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FINANCE AND CREDIT ASSOCIATED WITH RICE MARKETING IN THE PHILIPPINES

by

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CHAPTER X*

Finance and Credit Associated with Rice Marketing in the Philippines

I Introduction

Finance required for the marketing of a crop is often considered to include only that money or credit necessary to move the crop in the product market from the farm to the consumer, including any processing en route. In this study, finance for the marketing of rice is considered in the broader context, extending backward in the process to include the finance and credit required in the factor market for physical and human production inputs.

This more inclusive definition is chosen for two reasons. First, it is frequently difficult to separate on-farm and off-farm credit requirements. The multipurpose Farmers Cooperative Marketing Association (FaCoMa), for instance, might finance farm inputs, grain storage and eventually movement to the consumer. In Luzon, large rice wholesalers as well as FaCoMas often distribute fertilizer on credit with a lien on the crop as security. This provides wholesalers a back-haul for trucks bringing rice from Central Luzon to Manila and at the same time provides a source of palay for the millers from whom the wholesalers purchase rice. Secondly, formal institutions supplying credit for

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farm inputs have historically been slower in developing than those for moving the crop to the consumer. It is in the supply of credit for the factor market where remaining deficiencies remain largest.

The various formal institutions organized over the past 65 years to fill these finance and credit needs have been meeting with increasing success since World War II. The demand for this finance will be discussed first followed by a description and analysis of the means by which finance and credit is supplied. This leads to evaluation of special credit shortcomings and a look toward the future.

II Demand for Finance and Credit

1. Why is there a demand for credit? Primarily, the demand for short-term credit (finance to be repaid in less than a year) arises because of a seasonal cycle of production and a non-seasonal or relatively steady pattern of consumption of output. On the farm, the time when finance is needed for peak input requirements differs from periods of harvest when finance can be generated. Off-farm, processing and moving stocks to the consumer takes time. In addition, large portions of the stocks must be stored by millers and wholesalers to balance demand and supply in the market without undue price fluctuations. Some of this balancing of supply and demand takes place when the farmer stores part of his harvest on the farm or in the miller's warehouse for later sale or consumption by the farm household. Either savings or borrowing is required to finance inputs during production and palay and rice stocks during storage, processing and transport to the consumer.

In addition, medium- and long-term finance is required both on and off the farm. Transport, carabao, certain farm tools and equipment may require credit for over a year but probably for not more than 5 years. Bodegas and milling equipment, irrigation facilities and large farm equipment are examples of capital investment generally requiring longer-term credit. Where savings or finance is inadequate to supply the on- and off-farm credit needs, rice flows through the marketing channels will be impeded and price instability can result.

These on-farm and off-farm finance requirements often involve different creditors and debtors while at other times the same parties may be involved in meeting both needs. However, to pin-point the different requirements more clearly, on-farm and off-farm finance and credit demands are discussed separately.

2. On-farm demands for short-term finance and credit. Traditional small-scale owner and tenant rice producers in the Philippines most frequently used short-term credit in the manner described by Mellor -- to provide maintenance of a long-term consumption pattern, really as consumption rather than production credit.[1/] The returns to further investment in traditional inputs were generally below the level of the existing interest rates. It was only through consumption that a return higher than the interest rate could be achieved.

The opportunity for production credits, in this narrow sense

1/ John W. Mellor, The Economics of Agricultural Development, Cornell University Press (1966), pp. 314-ff.

excluding consumption credits described above, grew gradually after World War II with improvement in seed varieties, irrigation and increasing use of fertilizers and other modern technology. With the higher marginal productivity of these new inputs, and of the traditional complementary inputs of water and labor, demand developed for production credit to finance these higher input levels which could now provide increasing production and income. When the marginal productivity potential substantially increased by the development of the high yielding varieties at the International Rice Research Institute in the late 1960's, potential and effective demand for production-type credits could and did expand rapidly in the Philippines. Also, to the extent that land reform after the mid-1960's has been separating the tenant (now a lessee) from the landlord as a source of credit, the need has further increased for institutional credit at economic rates of interest if use of the new technology were to expand rapidly.

As the area of effectively irrigated lands multiplied in the late 1960's and early 1970's, both the quantity and nature of these production credits tended to change. Additional credit was needed for inputs for second crops, but the incremental income provided possibility for added savings and greater internal finance by the farmer himself.

Another demand for on-farm short-term credit is said to arise after the harvest. This is the often discussed demand for credit to enable the farmer to realize any speculative gain that might result from

a price rise after the harvest.[2/] But, as shown in Chapter VIII[3/], this demand is partially illusory. Based on historical price experience, the probability of speculative gain to the farmer from delaying sales after harvest is high only provided the farmer does not consider the interest, storage and insurance costs of holding -- a usual requirement for any formal loan. With these costs taken into account, the probability of gain from holding each year for a period of years appears to be low, probably too low for a near-subsistence farmer to be able to afford taking the risk.

3. Off-farm demand for short-term finance and credit.

Traditionally, with comparably small urban areas and marketed surpluses, the need by traders and millers for short-term working capital loans for marketing the crop, including storing between harvest, was also relatively small. With expanding urbanization in this century, the marketed volume and associated working capital needs increased. Institutional credit developed to supplement private savings in filling these needs. After World War II, the Government provided some of this working capital directly as it assumed responsibility for imports and for the storage and distribution of palay purchased by National Rice and Corn Corporation (NARIC)

2/ For example, Orlando Sacay describes this demand for credit by saying that "for a farmer to take advantage of high-prices, he must postpone the sale of his products. However, since the general level of farm income is low, agricultural products have to be sold immediately after harvest unless advances on future sales such as commodity loans are obtained," in "The Role of Credit in the Marketing of Food and Agricultural Products," 1st National Seminar on Agricultural Marketing, UN-FAO and Bureau of Plant Industry, Philippine Government, Manila (1966), p. 133.

3/ pp.___.

and Rice and Corn Administration (RCA) to maintain floor prices to the farmer. After 1969, with the country near self-sufficiency, the distribution between public and private sectors of this need for marketing credit will largely depend on the floor and ceiling price-level objectives and the financing available to public agencies to support these prices.[4/] In years of surplus, credit requirements will expand depending on the size of the surplus and timing of its sale.

4. Dimensions of the short-term financing and credit requirements. Total short-term financing needs are considered here to consist of three components, all related in the production and marketing cycle but with dissimilar timing of maximums and minimums throughout the year. Thus

$$F_{T_t} = F_{I_t} + F_{fs_t} + F_{ms_t}$$

where F_{T_t} = Total outstanding short-term internal and external finance required in month t, where internal finance directly comes from the income stream of the individual farmer's family and external finance from sources external to that family.

F_{I_t} = Outstanding finance (in pesos) in month t, required for cash farm inputs including cash borrowing for family living.

F_{fs_t} = Finance required (in pesos) for average stock of palay remaining on-farm after harvest, in month t.

4/ This question of price policy and its effect on distribution are discussed at length in the next chapter.

F_{ms_t} = Finance required in pesos for average stocks of palay and rice off-farm in marketing channels, in month t.

Estimates of these financing requirements over the crop year 1969/70 are shown in Table X-1.

These estimates of short-term finance needs outstanding at the end of each month of 1969/70 are only an approximation. There is overlapping and a possibility of double counting between the needs of each of the three components. Even though production loans may be paid off 2 months after harvest, as assumed here (but which may be sooner than actual liquidation), these production loans still may stay in effect long enough to delay need for additional finance to hold palay stocks on the farm. These estimated on-farm input-finance needs have been increased by 25 percent to allow for the use of a portion of the proceeds of the so-called production loans for family living expenses.[5/] Allowance

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5/ For example, Romeo Muere found in his survey of borrowers from the Rural Bank that they used 37 percent of loans for family living expenses. "An Economic Evaluation of a Decade of Rural Banking in the Philippines in Relation to the Development of Agriculture," unpublished M.S. Thesis, University of the Philippines, Los Baños, Laguna (1965), p.143. R. Matienzo and R. Niduaza disclosed that 40.9 percent of the loans to members from 14 FaCoMas in Central Luzon were used for subsistence, education and medical expenses, "A Study of Selected Rice FaCoMa in Central Luzon," Agricultural Credit and Cooperative Institute, University of the Philippines (1968)(unpublished). Orlando Sacay in his study of ACCFA crop loans in 1961 reported that 47 percent went for living expenses in "An Analysis of the Crop Loan Program of the ACCFA," unpublished Ph.D. Thesis, Cornell University (1961), p. 108.

TABLE X-1

Estimate of Short-term Financing Requirements On- and Off-Farm at End of Month, 1969/70*
(in millions of pesos)

Month	On-Farm Financing for Palay Production Inputs (F_{I_t})	On-Farm Financing of Palay Stocks (F_{fs_t})	Off-Farm Financing of Rice and Palay Stocks in Marketing Channels (F_{ms_t})	Total Financing Required (F_{T_t})
July 1969	606	194	152	952
August	588	173	116	877
September	606	159	91	856
October	626	173	216	1,015
November	663	218	289	1,170
December	552	257	353	1,162
January 1970	408	255	329	992
February	250	242	301	793
March	255	238	285	778
April	267	241	287	795
May	399	239	279	917
June	509	227	253	989

* For assumptions and methodology used in calculation, see Appendices A and B.

for consumption may be a rational requirement to enable low income families to concentrate time on production, especially during the period of land preparation and planting.[6/] However, the estimate of the need is rough at best.[7/]

In spite of the approximations, the estimates of finance should provide a general picture of short-term requirements. They enable calculation of the involvement, at each stage, of informal sources of finance (internal finance from the farm family and informal external finance).

From Table X-1, it will be seen that total financing needs are greatest in November/December when major harvests are well under way but production loans have not yet been liquidated. Another peak occurs in June when production loans are already required for the main crop and while stocks of palay from the second crop remain high. Seasonality is

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6/ Roekasah Adirathma found that subsistence farmers in Indonesia who could not obtain production loans were forced to take work off-farm to pay family living expenses with resulting lower yields on-farm, where they had insufficient time remaining for adequate land preparation and weeding. "Income and Expenditure Pattern of Rice Producers in Relation to Production and Rice Marketed," unpublished Ph.D. Thesis, Bogor Agricultural Institute (Java)(1969).

7/ Other inaccuracies may be involved in the valuing of required finance or in allocation of finance between each of the on- and off-farm component parts. The BAE estimates of marketed surplus and of year-end stocks are only approximate. Average value assumed for off-farm stocks had to be estimated given the varying value added for stocks at different points of the distribution channel. And finally, off-farm costs also include some long-term component of warehouse and mill amortization as these costs enter into value added through the distribution channels.

most evident for off-farm requirements, somewhat less for input financing and least for total finance where seasonality of components partially balances out.

This seasonality of the total outstanding loan requirement is somewhat different from the seasonality concept in terms of the month when loans were obtained. During 1960/61 the Bureau of the Census and Statistics (BCS) sampled households on all types of Philippine farms to determine the monthly demand for new on-farm finance (see Table X-2). The sample included about 50 percent palay and 50 percent non-palay farms. The monthly demand for external loans by all farms was somewhat less seasonal than that by palay farms alone, as revealed by the Bureau of Agricultural Economics (BAE) surveys for 1967/68 and 1968/69. These recent surveys show that two-thirds of palay farm loans were obtained at the time of land preparation and planting of the main rice crop, during the four months from May to August.[8/] Over 40 percent were obtained in June and July alone,[9/] compared to only 26 percent in the 1960/61 survey of all farms.

8/ Recognition of the need for finance during this period is implied by two Tagalog words. Tag-ulan, literally meaning rainy season, is used in the Tagalog exhortation "mag-ipon para sa tag-ulan" (save for the rainy days) to imply the period of scarcity. Ina-agosto, meaning to undergo a period of short supply, is derived from the word for August.

9/ The June/July peak is influenced by educational expenditures as well as by the production pattern, with school year beginning in late June or early July.

TABLE X-2

Loans Obtained by Philippine Farm Households by Month Obtained

Month[1/]	PSSH Study All Types of Farms 1960/61	BAE Study Palay Farms 1967/68 Cash and Kind	BAE Study Palay Farms 1968/69 Cash Loans	BAE Study Palay Farms 1968/69 In-kind Loans	1969/70 Palay Farms Estimate Based On Monthly Harvest
	(% of total value of loans)				
July	10.5	29.8	26.8	42.6	20.1
August	11.1	9.4	11.6	6.4	2.0
September	7.1	6.4	7.8	4.5	3.0
October	7.4	4.8	2.1	3.2	5.0
November	5.8	3.7	2.7	0.9	8.9
December	6.2	3.8	2.7	1.8	7.0
January	6.6	5.1	5.6	4.4	4.0
February	5.9	2.6	3.7	1.6	0.7
March	7.7	2.6	3.6	2.5	2.6
April	6.2	3.8	4.2	4.7	4.4
May	9.8[2/]	12.0	12.4	11.3	20.6
June	15.5[2/]	16.0	16.8	16.1	21.7
Unknown	0.1				

1/ Refers to month loan actually obtained.
2/ 1960.

Sources: PSSH Study: BCS, "Borrowing Practices of Farm Households, May 1961," PSSH, Bulletin Series 12, Manila (June 1963), pp. 2 and 5. One-third of loans included were of a long-term nature for animals, irrigation facilities and housing, while only 15 percent were for fertilizer, pesticides and other farm supplies.

BAE Study: 1968/69 Integrated Agricultural Survey. Loans where time of month obtained was not reported, were assumed to have been obtained in the same monthly proportions as the reported loans.

1969/70 Estimate: Based on 1969/70 BAE Integrated Agricultural Survey, assuming finance required proportional to area harvested and obtained in a lump sum 5 months before harvest.

This seasonality suggests a strong relationship between loans and production requirements in recent years. If they were more consumption oriented, heavier borrowing would be expected in September, before the harvest. A demand on the palay farms for a second crop loan in January is evident but not to the extent that might be expected if seasonal loans were proportional to seasonal plantings. It is logical that those on irrigated lands enabling second crops of palay would be better able to self-finance. The in-kind loans peak in July, with 70 percent of these concentrated from May to July. This peaking seems to relate to the need to feed large planting and land preparation crews. If fertilizer usage on the high yielding varieties more nearly approaches recommended quantities, the peaks of new monthly financing should become even more pronounced at planting periods.

Given the objective of maintaining self-sufficiency in rice production, total financing requirements would be expected to continue to increase over time. Finance for each of the three components would not vary proportionately. Need for production input finance would tend to grow as population and use of modern inputs increase and as wages for harvesters and threshers are monetized. The effect of growing farm incomes on rice consumption (and production) could be offset by reduced borrowing required for family living. Finance of palay stocks on-farm would increase with income but decline as commercialization of farm activity increases and if absolute population on palay farms declines. Off-farm finance needs would tend to increase with urbanization and degree of farm commercialization and decline to the extent transportation

improved and price-stabilizing buffer stocks could be reduced. If exports increase, both production and off-farm finance needs will have added cause to expand.

5. Medium- and long-term demand for credit. In an earlier time when most of the production was hand-pounded and consumed on the farm, storage after harvest was largely accomplished in simple baskets or small granaries on the farm. These small on-farm storage units and hand-pounding facilities were generally self-financed. There was then but little need for long-terms finance for large bodegas (warehouses) and rice mills. However, the need for long-term finance for bodegas and mills has grown rapidly in this century along with increasing urbanization, with the decline in hand-pounding and since 1967, with the substitution of domestically produced rice for imports. The demand for medium- and long-term finance has also expanded in recent years for things such as tractors, threshers, transports, and pump irrigation systems. After 1960, with implementation of the policy to nationalize the rice and corn industry, financing of some of the facilities and working capital for Filipino traders and millers took on a new form. This involved substitution of subsidized financing by Government banks for prior financing through commercial banks, informal sources and by internal savings.

There is no strong reason to expect seasonality of demand for medium- and long-term loans. The only recent estimate of demand for such loans comes from the BAE Integrated Agricultural Survey in 1969/70. By estimating depreciation of fixed assets on palay farms, they arrived at

an annual capital cost per hectare of approximately P154, including finance for small scale irrigation facilities but excluding value of land. On the basis of area harvested in that crop year, this would give an annual on-farm medium- and long-term financing demand approaching P480 million.

No estimates have been made of medium- and long-term finance required for millers and traders. Such financing in the past has tended to vary considerably from year to year; it can best be discussed when actual credit supply is examined and evaluated.

III Supply of Finance and Credit

Inputs for rice production and its processing and marketing for the consumer are financed by a combination of internal finance (personal savings of the farmer, trader or processor) and external credit (both formal institutional credit and informal loans and gifts from relatives, friends, traders and other individuals). It will be observed from the following evidence that internal financing retains an important role in the funding of both on- and off-farm financial requirements. On the farm, the family and other social units remain the major source of external funds, reflecting the existence of close family and social ties. Landlords, millers and merchants remain an important source of credit at this level. Off-farm formal institutions, including the RCA, provide a large proportion of the credit required for marketing.

1. Short-term credit for on-farm needs. Surveys of Philippine

farmers have not all been in agreement as to the percentage of farmers resorting to short-term credit but until recently they all confirm that the percentage is high. De Guzman in 1955, studying 5,144 farmers throughout the country, of which over 50 percent were rice farmers, reported that 74 percent used at least one form of credit.10/ In 1958, Gapud in his study of rice farmers in Nueva Ecija found that over 90 percent had short-term loans.11/ In 1961, the PSSH countrywide study reported that 45.2 percent obtained some kind of a loan during the year,12/ with about 60 percent of the borrowers deriving most of their farm income from palay production. Matienzo in a 1965/66 study of palay farms belonging to fourteen FaCoMas in Central Luzon reported 81 percent borrowing during the year.13/ In contrast, a 1968/69 countrywide sample survey by BAE of 9,923 households reported that only 22 percent of the rice farmers had obtained loans during the year.14/ If correct, this

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10/ Leopoldo de Guzman, "An Economic Analysis of the Methods of Farm Financing Used on 5,144 Farms," The Philippine Agriculturist (Jan. 1958), pp. 461-2.

11/ Jose P. Gapud, "Financing Lowland Rice Farming in Selected Barrios of Muñoz, Nueva Ecija," Economic Research Journal (September 1959), pp. 78-79.

12/ Bureau of the Census and Statistics, "Borrowing Practices of Farm Households, May 1961," PSSH, Bulletin Series No. 12 (June 1963), pp. XIII-XIV.

13/ Rodolfo Matienzo, "A Study of Membership of Fourteen Active Rice Farmers' Cooperative Marketing Associations in the Central Plains of Luzon, Philippines," unpublished Masters Degree Thesis, Oregon State University (June 1969), p. 42.

14/ BAE, Integrated Agricultural Survey, 1968/69.

would indicate either farmers are now more affluent and so can increasingly self-finance or that credit was less available during that year, neither of which is very plausible.[15/]

a. Internal financing. Even though a large percentage of rice farmers resort to borrowing during the year, total credit requirements exceed external borrowing. Farmers self-finance a considerable portion of their needs out of savings. As shown on Table X-3, estimates of on-farm credit requirements for 1969/70 total about ₱1,080 million.

TABLE X-3

Estimate of Short-term On-Farm Credit Requirements 1969/70

1.	For cash production input costs including borrowing required for family consumption[a/]	₱825 M.
2.	On-farm financing of palay stocks, maximum monthly requirement.	255 M.
	Total	₱1,080 M.

a/ Cash production input costs were increased by 25% to allow for use of part of production credits for family consumption.

Sources: Cash production input costs from BAE, Integrated Agricultural Survey 1969/70, see Appendix B.
Palay stock financing, see Table X-1.

Of this total, institutional sources provided approximately ₱350 million (32 percent) of total requirements, as indicated on Table X-4. Assuming

15/ BAE statisticians suggest that farmers may have been more reluctant to disclose borrowing habits to Government officials conducting the survey than to private researchers who conducted earlier studies.

TABLE X-4

Loans Granted for Palay Production (Inputs), by Formal Institutions 1960-1970
(in million P)

1/	PNB (2)	Other Commercial Banks 4/ (3)	Private Development Banks (4)	Rural Banks (5)	Savings Banks (6)	ACA (ACCFA) (thru FaCoMas) 2/ (7)	Total 6/	% Change Over Preceding Year
[illegible]	32.3	29.5	3.2*	21.3 5/	0.4		101.8	[illegible]
[illegible]	50.4	38.1	4.2*	29.9 5/	0.4*	2.4	[illegible]	[illegible]
[illegible]	55.9	42.7	6.6	40.9 5/	0.4	1.3	[illegible]	[illegible]
[illegible]	61.4	52.9	8.5*	76.3 5/	0.1	0.8	[illegible]	[illegible]
[illegible]	73.1	51.4	4.5*	110.0 5/	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	74.0	54.5	5.4	80.7	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	86.2	61.2	8.5	92.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	111.7	94.6	7.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	79.2	70.2	6.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	39.6	51.3	7.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	22.4	74.3 3/	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	686.2	620.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

...d by authors.
...pproved for fiscal...
...ranted for fiscal...
...loans given...

that the institutional finance in 1969/70 did not exceed 42 percent of total external finance (indicated for 1968/69 on Table X-5), this would suggest a total value of external finance of not over 850 million. On this basis, farmers' internal financing (aside from the financing of short-term non-cash inputs) amounted to over P200 million in 1969/70.

b. External financing. Further examination of Table X-5 suggests that formal institutional credit may be accounting for a somewhat increasing percentage of the short-term farm credit supplied by external sources. The 1960/61 survey of all farms included sugar farms which received a large volume of credit through the Philippine National Bank (PNB). Excluding this PNB credit, which was mainly non-palay, institutional credit would have accounted for only about 25 percent of external credits. In contrast, the 1968/69 survey which included only credits for palay farmers, indicates institutional credit accounting for over 40 percent. Results of the 1965/66 study of rice-farming FaCoMa members in Central Luzon is a somewhat special case but it disclosed that 51 percent of the credit was from institutional sources, with 38 percent from FaCoMas themselves.

The structure of institutional credit also has changed during the 1960's. Production loans from rural and commercial banks, along with the Agricultural Credit Administration (ACA) and the FaCoMas, have increased rapidly both absolutely and relatively to other institutional lending as confirmed by totals shown in Table X-4, X-5 and X-6. During the decade of the 1960's, while total institutional lending expanded 3-fold in absolute

TABLE X-5

Loans Obtained by Farm Households by Source of Loan
(in % of total value of loans)

Source	1960/61 PSSH Survey All Farms			FaCoMa Members Luzon 1965/66 Palay Farms	BAE Integrated Agricultural Surveys Palay Farms Only					
					1967/8			1968/9		
	Loans in Kind	Cash Loans	Total Loans		Loans in Kind	Cash Loans	Total Loans	Loans in Kind	Cash Loans	Total Loans
. FaCoMa/ACA/ACCFA	1.7	1.3	1.4	38.0	6.2	15.7	13.3	13.9	13.7	13.7
. DBP	-	9.4	7.9		0.1	6.1	4.6	-	2.2	1.9
. PNB	-	21.1	17.8	18.0	-	-	-	-	-	-
. Rural and Commercial Banks	-	10.5	8.9		3.8	19.8	15.7	4.7	30.2	26.5
. SSS, GSIS and other Insurance Companies	-	1.4	1.2	-	-	-	-	-	-	-
. Loan Associations and Credit Unions	-	1.4	1.2	1.0	-	-	-	-	-	-
. Total Institutional Credit	1.7	45.1	38.4	57	10.1	41.6	33.6	18.6	46.1	42.1
. Landlords	37.0	10.7	14.8	10.0	42.9	19.1	25.1	44.7	15.3	19.6
. Relatives	5.8	19.9	17.7	8.0		-	-	6.4	4.5	4.8
. Rice/Corn Miller or Merchant	18.0	5.1	7.1	4.0						
. Other Merchants	20.9	11.6	13.0		37.6	32.7	34.0	29.2	30.0	29.9
. Friend or Neighbor	2.4	0.6	0.9							
. Pawnshops or Professional Moneylenders		2.6	2.2	21.0						
. Others	13.8	4.4	5.8							
. Total Informal External Sources	97.9	54.8	61.5	43.0	80.5	51.8	59.1	80.3	49.8	54.3
. No Source Reported	0.5	-	0.1	-	9.4	6.6	7.3	1.1	4.1	3.6
Total Value of Loans (millions of ₱)	31	169	200							

ources: PSSH Survey: BCS, "Borrowing Practices of Farm Households, May 1961," PSSH, Bulletin Series No. 12 (June 1963), p. 247. This sample survey excluded loans in kind and purchases on credit with a value less than ₱10, and daily or weekly credit purchases of foodstuffs and other daily needs, regardless of value. 58.8% of loans were made by palay farmers.

BAE Survey: BAE, Integrated Agricultural Surveys, 1967/8 and 1968/9. All loans reported above are to palay farmers, with sample including about 6,230 palay farms in 1967/8 and 6,946 in 1968/9.

FaCoMa Members: Rodolfo Matienzo, "A Study of Membership of Fourteen Active Rice Farmers Cooperative Marketing Associations in the Central Plain of Luzon, Philippines," unpublished Masters Degree Thesis, Oregon State University (June 1969), p. 46.

TABLE X-6

Loans Granted to Palay and Rice Industry by Different Financial Agencies[5/]
(in million ₱)

Agency	I. Production (Input) (1960-1970)	Percent of Total	II. Trading (Output) (Commercial) (1966-1970)	Percent of Total	III. Capital Assets[3/] (1966-1970)
Commercial Banks	620.7*	21.5	243.4	30.9	-
DBP	194.5[4/]	6.7	108.4	13.7	101.4
PNB	686.2	23.7	387.6[2/]	49.1	-
Private Development Banks	62.7	2.2	0.4	0.1	2.6
Rural Banks	1,197.7	41.4	6.0	0.8	42.5
Savings Banks	8.2	0.3	1.4[1/]	0.2	-
ACA	121.9	4.2	41.4	5.2	0.6
Total	2,891.9	100.0	788.6	100.0	147.1

* Total of estimate of new loans (original data as secured from the Central Bank include renewals).
1/ Total from 1968 to 1970 (breakdown prior years not available).
2/ Includes credit granted to Philippine Exchange (₱13.12 M) and RCA (₱270.88 M) for palay procurement.
3/ See Table X-10 for details.
4/ Includes some loans for machinery, equipment and irrigation.
5/ Loans granted by pawnshops and loan associations unavailable.

Sources: See Tables X-4, X-8 and X-10.

terms, lending from the Development Bank of the Philippines (DBP) held constant, that of PNB declined one-third, while ACA loans expanded over 15-fold, rural bank loans 9-fold and loans from other banks almost 3-fold.

This contrast over time also is illustrated from the results of two non-governmental studies in Central Luzon, one in 1958 and the other in land reform areas in 1966, see Table X-7. Less than 10 percent of the loans reported in 1958 came from institutional sources, which accounted for 36 percent in 1965/66. Landlords, friends and relatives remain as active sources of loans but institutional sources with relatively lower interest rates showed concrete gains. It was reported that a large portion of the farmers in the land reform areas who still relied on private sources were ineligible for institutional loans either because of their characteristically small scale which provides no repayment capacity or because of payment delinquency.

While institutions suited to providing farm production credits have shown exceptional growth during the 1960's, informal sources that have often loaned at very high rates of interest are still strongly in evidence. In absolute terms, landlords may still supply at least 20 percent of the external credit for an annual total exceeding P100 million. In 1969, landlords appeared to have increased their relative importance as suppliers of credit, both in the total credit they granted as well as in loans in kind. On this basis, if all rice land presently under tenancy were to be declared within land reform areas -- as has been

TABLE X-7

Sources of Short-term Credit on Rice Farms

	1958 Study Nueva Ecija	1965/66 Study Land Reform Areas Central Luzon
Source	% of Borrowers Using Source	
FaCoMas or ACA	4.0	22.0
PNB	*	3.0
Rural Banks	4.0	10.0
DBP	-	0.5
Credit Union	-	0.5
Total Institutional Credit	8.0	36.0
Landlords	56.0	64.0
Relatives	8.0	-
Merchants	3.0	-
Private Money Lenders	9.0	-
Others, incl. Self-finance	16.0	-
Sample Size	78	180

* Less than 1%.

Sources: Nueva Ecija Study: Jose P. Gapud, "Financing Lowland Rice Farming in Selected Barrios of Muñoz, Nueva Ecija," Economic Research Journal (September 1969), p. 79.
Land Reform Area: Adelino Ordoño, "Agricultural Credit in the Land Reform Areas, Economic Research Journal (March 1967), p. 248.

rumored in 1971 -- it is improbable that institutional credit is yet ready to fill the credit gap now filled by landlords. In addition, merchants, millers and professional money lenders as a group appear to be of even somewhat greater importance than landlords, probably accounting for over a quarter of total external credit in 1969.

This sketch of the demand and supply of on-farm short-term credit does not disclose how much greater farmers' expenditures on high yielding seed and/or additional fertilizer and insecticide might be if credit were freely obtained on more economic terms. No accurate answer can be given with available data. But assuming that availability of credit would permit one-half of the lowland rice area to receive an average of 20 kilograms additional nitrogen (N) per hectare, this could result in an increased production of over 200,000 tons, requiring additional credit of approximately ₱49 million, or less than a 10 percent increase in production credit over that granted in 1969/70. This level of N application would roughly equal only the average rate of application on high-yielding varieties in selected municipalities in Laguna in 1969.[16/]

2. Short-term working capital and marketing loans. Finance is required at all stages in the marketing of rice from the farm to

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16/ Barker estimates that one-half of the lowland rice effective crop area would receive 30 kilograms of nitrogen per hectare in the 1970 wet season. An increase in nitrogen use from 30 to 50 kilograms per hectare should result in a 15 percent increase in yield, and at the 1971 price for urea of ₱1.75 per kilogram, this would involve additional input costs of ₱49 million. See Randolph Barker et al., "The Impact of Devaluation on Fertilizer Use and Profitability in Philippine Rice Production," paper presented at IRRI Seminar, May 21, 1970, (unpublished).

ultimate consumer. This includes finance for the handling of stocks as they pass along distribution channels and for storage between harvests as well as for processing en route. As indicated by Table X-1, need for this finance is quite seasonal. In 1969/70, monthly outstanding loan requirements were estimated to vary from a minimum of ₱91 million in September before harvests to a peak of over ₱353 million at the time of the major harvest in December and January.

Formal institutional suppliers of this finance and their relative importance over recent years are shown in Table X-8. Their loans range in maturity from 3 months to 1 year with a large proportion not extending longer than 6 months. Commodity loans secured by crops more frequently mature in closer to 3 months, the short period reportedly imposed to minimize speculation. Thus some traders are forced to make more than one loan in a year. Total value of loans granted over the year as shown on Table X-8 will therefore overstate the supply of credit available in any one month, bringing a degree of haziness to comparison of this recorded supply with estimated outstanding monthly needs, as shown on Table X-1. For instance, while it would appear that in 1969 institutional sources supplied about two-thirds (₱232 million) of the peak December finance requirements of ₱350 million, this undoubtedly overstates the case.[17/] The balance of over ₱100 million must come

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17/ Finance totals on Table X-8 also may include some small amount supplied to farmers for holding of stocks for their own on-farm consumption. For example, ACA granted ₱6.5 million in commodity loans in 1969/70, financing farmers who held stocks in FaCoMa warehouses while awaiting final marketing. See ACA, Annual Report FY 1969/70 (January 15, 1971), p. 19. Rural banks, the PNB and some commercial banks also are known to grant commodity loans on stored crops belonging to farmers.

TABLE X-8

Total Loans Granted for Palay and Rice Trading Activities (Outputs), by Agency 1966-1970
(in million pesos)

Agency \ Year	1966	1967	1968	1969	1970	Total
1. DBP 4/	6.30	8.10	37.80	45.30	10.90	108.40
2. PNB 1/	1.80	4.70	51.20	22.60	23.30	103.60
3. Other Commercial Banks*	51.10 9/	51.10 9/	51.10	41.70	48.40 6/	243.40
4. Private Dev. Banks 3/	0.03 8/	0.07 8/	0.11	0.04	0.13	0.39 10/
5. Rural Banks 2/	4.09	0.82	0.65	0.19	0.20	5.95
6. Savings Banks	n.a.	n.a.	0.15	1.01	0.29	1.45
7. ACA (ACCFA) 5/ (thru FaCoMas)	4.81	8.87	8.01	5.43	14.32	41.44
8. PNB to Phil. Exchange	-	7.75	5.37	-	-	13.12
9. PNB to RCA 7/	14.15	51.31	77.10	116.05	12.27	270.88
Total	82.27	132.72	231.49	232.32	109.81	788.63 10/

1/ Short-term loans (maturing from 90 days to a year) mostly for working capital of millers and other traders; may include some loans for fixed assets. Prior to 1968, commodity loans included with production loan statistics and not separable.
2/ Includes some for corn trading.
3/ Short-term loans to rice mills.
4/ Loans to RICOB members suspended from August 1964 until March 1966. After October 26, 1967, DBP handled working capital loans for RICOB members who had rice warehouse or milling facilities, discounting loan papers with PNB.
5/ Loans released for fiscal year ending year shown at left. These are loans to FaCoMas, federations of FaCoMas and GRAMACOP.
6/ January to August, 1970.
7/ For local purchases only. 1966 and 1967 imports not included.
8/ Estimate of short-term loans: of total of P.22 million in 1966 and of P.55 million in 1967 as reported by CB.
9/ Estimated to be at same level as 1968.
10/ Totals may not add due to rounding.
* Estimate of new loans granted (original data include both new and renewed loans).

Sources of data:
1. DBP, Industrial Department.
2. PNB, Dept. of Economic Research and Statistics.
3,6. CB, Money, Banking and Credit Department.
4. 1966 to 1967 - CB, Money, Banking and Credit Department.
1968 to 1970 - Annual Reports, Private Development Banks.
5. CB, Dept. of Rural Banks Annual Report.
7. ACA, Dept. of Research, Evaluation and Statistics.
8. Philippine Exchange, Inc. (PNB subsidiary), record of palay purchases.
9. RCA, Acctg. Dept. record of domestic palay procurement multiplied by average procurement cost.

from informal sources. Part is realized by millers by trading with stocks of palay left for storage and later disposition by farmers.[18] The remaining requirements come from internal resources of the millers and traders.

As shown in Table X-8, RCA purchases (financed through the PNB) accounted for almost 50 percent of total trading credit supplied in 1969, almost 10 times their participation in 1966 and 1970. This irregularity of RCA activity throws a highly variable financial load on the balance of the banking system, especially on the private commercial banks. And, if credit in the banking system is tight, as was the case in 1966 and 1970, this could mean a rise in average financing costs arising from either extra-legal charges from formal institutional sources or from reliance on more expensive credit.[19] Depending on market conditions, this could mean lower palay prices to farmers or higher rice prices for the consumer.

Commercial banks, with about 440 branches and agencies at the end of 1970, have been the largest institutional supplier of trading credit to traders and millers, averaging approximately P50 million a year.

18/ Many millers in Luzon were reported to be operating in this fashion, trading with farmers' stocks stored in their bodegas.

19/ For description of credit restrictions applied by the Government in 1970, see Roberto Y. Garcia, "Financial Policies of the Philippines," Central Bank Digest (April 27, 1971), pp.4 and 5. According to the Industrial Department of the DBP, working capital loans to millers and traders were discontinued at the start of 1970, except for some renewals on existing loans. At the same time, by action of the DBP Board of Directors, fixed capital loans were discontinued because the legally prescribed rate of 7 percent for rice millers was no longer economically feasible.

In 1970, with DBP and RCA practically withdrawn from the market, commercial banks may have supplied closer to P75 million.[20/] External financing for eligible FaCoMas comes mainly from ACA with small amounts from rural banks and PNB. Although ACA trading loans tripled between 1966 to 1970, they still supplied less than 5 percent of total trading requirements and FaCoMas handled less than 3 percent of the marketed surplus. The large increase in 1970 reflected the increasing role of the Grains Marketing Cooperative of the Philippines (GRAMACOP) and regional federations of FaCoMas, with credit expansion made possible because of supplemental finance from US-AID. RCA financed large portions of the palay and rice in the distribution channels during the late 1960's, accounting for one-half of the institutional finance in 1969. DBP and PNB have shouldered most of the balance of the institutional trading credit in fulfilling their responsibility under RA 3018 to provide working capital for Filipino rice and corn traders registered with RICOB.

There is also considerable financing between different participants in the farm to market channel. Some of this finance is internal, coming from savings of large urban wholesalers or large millers. This is supplemented by informal finance with traders nearer the consumer often financing those nearer the farm as one means of insuring stocks of rice and palay for their trading or milling activities. Large wholesalers, especially those in Manila, at times finance purchases of palay by

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20/ PNB also withdrew from this market in 1971 as credit restraints tightened and priorities changed. In mid-1971, DBP was continuing to "roll-over" P22 million in working capital loans, expecting this to be the final roll-over. New working capital loans were not being granted.

rice millers and in turn have first claim on the milled rice as their sales require. Millers often finance middlemen traders who purchase palay from farms both as standing crops and after harvest. By these various means, trading credit for working capital is usually in adequate supply except in times of credit stringency. For example, in 1970 the authors found several millers with new mills that had been financed by DBP but who had not been able to obtain sufficient operating capital for profitable operation.

In like manner, large wholesalers in some instances, and depending on prior business relationships, provide credit for retail or smaller wholesale outlets. Some FaCoMas and their regional marketing federations also give 30-day credit to their customers, the federations generally requiring promissory notes as security. Retailers, mainly in rural areas or at a few urban sari-sari stores, provide credit for the consumer. In a 1968 survey in Manila, large wholesalers reported giving 30-day credit to 10 percent of their smaller wholesaler customers. Roughly 20 percent of the retailers received 30-day credit and 3 percent operated on a consignment basis from wholesalers.[21/] All other financing, including retail purchases by final consumers, was on a cash basis relying on internal savings.

3. Medium- and long-term capital (or facility) loans. Estimates of annual on-farm fixed capital costs of ₱480 million per year

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21/ "The Marketing Strategy for RICOREX," unpublished survey, Manila, Philippines (1968), pp. D2 and D17.

derived from the BAE survey are covered in large part by current production costs, many not affecting the farmer at all. Of the total, ₱130 million represents assessed land taxes, a responsibility of the land-owner directly or which accounts for part of a landlord's participation in crop division with tenants. Similarly, land rental, totalling ₱75 million, is paid the landlord in the crop division. New small scale irrigation, including dike maintenance, is financed by National Irrigation Authority (NIA) and Irrigation Service Unit (ISU) to the extent of somewhere between ₱20 and ₱30 million annually. Dike maintenance of twice this amount reflects family labor or irrigation fees to the extent performed. Farm buildings generally represent long time farm savings. So, aside from ISU pump loans -- of approximately ₱2 to ₱3 million annually -- and the NIA irrigation fees, the only formal financing at farm levels of these fixed cost inputs is supplied by the special program loans as shown on Table X-9 plus some unquantified additional financing by DBP.

The DBP has been the major source of medium- and long-term finance for off-farm marketing and processing facilities, as can be seen from Table X-10. Their supply of funds were expanded materially in 1960 to finance the Filipinization of the rice-milling industry. As a result, their rice and corn milling facility loans reached a peak of over ₱35 million in 1961/62 and were again over ₱30 million in both 1967 and 1968. Private development banks have added a small amount to this supply in the later part of the 1960's. ACA's contribution has been even smaller, directed entirely for milling and warehouse facilities for cooperatives.

TABLE X-9

Special Financing Program of Farm Mechanization and Irrigation
(in millions of pesos)

	AGLF	CB/IBRD	ADCR[1/]	Total
1967	5.3	13.0	0.2	18.5
1968	5.4	7.7	0.3	13.4
1969	3.1	2.6	0.1	5.8
1970	1.5	3.3	0.1	4.9

1/ Used only in Rizal Province. Fund comes from Province of Rizal being channelled through rural banks.

Source: Central Bank, Dept. of Rural Banks, Annual Reports, 1967/70.

TABLE X-10

Loans Granted for Capital Assets, by Type of Agency 1966-1970 4/
(in millions of pesos)

	DBP 1/ (1)	ACA 2/ (2)	Private Development Banks 3/ (3)	Total 4/
1966	10.8	5/	0.2*	11.0
1967	30.5	5/	0.5*	31.0
1968	30.5	0.1	0.5	31.1
1969	23.0	0.2	1.0	24.1
1970	6.6	0.3	0.5	7.4
Total	101.4	0.6	2.6 6/	104.6

1/ For rice and corn mills, warehouses, threshers, driers, hauling and other fixed equipment. Approved production loans for capital assets cannot be isolated (see Table X-4).
2/ For milling, warehousing and hauling facilities.
3/ Medium- and long-term loans to rice mills.
4/ See Table X-9 for Rural Banks medium- and long-term on-farm loans for acquisition of farm machinery and implements and for development of small private irrigation system under the AGLF, CB/IBRD, ADCR special financing programs.
5/ Less than P0.1 million.
6/ Total may not add due to rounding.
* Estimated.

Sources:
1) DBP, Industrial Dept.
2) ACA, Dept. of Research, Evaluation and Statistics.
3) 1966 to 1967, CB, Money, Banking and Credit Dept.
1968 to 1970, Private Development Banks Annual Reports.

AGLF - Agricultural Guarantee and Loan Fund
CB/IBRD - Central Bank: International Banks for Reconstruction and Development
ADCR - Agricultural Development Council of Rizal.

Thus, when the DBP was forced by credit constraints in early 1970 to withdraw from such long-term financing, funds for financing rice milling, warehousing, and dryers were temporarily practically unavailable. This situation developed even though a thorough study in 1968 had indicated financing requirements for new rice and corn storage, milling and drying facilities would total over ₱250 million by 1975.[22/] These conclusions assumed large exportable surpluses beginning in 1970 and estimate of requirements may have been high, but the study leaves no doubt as to a heavy continuing demand for facility financing.[23/]

Part, if not all, of this demand can probably be satisfied by the 1970 IBRD loan for a Rice Processing Project. It calls for provision of foreign currency totalling $14.3 million and envisions domestic long-term credit from DBP of ₱13 million with the private sector providing ₱26.4 million self-financing. In addition, peak annual working capital finance for these new facilities fall on DBP if not forthcoming from commercial banks or self-financed by borrowers. It remains to be seen how long and to what extent this special loan arrangement will provide the supplemental facility finance to meet the needs for efficient processing and marketing.

22/ Weitz-Hettelsater Engineers, "Economic and Engineering Feasibility Study, Storage, Handling and Marketing of Selected Crops in the Republic of the Philippines" (June 1968), pp. 342-ff.

23/ This conclusion was also voiced in personal conversations with members of the IBRD appraisal team (1969) for a Rice Processing Project in the Philippines.

IV Loan Characteristics

The characteristics of both the formal and informal financial institutions and the services they provide have been shaped over time in the direction of specialized marketing and production requirements. At times this has tended to be a slow process particularly given the conservatism often associated with institutional banking.

Rural banks and ACA (through Cooperatives) were organized in the 1950's to cater directly with low cost finance to farmers and others in rural areas for production, marketing and some longer term finance. With its cooperative focus, the effectiveness of ACA has been influenced by all the problems of building a strong cooperative movement. Starting in 1964/65, its activities were expanded to provide credit in land reform areas when farmers were not members of cooperatives. PNB expanded from its early concentration with sugar producers to provide short-term production loans to rice farmers and supplement the private commercial bank supply of working capital loans to rice millers and traders. The DBP seriously entered the field to provide capital financing to Filipino millers and traders in 1960 and has assisted private development banks in supplementing this activity. However, volume of lending of private development banks is still at low levels. Traditional informal sources of finance have always been active as suppliers of short-term loans. Major characteristics of loans from the various formal sources are summarized in Appendix C. These together with the more important characteristics of informal sources are discussed below.

1. Interest rates. Institutional credit has generally been made available at rates comparable with those in other Asian countries,[24] ranging from 7 to 14 percent per year. Low subsidized rates of PNB and DBP have been available in practice for only a limited number of loans since the 1970 credit squeeze. The only active low rate in 1971 is the 8 percent rate available from ACA for direct loans to farmers.[25] The new 11 percent Rice Milling Project rate of DBP is the lowest remaining institutional rate available for long-term marketing and processing facilities aside from the ACA rate which is restricted to cooperatives.

Such rates of 14 percent and below may have been realized by a large percentage of millers and traders but probably apply to not over 50 percent of the total number of on-farm loans.[26] Of the studies of interest rates for farm loans shown on Table X-11, the one reported by Gapud from 1957/58 may be somewhat more accurate especially for those borrowers reporting a zero interest rate.[27] By careful examination, he

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24/ For summary of institutional rates in Asia, see Shoa-er Ong, "Developing Small Farm Economy in Asia," in ADB, Asian Agricultural Survey, Manila (March 1968), p. 828.

25/ This direct ACA loan rate of 8% has caused problems for FaCoMas who re-lend ACA funds to their members at rates above 8 percent. For comments on this point, see W.T. Goddard, "Case Study of Selected FaCoMas in the Philippines," ACCI, Los Baños (May 31, 1967), p. 38. (Mimeographed).

26/ This may mean a much larger percentage in total value as the larger loans are usually negotiated by more credit-worthy borrowers where lenders can afford to give lower rates considering the lower risk and reduced servicing involved.

27/ Jose P. Gapud, op. cit., p. 78.

TABLE X-11

Interest Rates Paid by Farmers

Interest Rate Range	% of Borrowers Paying Within Rate Range	
	Gapud 1957/58 Survey of Rice Farms	De Guzman 1954/55 Survey 75% of Sample were Rice Farms
0	20.0	49.0
1- 4	13.0	5.0
5- 9		
10- 14		20.0
15- 19	9.0	
20- 29		11.0
30- 49	23.0	
50- 74		6.0
75-100		
100-199	20.0	6.0
Over 200	15.0	3.0
Size of Sample	224	5,144
Average Rate	98	28
Study Location	Nueva Ecija	countrywide

Sources: Jose P. Gapud, "Financing Lowland Rice Farming in Selected Barrios in Muñoz, Nueva Ecija," Economic Research Journal (September 1959), p. 79.

Leopoldo P. de Guzman, "An Economic Analysis of the Methods of Farm Financing Used on 5,144 Farms," Philippine Agriculturist, Vol. 41 (January 1958), p. 467.

determined that the average computed interest rate for loans for which zero interest was claimed was actually 16 percent with many charging highly usurious rates. These differences arose from underpricing harvest repayments, overpricing goods purchased with loan proceeds and similar trading practices. If the 1954/55 findings are similarly adjusted, average rates would probably have been considerably higher.

Several farm studies have reported the range of interest rates charged by different categories of lenders, as shown on Table X-12. FaCoMas, which are limited by law to 12 percent, have been found at times to be charging higher rates on loans repaid before maturity where no interest adjustment was given or where the annual rate was charged for loans maturing in less than a year.[28/] Traditional types of high interest loans are reported as still in evidence. These include practices known as takipan (repay 2 cavans of palay for every one borrowed), talindua (repay 3 cavans for every 2 borrowed), terciahan (repay 4 cavans for every 3 borrowed), and takalanan (where repayment in kind for cash loan is valued below prevailing prices).[29/] Some loans from all categories of informal lenders were found with effective rates exceeding 200 percent.

Many of these farm loans were small and without security,

28/ Gapud, op. cit., p. 79. The annual effective rate is also increased by the service charge being assessed on a loan basis rather than per annum.

29/ Nathaniel Tablante, "The Present Situation and Outlook of Short-term Credit Facilities with Emphasis on their Implications on the Present Rice Problems of the Countr," in Rice and Related Statistics, U.P. Statistical Center, Manila (1965), p. 154; and Augusto F. Espiritu, et al, Rural Banking, published privately by the authors, Manila (1967), p. 23.

TABLE X-12

Rates of Interest Charged by Formal and Informal Sources
(in % per year)

Group or Organization	Rates Reported by Formal Organizations: Prior to 1970	Rates Reported by Formal Organizations: 1970 & After	Gapud 1957/58 Survey of Rice Farms	De Guzman 1954/55 Survey 75% of Sample were Rice Farms
			← Rate Range →	
ACA(ACCFA)	8	8		Average 12
FaCoMas	10	12	10-36	
DBP	8-10	12		
RICOB Registered				
Production	7	7		
Working Capital	8	10		
Facility	7	7		
Rice Milling Project		11		
PNB	7-12	12-14	1-14	1-19
Rural Banks[1/]	12	12	Average 14	
Commercial Banks[1/]		12-14		
Private Dev. Banks[1/]	10-11	12		
Insurance Companies				1-9
Savings Banks		12		
Landlords			0 to over 200	0 to over 100
Private Individuals			0 to over 200	0 to over 100
Merchants			0 to over 200	20-99
Relatives			0 to over 200	10-99

1/ Actual rates may be slightly higher than reported as interest generally collected in advance. Some effective rates from private development banks reportedly are increased still further by the practices of requiring 10 to 20 percent compensating deposits for the loan duration together with service and handling fees each anniversary data, see Mrs. Belen V. Ancheta, speech delivered at Private Development Bank Seminar, Manila (March 1971), (unpublished).

Sources: Formal Organizations; see Appendix C.
Jose P. Gapud; "Financing Lowland Rice Farming in Selected Barrios in Muñoz, Nueva Ecija," Economic Research Journal (September 1959), p. 79.
Leopoldo P. de Guzman; "An Economic Analysis of the Methods of Farm Financing Used on 5,144 Farms," Philippine Agriculturist, Vol. 41 (January 1958), p. 468.

involving high natural risks and administrative costs, which called for high interest rates unless loans were subsidized. These rates are comparable with those reported in 1953 by Belshaw for Asia and the Far East, rates varying from 20 to 400 percent.[30/] While some of the higher rates might be justified economically, they still indicate a social problem. As Mellor so correctly points out, because of the risks of the lender and the means he might take to minimize these risks, the likelihood of oppression arising from these circumstances is great.[31/] It does not indicate unusual immorality among money lenders, but rather that the evil arises from the nature of the credit and the borrowers and the resulting credit system. Moreover, aside from emphasizing the need for social action, these high rates highlight the need for expansion of cooperatives and/or other specialized lending institutions.

Loans between traders, merchants and millers may be at rates slightly higher than 14 percent but marketing surveys throw little light on this situation. The only clue comes from millers in Luzon who reported receiving loans from their large wholesale customers. Advances were made for palay purchases to be repaid usually within 6 months by rice shipments credited against the loan at from ₱0.50 to ₱1.00 below the existing market price. At current rice prices, this would reflect an annual interest rate of not over 10 percent. With DBP and PNB practically out of the working capital market in 1970 and 1971, many

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30/ Horace Belshaw, Agricultural Credit in Economically Underdeveloped Countries, FAO, Rome (1959), p. 61.

31/ Mellor, op. cit., pp. 316-ff.

traders without established credit relations elsewhere have had to increase their trading on deposited farmers' stocks or else resort to more expensive sources if they were to stay in business.32/

2. Collateral requirements. Traditional bankers tended to place high priority on real estate or chattel mortgages, shying away from accepting standing or stored crops as collateral. This shortcoming was of little concern to millers with their land and facilities. For the farmer, it was overcome to some extent with the bonding of warehouses and the use of quedans (warehouse receipts) to provide improved collateral for loans. When such security is accepted by commercial banks, loan value is usually for only 50 to 60 percent of market value of the palay stocks. Lack of standards of quality and insecurity of realizing claims from bonded warehouses remain important constraints for these banks.

When FaCoMas and Rural Banks were established, it was expected they could meet the need of the farmer who had collateral unsuitable to traditional banking institutions. FaCoMas from the start could lend against standing and stored palay stocks because of opportunity for closer control, although members have not infrequently sold their crops without repaying the loans. Rural bankers were often inexperienced and

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32/ Tightness of working capital credit could have contributed to the shortage of rice stocks in August/September 1971. Short of working capital, millers were forced to turn stocks over more rapidly at harvest time, thus relatively reducing retail market prices for rice. With lower prices after harvest, consumption rose, leaving smaller stocks for later in the year.

somewhat further removed from the farmers so were more reticent to loan against stored or standing stocks.[33] To some extent this is being overcome with the establishment of the Agricultural Guarantee and Loan Fund (AGLF) which assumes a portion of the risk involved. Supervised credit which is expected to accompany AGLF loans was planned to further minimize the overall risks. However, supervision has not yet provided as hopeful an answer as expected given the inexperience of available supervisors and the high costs of supervision.[34]

While RCA was buying palay to support the floor price, farmers could receive full payment after depositing their palay in bonded warehouses and signing over the warehouse receipts to an agent bank of RCA. This system proved successful from the farmers viewpoint but inadequate supervision of bonded warehouses and tendency of warehousemen/millers to use RCA stocks as working capital brought extensive losses to RCA from the system.[35] PNB has thus understandably been hesitant in continuing to finance RCA purchases.

33/ For example, Muere reports that of the total loans granted by rural banks in the first 10 years of rural bank operations ending December 31, 1962, only 5.13 percent of total loan value was secured by mortgages on growing crops, with an additional 1.01 percent by stored crops, op. cit., p. 24.

34/ In August 1971, the Monetary Board announced the approval of a financing plan expected to overcome some of the shortcomings of the AGLF. The new Agricultural Guarantee Fund (AGF) program incorporates an additional 1½ percent fee to adequately cover costs of supervising the loan, Business Day (August 4, 1971), p. 4.

35/ In March 1971, the chairman of RCA testified before the Senate that P92 million worth of palay had disappeared from bonded warehouses, the loss having resulted from "weak implementation" of the quedan system, Manila Times (March 15, 1971), p. 1. In June 1971, the new chairman of RCA, Jose Drilon, Jr. reported a P143 million loss of palay traceable to defaulting private contractors, warehousemen and other private persons, Manila Times (June 19, 1971), p. 1.

So, while ACA (FaCoMas) and the Rural Banks are providing an increasing amount of finance against crop collateral, their present capacities leave a large portion of the need unsatisfied except for reliance on informal sources or farm savings. And while RCA has been bridging the gap to some extent at harvest time, this financial source has been out of the market in most of 1970 and 1971.

V Other Considerations

1. Credit through cooperatives. A perennial need for specialized agencies to provide finance for small rice farmers in their production and marketing has long been recognized in the Philippines as elsewhere in Asia. Strong ideological support has been given to cooperative movements to save the farmer from the "clutches of the money lender and capture for him the profits of the middleman". In the Philippines, this support has been strongly evident since establishment of ACCFA by RA 821 in 1952.

In spite of this Government backing, the cooperative movement under ACCFA and later ACA (1953 by RA 3844) has been beset by continuous troubles. The difficulties have been too frequently documented to warrant detailed discussion here. They include managerial deficiencies, high social opportunity costs for many members, irregularity of financing and low loan repayments, bureaucratic delays with loan releases too late, and probably of key importance -- the original initiation of the program within the context of a relatively static rice agriculture primarily competing with money lenders who had more flexibility in offering a consumption-type

credit.[36/] Korzan sums up the situation in the Philippines in 1970 in saying, "when expectations are not realized ..... the image of cooperative enterprise is badly tarnished. This is the situation that prevails in the Philippines at the present time".[37/]

In spite of this gloomy picture, progress -- even though still small -- has been evident since the tying of the program after 1966 to the technological breakthrough in rice. Under these conditions, returns to income-increasing investment are possible and the institutional orientation and ties of the cooperatives are probably more suitable than those of the money lender for understanding the special problems of lending for a new technology. Volume of ACA lending has more than tripled since 1965/66, as shown in Table X-13. These accomplishments have reflected the development of a few strong cooperative managers plus an improving loan collection record providing increased availability of loanable funds. However, by 1969/70 ACA's percentage of institutional credit for rice and palay amounted to only 8 percent of farm input finance,

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36/ For excellent summary discussions, see Bibiano B. Arzadon, "The Role of Cooperatives in Marketing and Supply," in 1st National Seminar on Agricultural Marketing, DANR, BPI, Manila (Sept. 7-25, 1965), pp. 168-177; Gerald E. Korzan and Fabian A. Tiongson, "The Agricultural Marketing System -- The Cooperative Dimension," paper presented at First Asian Conference on Agricultural Credit and Cooperatives, Manila (Dec. 1-10, 1970) (mimeographed); and N. B. Tablante, "The Agricultural Credit Problem in the Philippines," paper presented at the 1964 Summer Seminar on Socio-Economic Aspects of Agricultural Development, U.P. College of Agriculture, Laguna (1964)(mimeographed).

37/ Op. cit., p. 15.

TABLE X-13

Credit Granted by ACA (ACCFA) to Palay FaCoMas[5], 1959/60-1969/70
(in million ₱)

Fiscal Year	No. of Active Palay FaCoMas[1]	I. Agricultural Palay Production[2]	II. Trading[3]	III. Others[4] (Facility Loans)	Total
1959/60	n.a.	2.37	0.63	0.16	3.16
1960/61	n.a.	1.25	0.56	0.05	1.86
1961/62	n.a.	0.79	6.23	0.08	7.10
1962/63	n.a.	1.84	4.70	0.64	7.18
1963/64	n.a.	2.91	2.11	0.17	5.19
1964/65	n.a.	3.24	2.98	0.01	6.23
1965/66	94	4.90	4.81	0.02	9.73
1966/67	112	12.62	8.87	0.02	21.51
1967/68	135	17.78	8.01	0.07	25.86
1968/69	153	12.66	5.43	0.15	18.24
1969/70	170	22.13	14.32	0.34	36.79
Total		82.49	58.65	1.71	142.85

1/ As of June 30. Includes federations of FaCoMas. Some of palay FaCoMas also handle corn and other grains. These are, however, reportedly negligible.
2/ Short-term loans maturing 60 days after harvest at 8% interest rate/annum, plus FaCoMa service charge of 1 to 4% additional. Loans direct to farmer under land reform program not included above.
3/ Short-term loans with maturities of 120 or 180 days.
4/ Generally medium- (maturing in 3 to 5 years) and long-term (maturing in 10 years) loans, depending on the facility being financed; warehouses, rice mills, farm equipment and the like.
5/ From 1965/66 data include loans to federations of FaCoMas.

Source of basic data: ACA, Research, Evaluation and Statistics Division.

13 percent of commodity loans and still less than 1 percent of facility loans.

On the basis of these gains, ACA now has plans to finance the handling thru FaCoMas and Cooperative marketing organizations of one-third of the marketed surplus by 1975.[38] Their ability to realize such a goal depends on many factors. Even with the tie to technological change, cooperative finance must still compete with the flexibility, knowhow and speed of operation of both the money lenders and traditional traders. Under the more suitable environment for making production and trading loans, money lenders and traders have the capability and flexibility to match lower administrative costs and risks with lower interest rates. To compete profitably, management of the cooperatives must be equally experienced and capable and finance must be adequate and timely. These are conditions that will be hard to realize.[39] The more prosperous farmers are apt to benefit from the competition and improved condition by lower interest rates from whomever supplies the credit. Cooperative marketing organizations will find difficulty in capturing profits for the farmers or reducing prices to consumers in distribution channels when margins are already relatively low. And, the small farmer whose needs are of a consumption nature must still pin his hopes on subsidized loans. The cooperative may or may not be the most effective instrument for furnishing this finance.

38/ Manila Times,"5-Year Coop Plan Completed"(December 10, 1970), p. 10.

39/ Adequate and timely releases of funds have perennially been a problem to ACA. In the late 1950's and early 1960's, funding almost dried up entirely. ACA, Annual Reports, 1960's.

2. Credit combined with other services. The argument has been advanced that a substantial need and justification for new credit institutions arises with opportunities for technological change, particularly where this involves important increase in cash inputs. This leads naturally to tying credit programs with other services that will help insure coordination with the other aspects of technological change. With this partnership, credit suppliers can have greater confidence that the new technology will be used and that debts can be serviced. Coordination can also result in more efficient use of scarce manpower services. The beginning of useful coordination of this sort has been evident accompanying the technological breakthrough in rice production in the late 1960's.

Supervised credit, which combines extension technicians with credit provision, is being increasingly employed by the Rural Banks in cooperation with the Agricultural Productivity Commission (APC) and their own technicians. Also, ACA activities were tied to APC farm management studies in spreading credit for the new technology in land reform areas in Luzon and elsewhere.

Further, in early 1971, the Secretary of Agriculture was seriously investigating the possibility of initiating a program for crop insurance to reduce the risks of default when natural calamities, typhoons and floods bring crop failures. Such insurance requires time for perfection so can be started only gradually. Where it has been established, as in the United States and Mexico, institutional loans generally cannot be obtained unless the borrower also insures his crop.

The crop insurance rate for rice production in the U.S. varies between 2.5 and 3.8 percent but this payment is partially offset by lower loan rates because of the reduced risk.40/

Other forms of coordination are practiced in the factor market. In 1967, the Agricultural Development Council of Rizal (ADCR) tied input credit provision for palay production to private suppliers qualified to provide some of the technical information associated with use of the new high yielding seed varieties. The council also tried to insure planned use of the loan funds by incorporating a practice extensively employed in Indonesia, of issuing purchase orders for the inputs instead of cash, the supplier being paid directly by ADCR. This purchase order procedure has been adopted also by some FaCoMas where they sell the inputs themselves and give technical help at the same time.

In the private sector, only between 10 and 15 percent of fertilizer sales are made on a credit basis. However, at least one large Philippine manufacturer (ESFAC, later Planters) conducted technical training sessions for dealers so they could give technical help relating to the new technology to their customers.41/

The coordination of credit and technical guidance is also being initiated by several of the new large rice mill owners, both in Luzon and Mindanao. These millers finance the new technological inputs,

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40/ In the U.S., administrative costs for the crop insurance program are government subsidized.

41/ Estimate of credit sales were given to the authors by two of Philippine fertilizer manufacturers.

require strict adherence to specified cultural practices, guaranteeing above market payment for output in a tied sales contract. The higher output price is apparently possible by uniformity in variety along with more precise measures for rewarding quality.

VI Summary and Conclusions

1. Traditionally, short-term on-farm finance was primarily for "consumption" purposes. This demand changed and increased especially after the mid-1960's, as technology developed such that improved combinations would bring a return higher than existing interest rates. Off-farm, demand for short-term working capital and commodity credit has been expanding over this century as the commercially milled marketed surplus increased along with urbanization and substitution of domestic production for imports. On-farm demand for longer term credit also increased as it become more important to expand effective land area by irrigation to satisfy a growing population and safeguard investments in high yielding inputs. Simultaneously, the increase in marketing brought concurrent demand for longer term loans for mills, bodegas and related facilities.

2. In 1969/70, peaking of outstanding short-term loan requirements was estimated to have occurred for on-farm inputs in November, for on- and off-farm palay and rice stocks in December/January and for overall requirements in November/December (approximately ₱1.5 billion). Around two-thirds of on-farm short-term loans for palay farms were obtained between May and July.

3. Formal credit institutions have grown rapidly both in absolute and relative terms during the 1960's in their capacity to supply the short-term on-farm finance needs. Largest gains have been made in absolute terms by rural and commercial banks and, percentage-wise, by ACA (and the FaCoMas). Even so, informal sources still appear to provide more than half of external finance, with landlords remaining the most important informal source. Internal finance from the savings of farm families accounts for about 20 percent of total short-term on-farm financing. There is evidence that around three-quarters of farm households borrow sometime during each year. An additional financing of P50 million to enable those on irrigated lands to increase fertilizer inputs with high yielding seed should result in additional output of 200,000 tons of rice with retail market value of over P175 million.42/

4. Working capital requirements of traders and millers were probably covered adequately during 1968 and 1969 when formal institutional sources supplied around half of the total financing required. During these years, RCA provided between one-third and one-half of the formal financing with the balance spread mainly between the commercial banks, DBP and PNB. Somewhat less than half the required financing was supplied by millers and traders with an assist from stocks of farmers stored in their warehouses. After DBP, RCA and PNB withdrew most of their support in 1970 and 1971, a major financing load was thrown onto the commercial banks. This undoubtedly meant higher cost credit with an

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42/ Valued at P2.20/ganta at which rationed rice was being sold in Manila in mid-1971.

influence either to reduce farm prices or increase retail prices. It could also have accentuated the rice shortage in the market in mid-1971 as insufficient finance forces traders to unload stocks soon after harvest.

5. Requirements of on-farm medium- and long-term finance appear large (estimated at ₱154 per hectare or around ₱480 million annually) but much is covered by crop distribution or proceeds. Rural banks currently supply a limited amount of finance for farm machinery and small irrigation systems, which may be adequate for near-future needs. NIA and ISU are charged with financing larger irrigation. Institutional financing for facilities has come primarily from DBP in fulfilling its responsibility to Filipino millers and traders, but these RICOB certified loans have been temporarily discontinued. Whether their new Rice Project Loans will meet present needs now is still an open question.

6. In recent years most of the millers and traders may have been able to borrow at interest rates of not over 14 percent but about half of the farmers faced higher rates, some in excess of 200 percent. Some of the high rates might be justified considering the nature of the loans, but such rates emphasize the remaining social problems and could reflect oppression inherently possible in such cases.

7. Farmers have traditionally had difficulty in obtaining loans from institutional lenders on standing or stored crop collateral. ACA and the FaCoMas have accepted such collateral in their limited

operating areas and rural banks are expanding their acceptance as they improve loan supervision under guarantee loan programs. RCA used the quedan system with bonded warehouses for purchasing palay but their unhappy experience because of poor bonding control has kept commercial banks from utilizing this potential collateral safeguard.

8. While the cooperatives have been advocated on ideological grounds as the solution to the farm credit problem in both the factor and product markets, the cooperative movement has faced continuous difficulty. It is only in association with the technological breakthrough that some progress, even though still small, has been achieved. ACA has plans to extend its gains but must meet the efficiency and flexibility of money lenders and traders who can be expected to reduce interest rates in line with lower risks. As to the small farmer whose needs are of a consumption nature, a solution through cooperatives is yet not in evidence.

9. Credit arrangements for farm inputs tend to become viable when associated with technological change and major output increases. Thus reason arises for conserving scarce technical resources and associating credit supply with provision of technical know how and supervision. A number of schemes of this nature are now being tried in the Philippines.

APPENDIX A

Estimate of Monthly On- and Off-Farm Finance Requirements for Marketing the Rice Crop, 1969/70
(in thousands of cavans palay of 44 kgs.)

Month	Monthly Palay Harvest (Q_t)	Total Consumption (C_t)	Farm Price (P_{f_t}) (in pesos)	Finance Required for Average On-Farm Palay Stocks (in 000 pesos)	Finance Required for Average Off-Farm Palay & Rice Stocks (F_{ms_t}) (in 000 pesos)
July 1969	833	9,739	16.07	194,484	151,783
August	3,092	9,763	16.07	173,418	115,807
September	5,233	9,787	16.07	159,412	90,831
October	24,502	9,813	13.26	172,929	215,526
November	25,810	9,839	13.26	217,852	288,622
December	23,907	9,864	13.26	257,471	352,747
January 1970	2,379	9,890	14.21	254,825	329,254
February	3,568	9,914	14.51	242,177	300,937
March	5,947	9,940	14.91	237,611	284,614
April	10,586	9,964	14.92	240,809	286,546
May	8,326	9,990	15.08	239,315	278,733
June	4,758	10,016	15.26	226,669	252,893

Explanation:

Y = Monthly % distribution of harvest (see Appendix B)

Q_t = Palay harvest in cavans in month t = $\frac{118,941,000\ Y}{100}$

where 118,941,000 = 1969/70 palay production in cavans

Q_{m_t} = Cavans of palay marketed off-farm in month t = 0.585 Q_t

Q_{fs_t} = Cavans of palay retained on-farm in month t = 0.415 Q_t = $Q_t - Q_{m_t}$

C_t = Consumption of palay in cavans on- and off-farm in month t = $\frac{142.5\ N_t}{12 \times 44}$ where N_t = population in month t

142.5 = average per capita consumption in kg. of palay, the same on- and off-farm.

Q_{f_t} = On-farm palay stock in cavans at end of month t = $Q_{f_{t-1}} + Q_{fs_t} - .40C_t$ assuming 40% of consumption occurs on rice farms,
where $Q_{f_{t-1}}$ for July 1969 = 13,877,358 cavans of palay

Q_{Ff_t} = Average on-farm palay stock in cavans requiring finance in month t = $\frac{Q_{f_{t-1}} + Q_{f_t}}{2}$

P_{f_t} = Farm price in pesos/cavan of palay in month t

F_{fs_t} = Finance required in pesos for average on-farm palay stocks = $Q_{Ff_t}\ P_{f_t}$

Q_{F_t} = Average off-farm palay equivalent of stock in cavans requiring finance in month t = $\frac{Q_{of_{t-1}} + Q_{of_t}}{2}$
where Q_{of_t} = off-farm stock of rice and palay in terms of cavans of palay at end of month
= $Q_{of_{t-1}} + Q_{m_t} - .60C_t$

and $Q_{of_{t-1}}$ for July 1969 = 11,219,117 cavans of palay

Q_{Fr_t} = Average off-farm rice equivalent of stock in gantas requiring finance in month t = $0.53Q_{F_t}(23.5)$
where 1 cavan of rice assumed = .53 cavans rice

F_{msp_t} = Finance in pesos required for off-farm stocks if all valued at P_f = $P_f\ Q_{F_t}$

F_{msr_t} = Finance in pesos required for off-farm stocks if all valued at P_r = $P_r\ Q_{Fr_t}$, where P_r assumed at average price for Macan 2nd class rice for 1969/1970 = ₱1.70/ganta

F_{ms_t} = Finance in pesos required for off-farm palay and rice stocks in month t = $\frac{2F_{msr_t} + F_{msr_t}}{3}$
where off-farm stocks assumed to remain in palay form twice as long as in rice.

Sources: BAE for production, monthly harvest percentages, stocks and average farm prices.
Central Bank and Bureau of Commerce for retail prices.

APPENDIX B

Estimate of Financing of Cash Inputs for Rice Production, 1969/70
(in millions of pesos)

Month of Harvest (t+5)	Monthly % Distribution of Harvest, 1969/70 During Harvest Month (Y)	New Cash Requirement During Month to Meet Cash Inputs plus Family Expense Financed ($F_{C_t} = X \cdot Y \cdot A_{h_t}$)	Total Outstanding Credit ($F_{I_t} = F_{I_{t-1}} + F_{C_t} - F_{C_{t-7}}$)
June 1969	4.0	34.9	34.9
July	0.7	5.7	40.6
August	2.6	21.2	61.8
September	4.4	35.9	97.7
October	20.6	167.9	265.6
November	21.7	176.9	442.5
December	20.1	163.8	606.3
January 1970	2.0	16.3	587.7
February	3.0	24.5	606.5
March	5.0	40.8	626.0
April	8.9	72.5	662.7
May	7.0	57.1	551.8
June	4.0	32.6	407.6
July	0.7	5.9	249.6
August	2.6	21.8	255.1
September	4.4	36.9	267.5
October	20.6	172.6	399.4
November	21.7	181.8	508.7
December	20.1	168.4	620.0

Explanation:

Credit is assumed needed 5 months before harvest.

Credit maturity assumed to be 2 months after harvest (or 7 months after credit was obtained).

Definitions:

A_{h_t} = area harvested: 3,332,150 ha. for January 1969.
3,113,440 ha. for February 1969/Jan. 1970.
3,200,700 ha. for February/July 1970.

X = average production cost of cash inputs/ha. + family living expenses financed, where family living expenses financed assumed to equal 25% of cash inputs and where average production cost of cash inputs = ₱209.45/ha.
= 1.25 (₱209.45) = ₱261.81.

Y = monthly percent of harvest.

t = month on which credit needed.

Sources: BAE: Monthly percent of harvest, area harvested and basic production cost statistics.

APPENDIX C

Specifications of Formal Financing Terms

Agency	INTEREST RATES[1] (in %/annum) Prior to 1970	1970-Present	MATURITY[5] Production Loans	Commodity & Working Capital Loans	Facility Loans
Agricultural Credit Administration (ACA)	8[2]	8[2]	60 days after harvest	120 days on commodity 180 days on w. cap.	3-10 years, depends on facility type
Dev. Bank of the Phils.(DBP)					
Non-RICOB	8-10[3]	12	5-10 years[4]	270 days (plus 4 renewals) at DBP option & upon payment of 20% of principal)[7]	Up to 10 years
RICOB-Registered Borrowers					
Production & Facility	7	7			
Working Capital	8	10			
Rice Project (1971)		11			14 years
Philippine National Bank (PNB)	7-12[6]	12-14[6]	10 months to 1 year	90-180 days (plus renewals)	1 year
Rural Banks	12	12	4-6 months	4-6 months	1-10 years, depends of facility type
Commercial Banks		12-14[6]	270 days to 1 year	3 months-1 year	1-5 years and over
Private Dev. Banks	10-11	12	Up to 1 year	Up to 1 year	

Agency	COLLATERAL REQUIRED[8] Production Loans	Commodity & Working Capital Loans	Facility Loans
ACA	Expected harvest	1) Crop deposited at FaCoMa warehouse 2) Any free FaCoMa asset	Facility itself
DBP	1) Real estate 2) Chattel Mortgage (CM) on machinery or equipment	1) Real estate 2) Mortgage on securities 3) Lien on palay stock acquired with loan (promissory note)	1) Real estate 2) Mortgage on other securities

Agency	COLLATERAL REQUIRED 8/		
	Production Loans	Commodity & Working Capital Loans	Facility Loans
PNB	1) CM on crop being financed 2) Real estate 3) CM on farm equipment being financed 4) Surety bonds 5) Promissory note with personal guaranty 6) Cash deposits	1) Harvested or stored crops (for farmer-borrower) 2) Additional real estate security or other fixed assets if other than farmer 3) Surety bonds 4) Cash deposits	1) Real estate(principal) 2) CM on farm implements being financed (additional)
Rural Banks	1) Real estate 2) CM on standing crop 3) Other securities	1) Stored crop mortgage 2) Acceptable assets as additional collateral	Property to be financed 7/
Commercial Banks	1) Real estate 2) CM on standing crop 3) Other acceptable assets, machinery or implements	1) Crop stored in bonded warehouse 2) Real estate or other acceptable assets as additional collateral	10/
Private Dev. Banks	1) Real estate 2) CM on other fixed assets 3) CM on stored or standing crop	9/	1) Real estate 2) CM on fixed assets
	MAXIMUM LOAN		
ACA	60% of future crop, not to exceed ₱2,000	80% of market value of crop	80% of value of facility
DBP	No limit, depends on business needs and collateral	Up to 80% of margin of value of assets mortgaged over borrowers outstanding balances	No limit, depends on business needs and collateral
PNB	1) 70% of estimated crop value (principal security), not to exceed ₱1,000 2) 60% of land value (principal security) 3) For palay lands, well irrigated, ₱800/ha	Commodity: 80& of value of stored crops	

Agency	MAXIMUM LOAN		
	Production Loans	Commodity & Working Capital Loans	Facility Loans
Rural Banks	50% of value of prior year's production or estimated value of crop	1) 70% of value of stored crop 2) 50% of value of palay crop to be purchased	50% of value of property, financed or improved, not to exceed ₱10,000
Commercial Banks	50-75% of value of collateral offered	1) 50-80% of value of stored crop 2) W. cap. loans depend highly on particular needs of borrower	

1/ In practice, effective rates apt to be somewhat above those shown as interest on loans generally collected in advance.

2/ FaCoMa charges service fee of between 2 and 5 percent in addition to ACA fee.

3/ Depending on amount of loan borrowed.

4/ Except supplementary loans of ₱200/ha. granted those with ordinary loans, for purpose of promoting Masagana or Margate system of palay culture. These mature within 1 year.

5/ Maturity period, generally, from date of first release.

6/ Depending on security offered. 8% if against cash deposits (7% prior to 1970).

7/ These 270-day maturity loans were instituted on Oct. 26, 1967, by Resolution No. 270 of DBP Board. Previously, working capital loans had been on a longer-term basis, generally as part of fixed capital loans.

8/ Collateral requirement may be any one or a combination of those listed.

9/ Working capital loan as part of loan to millers. Loan proceeds for working capital not to exceed 50% of each loan. Bank holds lien on palay crop purchased with loan.

10/ Commercial banks generally reluctant to finance projects requiring medium- or long-term loans. RA 337 (General Banking Act) limits their medium- and long-term loans to 25% of banks' savings account.

Abbreviations:
CM = Chattel Mortgage
W. Cap. = Working Capital