Bank of Nueva Caceres (RBNC) opened its credit vaults to the Inginan CFs.

Then nature nearly undid compact farming in Camarines Sur. In October 1970 typhoon Sening, the worst to hit Bicolandia in living memory, smashed across the region's length.<sup>4</sup> To help the compact farmers rehabilitate themselves, Morano, a member of the Knights of Columbus, enlisted the assistance of the food-for-work program of the Catholic Relief Services (CRS). This he did through the ASSA. Fortunately, Archbishop Teopisto V. Alberto saw in the situation an opportunity for an even more solid type of social action. Hence he urged other rural banks to follow the example of the RBNC in supporting the compact-farm program by extending agricultural production loans to CF groups. To provide added impetus, the ASSA and the Bicom embarked on a joint cooperative farm development program.<sup>5</sup> As CFs sprang up in Buhi, Naga, Bula, Fili, and Gpa, Camarines Sur became the first province in the entire country in which rural banking institutions gave massive support to compact farming.<sup>6</sup> At this stage, too, the idea of farm-contiguity as a requirement for group membership began to be applied, although this constituent was to become optional later on when the Masagana 99 program went into effect.

The compact farm financing scheme became so successful that the ASSA and the rural banks soon discovered that they could not meet the farmers' growing

needs without outside help. Atty. Ravanera and the Archbishop took it upon themselves to explore possible means to assure the program's continuity. At their own expense, they arranged a series of conferences in Naga City between themselves on the one hand, and, on the other, such technocrats as National Economic Council (NEC), now National Economic and Development Authority (NEDA) chairman Gerardo Sicat; Gen. Fidel Ventura, chief of the Engineering Corps, AFP; and Director Thomas C. Niblock and Frank Sheppard, Jr., of the United States Agency for International Development/Philippines. To them Ravanera and the Archbishop presented the problem. The offshoot of all the conferences was that, upon assurance of support by Secretary of Agriculture Arturo R. Tanco, Jr., and Public Works Secretary David M. Consunji after subsequent meetings with the two cabinet members in Manila, the Interagency Bicol River Basin Team was formed to draw up an integrated development program that would build on the compact farms of Camarines Sur.

The ACA-type CF. At about the same time that Morano first tried his idea in Borongborongan in 1969, ACA provincial agricultural credit officer Arturo Torralba, Sr., attempted to revitalize the Canaman Facoma along the general lines of cooperative farming introduced in Cotabato. Torralba initiated an educational drive on cooperative farming, and was in the process of organizing the Canaman farmers into compact groups when he was called by the Manila office to participate in an observation study of the Pangasinan sarayan.

The following year, with a regional chief more receptive to compact farming, Torralba decided not to pursue the germinal Canaman experiment. Instead, a new approach and orientation was introduced in an area in Bula served by the Bureau of Agricultural Extension (BAE). In Bula, Torralba found support in BAE technician Orlando Agrite. The ACA soon followed up the Bula pilot project with similar farmers' associations in Pili, Pamplona, and Libmanan. Where the evolving RB-type concept was distinguished by its essentially social-base cast, the ACA approach introduced in Bula was above all production-

oriented. Both concepts had the same underpinnings in joint-liability groups; both were vigorous ideas developing along parallel and, in retrospect, complementary lines.

During the Bula experiment, Torralba perceived an elementary source of weakness that invariably doomed cooperative undertakings: failure to use existing organizations at the barrio level as the base for strong membership. A barrio zone organization, the rabug, (Tagalog, purok) became the foundation on which the ACA built compact-farm groups, supplanting the individual-farmer membership in the Faconab.<sup>7</sup>

It may be pertinent to remark that at this point in time the ACA left it to its branches to organize CF groups according to local conditions. The ACA was openminded about the mechanics best suited for farmers' associations; it left room for flexibility as different modifications were tried out. Thus the ACA concept supplied the second dimension originally missing from the natural-community concept in the RB type: members had to be mutually acceptable. Farm contiguity likewise became another CF component in the ACA formula; later, when it standardized its national guidelines for CF formation, the ACA made contiguity a cardinal principle. In line with its technical thrust, the ACA added a distinct element to the contiguity requirement: the approximately equal productive capabilities of the farms composing a CF production unit (ACA 1973a).<sup>8</sup>

#### ACA and RB Compact-Farm Formulas

The differences and similarities characterizing the approaches of the ACA and the Rural Bank can be seen in Table 1. In looking at the requirements of each formula, the reader should remember that he is looking at ideal prescriptions, which may not always be followed in practice. Thus while both the ACA and RB concepts call for at least lessee tenurial status, if not ownership, about 45 percent of the Camarines Sur CF members interviewed in October 1973 said they were share tenants. Again, while irrigation is said to be mandatory, 48 percent of CF members reported that they were working rainfed riceland.

Table 1  
Comparison of the ACA and RB formulas for the  
compact farm organization

Feature	ACA	RB
<b>A. Membership qualifications</b>		
1. Contiguity of members' farms	Required	Not required
2. Irrigation (gravity or pump)	Required	Required
3. Equal productivity of members' farms	Required	Not required
4. Acceptability of members to all others in group	Required	Not required as such (see A.5)
5. Kinship (blood or marriage) with other members; residence near others	Not required	Required
6. Premembership training	Required	Not required
7. Acceptability of program package esp. modern farming techniques	Required	Required
8. Lessee or ownership status	Required	Required
<b>B. Membership size</b>		
9. Number of members	Dependent on requirements for efficient and effective supervision	15-20 members
10. Number of hectares	Dependent on requirements for efficient and effective supervision	40-50 hectares
<b>C. Operation</b>		
11. Members jointly and severally responsible for loans	Required	Required
12. Supervised credit	Required	Required
13. Farm operations	Consolidated, following one overall plan	Individual, following individual plans
14. Marketing	Pooled, with first proceeds used to repay loans	Individual, with payment of loan

Instead of allowing himself to be hung up on details, the reader should look at the whole thrust of the contrasting provisions. Doing this, he will perceive that the RB plan focuses on bringing together mutually compatible loan applicants; while the stress is on solidarity of responsibility, it condones independent farm operations. The ACA plan emphasizes unity in production and marketing and, in general, sees the farmers above all as technicians. Both formulas, however, see the farmer as a point of convergence for all developmental efforts leading to the improvement of the individual farmer's condition as a social and economic being (ACA 1973a).

#### Cooperative Compact Farming and the BRBDP

At the inception of the Bicol River Basin Development Program (BRBDP), a cooperative compact farm development program was envisioned for the impact area (Interagency Bicol Basin Team 1973: 30). No distinction was made between the RB concept and the ACA concept; a close reading of the "blue book" reveals that the BRBDP sees wisdom in synthesizing and combining the best features of both concepts as found in existing compact farms in Camarines Sur (ibid.: 30-31).

Development plans as reflected in the project proposal include the establishment of a Compact Farm Training Center (CTTC), and seed banks. The original strategy for implementation calls for cooperative CF development in all existing municipalities where irrigated riceland exists (ibid.: 33-34). Planned modifications include provisions for increased technical training for technicians and farmers, more efficient marketing of inputs and outputs, and the use of the CF as a water-management unit. In reference to the latter, it is likely that the popular response will be positive, since it is clear from a recent survey (Lynch 1973) that rice farmers in Camarines Sur place top priority on water management.

As presently conceived by the Plans and Programs Department and the Social Infrastructure Department of the BRBDP, compact farm groups will be established

on the ideal basis of either 15 farmers with contiguous farmholdings, or an aggregate area of 50 contiguous hectares of farmland, whichever is applicable to a specific situation. Priority areas will now also include upland farmholdings covered by Operation Land Transfer, as well as landed estates and settlement areas. As a matter of fact, by virtue of Presidential Decree No. 1, which officially confirmed the attachment of the ACA to the Department of Agrarian Reform (DAR) as the latter's principal credit arm (ACA 1973b: 11), a joint DAR-ACA experiment on compact-farm organization is already underway. In this experiment, CF membership is limited to amortizing owners in landed estates, settlement areas, and Operation-Land-Transfer areas.

#### Notes

In gathering these historical data on compact farming in Camarines Sur, I was given invaluable assistance by many knowledgeable informants and resource persons, among them the following, listed in alphabetical order: Remigio Angeles, public information officer of the regional office of the Department of Agrarian Reform; Bureau of Agricultural Extension provincial agriculturist Micanor S. Clasio, concurrently National Food and Agriculture Council provincial program officer; Leoncio Haber of the Archdiocesan Secretariat for Social Action; Jose C. Morano, former regional accountant of the Agricultural Credit Administration and past auditor of the Bicol Central Cooperative Marketing Association, Inc.; Amiceto B. Oliva, director, Research and Service Center, Ateneo de Naga; Salvador P. Pejo, regional director of the Department of Agrarian Reform and concurrently deputy director, Social Infrastructure Department, BRBDP; Oscar M. Ravanera, president of the Rural Bank of Nueva Caceres and executive director of the BRBDP; Emilio N. Reyes, assistant branch credit manager, region V, Agricultural Credit Administration; Arturo Torralba, Sr., provincial agricultural credit officer, Agricultural Credit Administration; and Erlinda Villanora, manager, Rural Bank of Nueva Caceres.

1. ACCFA was changed to ACA on August 8, 1964, by virtue of RA 3844.
2. Headed by Archbishop Teopisto V. Alberto, the committee counted among its members Msgr. Sanchez, Atty. Oscar M. Ravanera (presently executive director of the BRBDP), Department of Agrarian Reform director Salvador P. Pejo, Morano, Department of Local Governments and Community Development (then PACD) provincial development officer Adolfo Badiola, Bureau of Agricultural Extension provincial agriculturist Micanor S. Clasio, BAE representatives Jaime Pablo and Felixberto Villegas, and Guillermo D. Undacino of the Bicom.



3. This ASSA social action task force became the forerunner of the BRBDP.
4. For a description of typhoon Sening's fury and destructive aftermath, see Barrameda (1970).
5. The Bicom (Bicol Central Cooperative Marketing Association) was organized in 1969 to succeed the Federation of Facomas of Camarines Sur, or Fefacs. Like the Fefacs, the Bicom was ACA-affiliated, its annual financial statement and certified inventory subject to review by ACA (Bicom 1969); further, its principal purpose was to serve as the marketing arm of the various Facomas (Morano 1970). The main difference between the Bicom and the Fefacs was that Bicom expanded its membership to include, not only the Facomas, but individual producers and landowners as well (*ibid.*). As a resident auditor of the Bicom, Morano saw in the CF a possible solution to the organization's two major problems: a small volume of business and substandard rice production by members.
6. Mrs. Salvacion P. Pojo, manager of the Gon rural bank, helped move rural banks of the province to support the program.
7. The need to use existing barrio-level organizations as the base for functional groups was to be stressed by de los Reyes (1972: 85) on grounds of his experience in Nueva Ecija.
8. In drawing up its CF organizational blueprint, the ACA consulted Torralba, who drew on his Camarines Sur experience.

#### References

##### ACA (Agricultural Credit Administration)

- 1973a Guidelines in the organization and operation of compact farms. Manila, Agricultural Credit Administration. September.
- 1973b Compact farms: A vehicle for agricultural development. A financing program for DAR-administered areas during the Calendar year 1974. Manila, Agricultural Credit Administration. December. Typescript.

##### Barrameda, Jose V., Jr.

- 1970 The 13th of October: Black Tuesday. Graphic 38 (22): 4-7, 55.

Bicom (Bicol Central Cooperative Marketing Association, Inc.)

- 1969 Amended by-laws and articles of incorporation of the Bicol Central Cooperative Marketing Association, Inc. (Bicom). (Formerly the Federation of Producers of Camarines Sur, Inc.) Naga City. Mimeo.

De los Reyes, Basilio W.

- 1972 Can land reform succeed? In View from the Paddy. Frank Lynch, ed. Philippine Sociological Review 20(1-2): 79-91.

Interagency Bicol River Basin Team

- 1973 Bicol River Basin Development Program. Manila. February. Mimeo. (Because of the color of its cover, this volume is often referred to as the "blue book.")

Lynch, Frank

- 1973 What rice farmers in Camarines Sur say they want from the Philippine government. SERU Research Report Series, No. 1. Naga City. Social Survey Research Unit, Ateneo de Naga.

Morano, Jose C.

- 1970 Memorandum to the board of directors. Naga City. Bicom. February 2. Typescript.

SSRU RESEARCH ACTIVITIES AND REPORTS

FOR THE FISCAL YEAR ENDING JUNE 30, 1974

As of September 13, 1974

SSRU research for FY74 is reported in two series of documents. The details of research design and implementation--without findings--are found in the set called Research Activity Summaries (RAS01-14). Findings, conclusions, and recommendations are presented in the Research Report Series (RS01-10). A manual of information regarding 33 municipalities of Camarines Sur is contained in a Special Publication (SP01).

Research activity	Category <sup>a</sup>	Short title (and field period)	Reports	
			RAS	RS <sup>b</sup>
1	QL1	Rice-farmer practices and priorities in Camarines Sur (mid-October 1973)	01	01 02
2	SS1	Program awareness of MDOs, PTs, and FMTs in Camarines Sur (mid-October 1973)	02	03
3	SS2	PT/FMT efficiency in Camarines Sur (pilot study; September 1973)	03	03
4	SpS1	Rice-farmer expenditures and M99 loans in Camarines Sur (November 1973)	04	03
5	SS3	Balongay fishpond-estate survey (Camarines Sur, December 1973)	05	04
6	SpS2	PT/FMT efficiency in Camarines Sur (final study; November 1973)	06	03
7	SpS3	Fertilizer source and loan timeliness in Camarines Sur (November 1973)	07	03

<sup>a</sup>See the back cover of this report.

<sup>b</sup>See the list of available publications, below.

Research activity	Category	Short title (and field period)	Reports	
			RAS	RS
8	MS1	Municipality survey (Camarines Sur, January 1973)	08	SPO1
9	SS4	Local-elite study (Camarines Sur, January 1974)	09	SPO1
10	SS5	Case studies in cooperation (Camarines Sur, February 1974)	10	05
11	SS6	Land-consolidation project study (Camarines Sur, February 1974)	11	06
12	SS7	Water-management study (Camarines Sur, March-April 1974)	12	07
13	AP1	Annual panel survey no. 1 (Camarines Sur, March-April 1974)	13	08-10
14	SS8	Flood effects survey (Camarines Sur, April 1974)	14	SPO1

SSRU PUBLICATIONS NOW AVAILABLE

Research Report Series

1. What rice farmers of Camarines Sur say they want from the Philippine government (by F. Lynch)
2. Rice-farm harvests and practices in Camarines Sur: Do compact farms, Masagana 99, and the Samahang Nayon make a difference? (by F. Lynch, with an appendix on compact farming in Camarines Sur by J.V. Barrameda, Jr.)

Announcement Series

1. SSRU research plans for February-June 1974

Research Activity Summaries 01-14

Consolidated Progress Reports

1. July 1, 1973, to April 30, 1974
2. July 1, 1973, to June 30, 1974

For single copies of the above publications, contact the SSRU at one of the return addresses on the back cover of this report.