# A STUDY OF INTERMEDIARIES AND THEIR CONTRIBUTIONS TO RICE MARKETING IN THE PHILIPPINES

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by

FLORDELIZA A. LANTICAN

B.S.A., University of the Philippines at Los Banos, 1974

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A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Agricultural Economics

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1978

Approved by:

D W Boman

Major Professor

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Dedicated to my beloved mother

and in memory of my father

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## ACKNOWLEDGMENT

The author wishes to extend her appreciation to the United States Agency for International Development and the University of the Philippines at Los Banos, for financing her education leading to a master's degree.

To Drs. Pedro R. Sandoval and Marciso R. Deomampo, Dean and Chairman of the Institute of Agricultural Development and Administration, deep gratitude is hereby expressed for granting her a study leave with pay during the period of her study.

Sincere thanks is likewise extended to Dr. Vernon Larson and to his staff at the International Agricultural Programs for all the help and support given to her.

The author is indebted to Dr. David Norman, her advisor, for all the support and guidance he has given in the preparation of this proposal. Sincere thanks is also accorded to Drs. Donald Erickson, Orlo Sorenson and Richard Phillips for their valuable comments and suggestions.

To Zeny Toquero, Cielo Sumayao and Joseph Bene for helping her in designing the questionnaires, preparing the charts and cheering her up during the period of depression; and to all her friends and colleagues who in one way or another have helped her overcome the obstacles and difficulties of a student's life; deep gratitude is hereby expressed.

And finally, the author is greatly indebted to her

parents, brothers and sisters, Anda Toneng and Tisyo who provided the much needed moral support throughout her stay in Kansas State University.

# Chapter I

# INTRODUCTION

## Rice Situation

Rice is considered the staple food of the Filipinos and more than 70 per cent of the population depends on the production of this crop as their means of livelihood. Based on the 1960 census, as reported by the World Bank, there were 1.46 million farms growing rice, which accounted for 68 per cent of all farms in the Philippines and covered 2.7 million hectares of paddy. Of these, 1.04 million were exclusively rice farms accounting for about 80 per cent of the total rice area and 84 per cent of the total rice production in 1960.[1]

However, a rapid increase in population accounting to more than 3 per cent a year from 1960-72, brought about a significant changes in the size of farm and production from 1960-72. According to the BAECON reports, in 1972 there were 1.69 million rice farms cultivating 2.63 million hectares. This indicates that the number of rice farms rose by 4 per cent a year from 1960-72 while the area harvested increased only by 1.7 per cent a year.[2] The average farm size declined

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[1] E.K. Hawkins, The Philippines: Priorities and Prospects for Development, A Report Prepared by the World Bank (Washington, D.C.: The World Bank, 1976), p. 100.

[2] Crops and Livestock Statistics, A Report Prepared by the Bureau of Agricultural Economics (Philippines: Diliman, Quezon City Office, 1975).

by 2.4 per cent a year as many farms have been subdivided into small pieces starting crop year 1960. It is noted that as farm size declined, the annual growth rate of production from 1960-73 increased by 2.7 per cent per hectare. Although there was a decline in farm size, this had been offset by a considerable increase in rice production which could be attributed to the introduction of modern and intensive technology in farming.

To recover the big losses in production caused by strong typhoons and floods in crop years 1972-73, the Philippine government launched the Masagana 99 program to provide technical assistance to the farmers, institutional credit and subsidized inputs. As a result, rice production and the area planted increased by 28.2 and 13.2 per cent, respectively, three years after the implementation.

Two crops of rice in the countryside are feasible in irrigated areas. One crop is commonly planted in June to July to be harvested from October up to early December. This type of crop is called the wet season crop.

In places where double cropping is possible, the farmers prepare their land immediately after the wet season crop is harvested. Planting of the dry season crop falls from December to January using an irrigation system as the source of water supply. Harvesting may start in the month of April and end in early May. However, it should be noted, that the planting and harvesting times of rice are not the same in all regions of the country. They may vary between areas or

regions depending on the source of water, rice variety planted, planting calendar and other local practices and beliefs. Even though the areas are irrigated, the planting and harvesting months may also differ depending on the source of irrigation since for National Irrigation Administration irrigated farms there is a schedule of water releases among farmer-users so the cropping calendar is affected by the water availability from the dams.

## The Problem

The great importance of rice in the economy and welfare of the Filipinos has been given priority in the list of commodities that needs intensive research by many governmental agencies. Other commodities include corn, bananas, fruits and vegetables and root crops. In this context, various disciplines continuously engage in efforts to increase its production. Although there are numerous marketing studies on rice, very few discuss it comprehensively. More often than not, intermediaries are considered the sole causes of skyrocketing prices. They are often accused of manipulating prices to the disadvantage of both producers and consumers. They are also accused of organizing or colluding with each other to obtain better control of the marketing system thereby resulting in monopolistic practices. However, these accusations have not been tested empirically.

Undeniably, the middlemen perform very important and necessary functions in the distribution of rice from the point

of production to the point of consumption. They provide transportation and storage facilities, assume risks and uncertainties in the marketing process and help the farmers, especially those who operate on a small scale, to concentrate in improving their productive activities. Without the middlemen, marketing functions would perhaps be left unperformed, resulting in the problems of shortage of supply, surpluses and unstable prices. Hence, empirical research studies are needed to assess the performance of the intermediaries. Hopefully, the results of this study could be used as a guide to policy makers in improving the efficiency of the marketing process and perhaps instituting controls and formulating policies with reference to the price stabilization of rice. The importance of providing credit institutions not only for farmers but also for the buyers could also be another policy issue which might be relevant to consider.

Analysis of costs and margins in performing different marketing functions can be used in assessing the efficiency of the marketing system for rice.

The objectives of this study are:

1. To explain the marketing practices and channels for various sizes of firms in rice marketing
2. To determine the functions performed by various middlemen in marketing rice
3. To determine costs and margins of market intermediaries
4. To determine seasonal variation in prices of rice in three different markets where intermediaries transact their business.

## Chapter II

## REVIEW OF LITERATURE

### The Role of Marketing in Economic Development

In most Asian countries, the attention of the government is focussed on the expansion of the agricultural sector in order to meet the domestic demand for food by a rapidly growing population. In the Philippines, agricultural output will need to grow at an average annual rate of about 4 per cent during the next decade. This growth will have to come primarily from an expansion of acreage or an increase in yields. Although there are still some areas of unused cultivable land, arable and harvested areas combined are unlikely to expand more than 1.5 per cent per year over the 1975-85 period. This means that yields will need to grow by about 2.5 per cent a year to account for about two-thirds of the increase in production during the next decade.[3] In order to achieve self-sufficiency in food crops, particularly rice, technological innovations will be required, expansion of the irrigation system will be needed and an infrastructural support system be provided (e.g., extension, input distribution system and perhaps a credit program etc.).

The development of the agricultural sector requires a

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[3]Hawkins, p. 85.

balanced improvement in production and marketing. The interacting and mutually reinforcing relationship between productivity and efficient marketing has been firmly established.[4] It is ineffective to improve the production side and neglect the marketing side as the farmer's improvement is dependent on the latter's development. In addition to guiding the farmers in selecting the kind of commodities to produce and sell that would create and activate new demands, the marketing system performs the function of providing an outlet for producers and intermediaries' agricultural products. The system operates to distribute goods and services to consumers in the desired forms and conditions, and to deliver them at prices consumers are willing and able to pay. Therefore, extension of market size and potential aggregate demand would encourage the commercialization of production and the division of labor which form the basis of economic development.[5]

## Definition and Concept of Marketing Efficiency

Before making an attempt to define what efficient marketing is, it is necessary to first define the word marketing. There are numerous definitions of marketing given by economists, but the selected one pertains more to agriculturally related

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[4] J.K. Olayemi, "Rice Marketing and Prices: A Case Study of the Kwara State of Nigeria", Bulletin of Rural Economics and Sociology, Vol. 8, No. 2 (1973), pp. 211-212.

[5] A. Rashid et al., Costs and Contributions of Market Intermediaries: A Study of Four Agricultural Commodities in Six Punjab Markets, 1968-70, Department of Agricultural Economics, West Pakistan Agricultural University (Lyallpur, 1972), p. 3.

fields. Marketing as defined by Kohls, is: "The performance of all activities in the flow of goods and services from the point of initial agricultural production until they are in the hands of ultimate consumers."[6] These activities when referred to rice marketing, include processing, storing, milling and transportation.

From the given definition of marketing, marketing efficiency may refer to the optimization of the input-output ratio. The inputs of marketing are the various resources of land, labor, capital and management whereas the outputs are the consumer satisfaction derived from the goods and services available in the market. Due to the intangible nature of marketing output, the true efficiency in the marketing system is difficult to measure. A more efficient marketing system provides either goods and services at a lower cost or better services or products at existing costs.

In order to overcome the difficulty of measuring marketing output, marketing efficiency is usually divided into two categories - operational (technological) efficiency and pricing (economic) efficiency. Operational efficiency focuses more on reducing costs of inputs, assuming that the essential nature of outputs of goods and services remain unchanged.[7] For

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[6]Richard L. Kohls, Marketing of Agricultural Products (New York: The MacMillan Company, 1961), p. 6.

[7]Ibid., p. 8.

example in the case of vegetables like cabbage, use of improved crates reduces the damage while in transit, increases the volume handled and makes them more acceptable to the consumers.

Pricing efficiency on the other hand, deals with the concept of price transmittal from the consumer to producer. Efficient pricing implies knowledge of the quantity available by grade and the quantity consumed. Inefficiency results when knowledge of the market conditions (quantity offered for sale and quantity consumed) decrease. Pricing efficiency is a direct response of price changes to changing market conditions.

Demand elasticity which is a measure of the willingness to pay for a given commodity at a given market place depends on three conditions.[8] First, the consumer must be provided with viable alternatives in the market place for which to choose. Second, the prices of the alternative must adequately reflect the costs of providing them in the long run. And third, business firms are relatively free to enter or leave the given marketing activity in response to profits or losses based on the prices bid in the market place. Complete knowledge of market information and proper grading of agricultural products will improve pricing efficiency.

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[8]Economic Research Service, USDA/USAID, "Improving Marketing Systems in Developing Countries, An Approach to Identifying Problems and Strengthening Technical Assistance," Foreign Agricultural Economic Report, No. 93 (February, 1972), pp. 48-49.

## Marketing Margin As A Measure of Marketing Efficiency

In theory, the concept of a marketing margin is considered as one useful measure of marketing efficiency. The term marketing margins may be defined as the difference between what the consumer pays and what the producer receives for his agricultural produce. The two major components of marketing margins are the marketing costs and the net returns of the intermediaries and producers. Any marketing services added to the products require additional labor, management and capital, resulting in accumulated costs. Deducting the marketing costs from the marketing margins would give the net returns. Net returns serve as the payment for risks, management and capital employed.

Marketing margins and costs may be determined in three ways; at a point in time in the same market, over a period of time in the same market and over a period of time in different markets. In addition, marketing margins can be measured using the aggregate method and the mode method. While the aggregate method involves calculation of margins by taking the difference between the total value of purchases and sales at a given period, the mode method considers the modal prices for different intermediaries and margins are worked out at different stages.[9]

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[9]R. Singh and M. George, Marketing of Rice in The Punjab, ed. K. Dua (Ludhiana: Giani Printing Press, 1971), pp. 4-5.

The use of the two methods of computing marketing margins depends on the nature and availability of data and goals of the researcher. In the aggregate method, average gross margins are calculated by dividing the difference between the monetary value of purchases and sales by the volume of turnover at every stage of marketing system. A detailed examination of the business operation of various intermediaries is required under this method. In the case of the mode method, average or modal prices are compared at different stages in the marketing channel to get the margins. The services and prices must be comparable given the same quality of products at different points in the study market.

Overview of Research Studies On Marketing Margin

A number of studies have been done concerning the marketing of agricultural products in the developing countries. There are some which have highlighted the contention that there are large margins. This contention poses four conflicting views on the part of the economists and marketing agencies concerned. The first notion argues that the practice of monopoly power increases the marketing margins resulting to inefficiency in the marketing system. On the other hand, a second view explains that high margins are due to the existence of numerous and inefficient middlemen in the marketing channels of agricultural products. A third view is that marketing margins are high because marketing functions (e.g. financing of inventory, transportation, etc. are inefficiently

performed. Functions, in turn, are inefficiently performed because infrastructure is inadequate, risks of price change and physical loss are high, etc. The last view justifies the existence of high margins by arguing that there is provision of more and better marketing services performed by the intermediaries in the developing countries.

Although the validity of the above contentions will be examined with reference to a specific area in the proposed study, it is worthwhile to review and examine the available studies already done in the Philippines and other countries to assess whether there is enough proof to conclude that the said contentions are true or not. Also, the question of whether the farmers receive a reasonable price for their products based on wholesale and retail prices will be discussed in this section. However, it should be noted that the research studies to be presented in this chapter include not only rice but also other grains, livestock, fruits and vegetables.

Among the few available studies which show that a large number of middlemen increases the marketing margins was the one conducted by Adeyokunnu concerning marketing margins of rice in Egba Division, Western State Nigeria.[10] It was reported that out of 44.2 per cent of the retail price which goes to the different intermediaries, only 10 per cent is considered as return for risks, entrepreneurship, processing (parboiling

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[10]T.O. Adeyokunnu, "Marketing Margins for Rice in Egba Division, Western State, Nigeria," Bulletin of Rural Economics and Sociology, Vol. 8, No. 2 (1973), pp. 243-253.

and milling), transportation, losses in storage and allowance for financing. Such results indicated that returns to individual distributors are low due to the multiplicity of middlemen resulting in duplication of some functions such as packaging. The marketing margins are large as a result of an increase in the marketing cost during the movement of the products. Savings can be made by combining marketing functions, increasing the size of unit and improving the method of rice processing and reducing losses in storage.

On the other hand, Rashid, et al. commented the reverse by arguing that the presence of an additional intermediary would lower the cost.[11] Moreover, the intermediaries could not act by themselves in the trade channels to increase the farm-retail spread. He said that if the middlemen want to obtain more by increasing their margins they would lose business. The farmers would force them to disappear by refusing to pay their charges, if conditions for perfect market prevail.

The acceptance of the intermediaries in a society is a reflection of an appreciation of the services performed. The competition among the middlemen is not always based on prices but may emphasize services rendered by them to the farmers. Notable among these services designed to retain the loyalty of producers and to attract new producers, are the provision of price information and financial credit.[12] The extension

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[11]Rashid, et al., p. 11.

[12]Ibid., p. 12.

of credit (based on the findings of Hays), had no interest charge involved and the farmers are not compelled to pay at a specific time. There was no evidence that joint provision marketing services and financial credit by middlemen was significant in the case of food crops, although this may be more relevant in the case of cash or export crops, for example, groundnuts in Nigeria.[13]

However, occurrence of high marketing margins does not always mean that the marketing system is inefficient. It can be true that marketing margins are large due to high marketing costs which neither the producers nor the buyers have control over. A study of selected fruits and vegetables conducted by Torres and Lantican showed that except for the wholesaler-retailer and retailer, all the marketing costs are more than half of the marketing margins.[14] Marketing costs include entrepreneurship, assumption of risks, physical loss, labor cost, storage cost and transportation cost. Among the intermediaries interviewed, contract buyers reported the highest margin amounting to ₱81.00 per 100 kilograms, due to high pre-harvest and post-harvest risks which they assume prior to selling the fruits, aside from the costs borne in preparing the produce

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[13]H.M. Hays, Jr., "The Marketing and Storage of Grains in Northern Nigeria," Samaru Miscellaneous Paper 50, Institute for Agricultural Research, Amadu Bello University (Zaria, 1975), p. 63.

[14]Enriqueta B. Torres and Flordeliza A. Lantican, "Middlemen and Their Operation in Fruit and Vegetable Marketing," Philippine Journal of Agricultural Economics and Development, Vol. VII, No. 1 (January, 1977), p. 85.

for the market. Of this margin, ₱43.00 went to marketing cost and ₱38.00 went to returns above cash and non-cash costs (Table 1).

For vegetables, the financier-wholesaler had the highest margin, ₱42.00 per 100 kilograms because of storage services provided to the producers and consumers. By storing vegetables, a continuous supply could be provided to the consumers even during off-season. Other factors that would contribute to higher margins in marketing fruits and vegetables are the processing cost, transportation cost, characteristics of the product and time of business transactions.

Fruits and vegetables are highly perishable and the intermediaries processed fruits and vegetables (e.g. canning, bottling, etc.) to have a supply available throughout the year. Transportation cost is another contributory factor that adds to the size of marketing margins. The farther the production areas from the market places, the higher is the transportation cost.

The time of business transaction also affects the marketing margins. Marketing margins would be higher during off-season than during harvesting time due to limited supply of fruits and vegetables.

Likewise, in case of live animals, Darrah and Alunan reported that a high cost of transport was incurred from Mindanao to Manila due to a very high shrinkage cost.[15] This

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[15]Lawrence Darrah and Julio Alunan, Marketing of Livestock in General Santos City, Department of Agricultural Economics (UPCA, 1970), p. 8.

Table 1. Marketing margins of middlemen, 1974-75.

| Middlemen | Margin | | |
|---|---|---|---|
| | Cost | Return | Total |
| | Pesos/100 kilograms | | |
| Fruits* | | | |
| Contract buyer | 43 | 38 | 81 |
| Financier-wholesaler | 21 | 16 | 37 |
| Assembler-wholesaler | 18 | 10 | 23 |
| Wholesaler-retailer | 18 | 27 | 45 |
| Retailer | 17 | 33 | 50 |
| Vegetables** | | | |
| Financier-wholesaler | 27 | 15 | 42 |
| Assembler-wholesaler | 15 | 13 | 28 |
| Retailer | 16 | 26 | 42 |

*Fruits include lanzones, mangoes and citrus.

**Vegetables include onions, cabbage and potatoes.

Source: Enriqueta B. Torres and Flordeliza A. Lantican, "Middlemen and Their Operation in Fruit and Vegetable Marketing", Philippine Journal of Agricultural Economics and Development, Vol. VII, No. 1 (January, 1977), p. 85.

factor contributed to higher marketing margins. Higher shrinkage costs, however, can be attributed to poor transportation, poor roads etc. over which shippers have no control. Such inefficiency cannot be remedied by just removing the middlemen, rather their functions should be studied and problems be identified.

Bauer and Yamey have commented that if a particular intermediary in a marketing chain was really unnecessary, he would be unlikely to survive, since others would by-pass him and secure for themselves the margin that he enjoyed. It is in the interest of the traders themselves to minimize the number of intermediaries who share the margin between producer and consumer prices.[16] When a large number of middlemen are present, there is reason to believe that each satisfies a need.

Due to the unavailability of research studies, there is no strong ground to support the contention that middlemen exercise monopoly power in the marketing process of agricultural products especially in the developing countries. Perhaps, there was some truth in the contention of monopoly profit in the past due to poor communications as a result of less advanced technology. Such conditions may also prevail in very remote areas where farmers have no access to market information

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[16] P.T. Bauer and B.S. Yamey, "Case Study of Responses to Price in an Underdeveloped Country", Economic Journal, Vol. LXIX, No. 276 (1959), pp. 300-305.

as well as market facilities. But, as time progresses, mass media has been developed and probably even though monopolistic competition exists, such conditions may not be as serious as in earlier times.

The most important accusation against the middlemen is that they pay lower prices than the real value of the product. Some studies opposed this contention and argue that the farmers received a relatively large share of retail or consumer's price. One such study conducted by the Food and Agriculture Organization reported that rice growers in Nigeria, Taiwan and the Philippines in the 1960's to early part of the 1970's received a large share of the retail price paid by consumers (Table 2).[17] In Nigeria, returns to producers covered by a 1963 survey averaged 54 per cent of the price paid by consumers. The assembly/processing stage took 12 per cent, of which the cash costs of parboiling amounted to 1.4 per cent. Movement of the milled rice to urban consumption areas and wholesaling took less than 6 per cent. Of this, 4 per cent went directly for transport, leaving less than 2 per cent to cover capital and operating costs of the trader and his profit. Retailing accounted for 28.2 per cent. In Taiwan, for the crop year 1971, the farmer's return averaged 80 per cent of the retail price and margin for wholesaling and retailing accounted to only 5.5 per cent and 6.5 per cent of the

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[17]Food and Agriculture Organization of the United Nations, Rice Marketing (Rome, 1972), p. 8.

Table 2. Margin and Farmer's share of the retail price by country.

| Country | Share of Retail Price | Margin | |
|---|---|---|---|
| | | Wholesale | Retail |
| | | per cent | |
| Nigeria | 54 | 6 | 5.5 |
| Taiwan | 80 | 5.5 | 6.5 |
| Philippines | 49-77 | - | - |

Source: Food and Agriculture Organization, Rice Marketing (Rome, 1972), p. 8.

consumer's price. From the period 1957-63, the average prices received by farmers in the Philippines during peak harvest months ranged on a regional basis, from 49 to 77 per cent of the retail price.

Another interesting study supports the argument that farmers received a reasonable share of the consumer's peso was highlighted by the study of Hays, about the marketing and storage of grains in Northern Nigeria which shows that there is a close correlation between producer price and retail price for both millet and sorghum.[18] This close relationship indicates that price changes at the consumer level are being reflected back to the producers. During the period of the study, the producer's share of the final retail price averaged 68.2 per cent for millet and 69.8 per cent for sorghum. The intermediaries with the largest margins were the local assemblers who received about 9 per cent of the retail price. The local transporter's and the lorry transporter's margins appeared to remain fairly constant over the year and were from two to four per cent of the final retail prices.

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[18]Hays, Jr., p. 63.

# Chapter III

## RICE MARKETING CHANNELS AND INTERMEDIARIES IN THE PHILIPPINES

The flow of paddy (rough rice) or rice between producers and consumers can differ between and within regions. This difference can be attributed to variations in units; location and technology in paddy processing and storage; distances and availability of transportation facilities; market conditions in the area; and government intervention and regulation. In this section, an overview of the rice marketing channels and their respective intermediaries in the various market areas will be discussed. To do this the studies of Leon Mears and others who conducted an investigation on the Philippine Rice Economy and, the National Grain Authority Report on the rice industry situation of the country will be referred to.

### Rice Marketing Channels

In the mid 1970's, over 60 per cent of the total rice production in the Philippines went through commercial trade centers. Based on Mears report, there have been two distinct trade channels through which paddy and/or milled rice has been distributed to the consumers. These channels are the private and government channels.[19] However, since the market channels

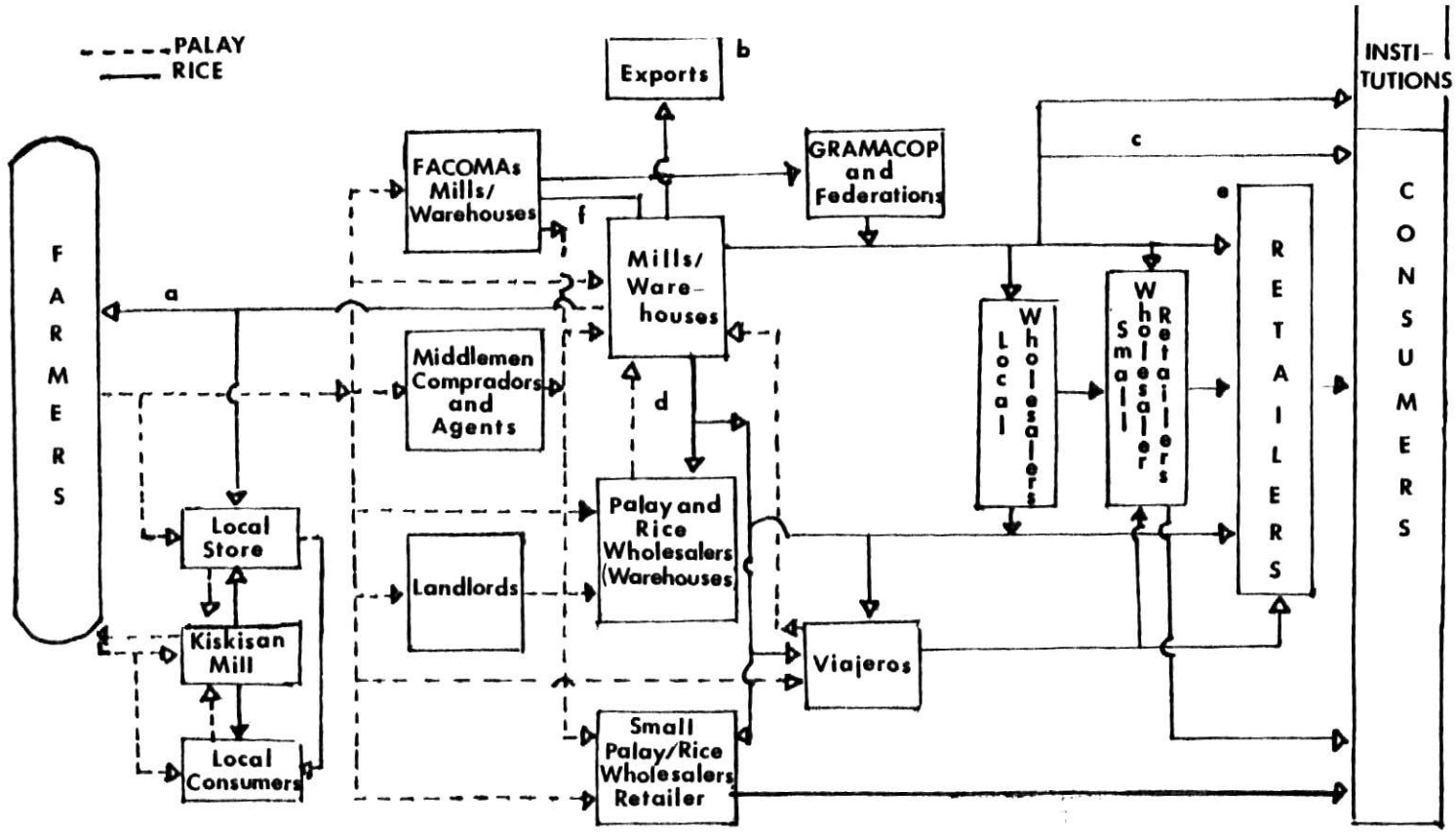
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[19]Leon A. Mears and others, Rice Economy of the Philippines, (Quezon City: University of the Philippines Press, 1974), pp. 80-86.

were identified way back in the late 1960's, the updated version of the National Grains Authority (which is also based on Mear's study) is used for the purpose of discussing the government component. The private channel analysis, on the other hand, is based on Leon Mear's study.

As shown in Figure 1, the distribution of paddy or rice from producing areas to consumption areas follows different paths depending on the marketing arrangements between buyers and producers. The simplest case of product flow is where a producer sells directly to the consumer. The consumer in turn, has the paddy milled in an engleberg or steel huller mill (locally known as "kiskisan") located in municipalities (towns) and villages (barrios) for home consumption. On the other hand, paddy or rice entering the private channels could change ownership several times before finally reaching the consumer. It could pass through the commission agents who are local buyers in the village, to wholesalers located in the municipalities, to millers in the transit market and to several wholesalers situated in big cities and finally to the consumers through the retailers.

Government agencies involved in the marketing of rice vary regionally. For instance, the Grain Marketing Cooperatives of the Philippines (GRAMACOP), which is the marketing arm of the Farmer's Cooperative Marketing (FACOMA) is not active at present and only operates in some areas of Luzon. The mobile traders who are locally known as "viajeros" operate only around the market centers of Manila and other big cities in




[a]Farmers' supplies are also customed milled in cono mills
[b]Arrangements for exports not firmly institutionalized
[c]Includes home deliveries
[d]Reverse movement of palay - from miller/wholesaler to non-wholesaler
[e]Includes supermarkets
[f]Some FACOMAS' palay is custom-milled by private conos

**Fig. 1. Private Channel For Palay and Rice.**

Source: Leon Mears and Others, "Rice Economy of the Philippines"(Quezon City: University of the Philippines Press, 1974)

the country.

The government channel is directed by the National Grains Authority (NGA) which was created by virtue of Presidential Decree No. 4 on September, 1972 to administer the national program and management and price stabilization. The National Grains Authority has been designated to support a floor price for the producer and control a ceiling price for palay and rice after they have been set by the National Grains Authority Board. In May, 1976, the producers were guaranteed a floor price of ₱55.00 per cavan of paddy of 50 kilograms and the consumers a ceiling price of ₱105.00 per cavan of rice of 50 kilograms.

The National Grains Authority is empowered to purchase paddy from the farmers at a price that is considered high enough not only to allow the farmer to cover his production costs but also to get a return that would encourage him to produce rice. The production costs include the fixed costs and variable costs incurred by the farmers from the time of planting up to harvesting under the dry, wet, irrigated and non-irrigated farms. The floor price is set at least a 5 per cent mark-up above weighted average cost of production obtained from the actual surveys done by the Bureau of Agricultural Economics and through the Masagana 99 technicians and farmers. In case there is a great discrepancy between the costs of production between irrigated and rainfed areas, the actual costs incurred in rainfed areas are used as the basis of setting the floor price. This is done in fairness to

rainfed farmers who sometimes incur higher costs of production due to tedious land preparation but obtain lower yields than the irrigated farmers.

The retail ceiling price, on the other hand, must be reasonable enough to cover the costs incurred by the intermediaries in performance of marketing functions. Thus, the difference between the floor and ceiling price must not be so high, otherwise, it would result in erratic fluctuation in prices which the National Grains Authority by its intervention is supposed to avoid.

The seasonal pattern of rice and paddy prices is also considered in setting the floor and ceiling price limits. From this seasonal pattern, the period of support to the farmer falls in the harvest months from October to January, when paddy prices are very low, and the period of support to the consumers start mid-July when supply is limited and rice prices are high. Aside from the above mentioned basis, other criteria used in planning market injections in all parts of the country to stabilize market prices are the monthly average rice price index and income levels of the consumers.[20] All these criteria are based on averages by province.

The regulatory and supervisory functions of the NGA are extended throughout the country. In the private channels, its role is mainly regulatory particularly on the part of the

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[20]Richard Phillips, Recommendation for Improving Philippine Grain Marketing and Price Stabilization Programs, A Report Prepared for ADI/USDS, No. 46 (May, 1974), p. 21.

retailers and rice millers. Any rice dealers who are planning to enter into business are required to register every year. Inspection of rice mills and retail markets is frequently done during the period of crises to check whether the said dealers follow the rules and regulations set by the NGA.

On the other hand, the NGA also own mills and warehouses where the paddy purchased from the farmers is milled and stored, to be distributed to "barangay" customary outlets or to other special outlets such as consumer cooperatives and GRAMACOP. Barangays are small, interpersonally related groups composed of a minimum of 100 families and a maximum of 500 families.

The NGA exercises greater control in the government channel in order to maintain ownership of the stocks on their way to the producers by assigning field buyers and other middlemen to do the procurement of paddy. Aside from utilizing its own mills, NGA utilizes extensively the private marketing agencies such as retailers and millers to facilitate handling and distribution of stocks under its supervision (Figure 2).

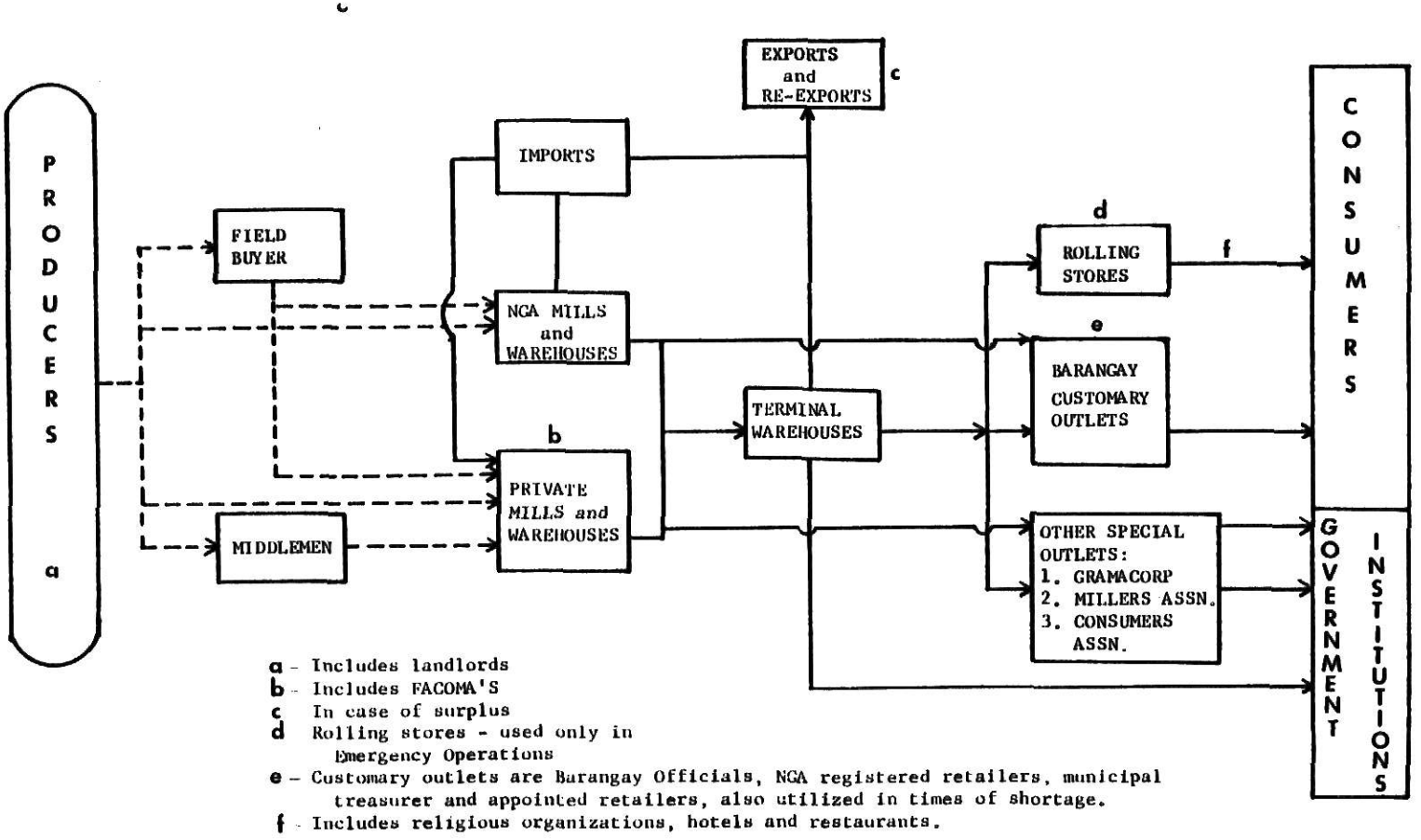
Markets and Marketing Intermediaries

Rice is traded in three types of market outlets; local assembly, transit and terminal market.[21]

1. Local Assembly Market - refers to an area where paddy

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[21]Mears and others, pp. 40-45.






# Fig. 2. Government Channel for Paddy and Rice.

Source: National Grains Authority Report, 1974-75.

or milled rice is produced and collected for storage and distribution in the transit and terminal markets. In this type of market, kiskisan millers and commission agents are the two most common outlets of paddy or rice. Kiskisan millers are those who own small-scale steel-huller or Engleberg mills in the villages and municipalities while commission agents are those buyers who work with "viajeros" and large millers on a commission basis. The "commission rate" can be on a per sack, kilo or truck load basis. They buy and assemble purchased rice or paddy in the village until the volume is large enough to be transported to mills/warehouses or pick-up by "viajeros".

2. Transit Market. This type of market is located in the town proper of rice producing areas. Rice is first collected, stored and processed in large quantities before being dispersed within the region or distributed to consuming centers at the terminal markets. Big rice millers, paddy and rice wholesalers as well as "viajeros" are the market intermediaries that can be found in the transit market. Big rice millers operate on a large scale, own warehouses and procure paddy from suppliers including their own rice/paddy agents, farmers, wholesalers and farmer cooperatives. To ensure a continuous supply of rice, such millers have resorted to pre-harvest contract arrangements wherein the millers provide the producers with cash advances, sacks for paddy and free warehousing facilities. Such millers even provide technical advice on the use of improved seed, different farm inputs such as fertilizer and chemicals and improved methods of rice production. In

return, the producers sell their paddy to the millers at current prices or at contract prices for harvest delivery.

The wholesalers in this type of market handle both paddy and rice and sell them on a wholesale basis.

Generally, wholesalers engaged in large-scale trading of paddy and milled rice reside in rice production centers. Some of them have their own warehouses while others utilize their own residences for storage purposes. Wholesalers may either buy rice from other rice millers or take from their own stocks processed in their mills.

The "viajeros" play a vital role in transporting paddy and rice from producing areas to the transit and terminal market. They are characterized as small-scale operators, are generally mobile and own trucks for transporting paddy or rice but lack warehousing or milling facilities. They usually operate with their own capital, usually of minimal amount therefore necessitating rapid stock-turnover.

3. Terminal Market - refers to those markets in large cities or areas of consumer concentration which usually are deficient in production for their own needs. Manila is the commercial terminal market in the Philippines. The rice wholesalers and retailers are the important intermediaries predominant in the market. Rice wholesalers in the terminal markets deal only with milled rice and not in paddy. To ensure a regular supply, contract arrangements with millers and "viajeros" for future deliveries of rice are a common practice in the terminal market. They have permanent stalls and sell

mainly to retailers with very small quantities being sold directly to the consumers.

The retailers are the product handlers that serve as the last link in the marketing chain to consumers. They sell their rice in small rented stalls and bins in municipal and private markets and along with other household items in "sari-sari" stores outside the market. Such stores are located in villages selling a variety of goods such as canned goods, candies, soft-drinks, bread, etc. that are usually needed by the people in their everyday living. Retailers, generally buy rice from wholesalers and very few go directly to millers due to limitations imposed by a lack of capital.

# Chapter IV

# RESEARCH METHODOLOGY

## Selection of Sample Areas

The Bureau of Agricultural Economics is an agency designated by the government to collect primary data on agricultural products both at the farm and market level. The collected data after they have been processed are distributed to interested government agencies for reference and utilization purposes.

The Philippines as reported by the Bureau of Agricultural Economics, is composed of 12 regions comprising 75 provinces. Provinces are composed of municipalities and the components of the municipalities are the villages (barrios). Market centers are usually located in the town proper whereas farms are situated in the barrios. Thus, the selection of sample areas follows this order of divisions.

The selection of study is based on data on actual production and the area planted to paddy published by the Bureau of Agricultural Economics.

Due to anticipated resource constraints, only two leading paddy producing regions will be studied. These regions are Central Luzon and Southern Luzon. At present, the government trust and support are focused on these areas to further boost rice production thereby, achieving self-sufficiency in rice. By studying these regions, the impact of government programs such as Masagana 99 on the farmers income can be measured

directly or indirectly.

Since the 1950's, Central Luzon has been the top paddy (palay) producing area thus, giving it the name of Rice Granary of the Philippines. For a period of 15 years (1960-75), this region accounted for 23 per cent of the total paddy production. In terms of area planted, Central Luzon accounted for 17 per cent of the country's total hectarage (Tables 3 and 4).

The region of Southern Luzon was second to Central Luzon in paddy production and third in terms of area planted to paddy from 1972-75. This region accounted for 13 per cent of the country's paddy production and hectarage for the three year period (1972-75).

In terms of total paddy or rice stocks stored in government and private warehouses by region in 1973, Central Luzon as usual had the highest amount followed by Southern Luzon (Table 5). From these two leading regions two major-rice producing provinces will be selected. Following a non-random sampling technique, Nueva Ecija and Bulacan have been selected as study areas in Central Luzon while for Southern Luzon, Laguna and Oriental Mindoro will be taken (Figure 3). The reason for choosing the above provinces is the same as the one given in selecting Central Luzon and Southern Luzon as study regions.

Based on each selected province, two municipalities will be selected. From each municipality, two villages will be selected to represent the assembly market areas. A total of four transit markets located in towns proper (center of

Table 3. Paddy (rough rice) production by region, Philippines for 1954-1976 (in 000 cavans of 44 kgs.).

| Year | Philippines | Ilocos | Cagayan | Central Luzon | Southern Luzon | Bicol | Eastern Visayas | Western Visayas | Northern & Eastern Mindanao | Southern & Western Mindanao |
|---|---|---|---|---|---|---|---|---|---|---|
| 1954 | 72,328 | 1,834 | 7,824 | 19,220 | 8,937 | 6,010 | 5,917 | 11,261 | 6,522 | 4,803 |
| 1955 | 72,793 | 2,580 | 7,040 | 19,605 | 8,292 | 5,446 | 6,863 | 10,779 | 5,203 | 6,986 |
| 1956 | 74,394 | 2,467 | 6,640 | 21,494 | 8,074 | 5,160 | 6,909 | 11,035 | 5,308 | 7,306 |
| 1957 | 76,044 | 2,773 | 6,720 | 21,985 | 8,432 | 5,190 | 7,043 | 11,033 | 5,381 | 7,489 |
| 1958 | 72,806 | 2,334 | 6,107 | 22,433 | 8,821 | 5,560 | 4,805 | 9,486 | 4,072 | 9,188 |
| 1959 | 83,739 | 2,635 | 7,571 | 26,433 | 11,009 | 6,709 | 6,145 | 11,122 | 4,785 | 7,329 |
| 1960 | 84,989 | 2,379 | 10,802 | 21,552 | 9,097 | 6,035 | 8,785 | 13,853 | 5,293 | 7,199 |
| 1961 | 84,199 | 3,213 | 11,218 | 19,518 | 8,678 | 2,402 | 7,651 | 11,896 | 3,319 | 11,305 |
| 1962 | 88,865 | 3,172 | 10,197 | 20,968 | 11,008 | 7,245 | 5,765 | 11,341 | 4,861 | 14,208 |
| 1963 | 90,159 | 3,149 | 9,139 | 21,580 | 10,258 | 8,688 | 5,866 | 10,950 | 4,545 | 15,715 |
| 1964 | 87,338 | 3,306 | 7,463 | 20,980 | 10,421 | 8,397 | 5,315 | 10,712 | 4,582 | 16,161 |
| 1965 | 90,738 | 3,717 | 9,440 | 21,087 | 10,817 | 8,316 | 5,737 | 11,160 | 4,575 | 15,890 |
| 1966 | 92,560 | 4,768 | 12,214 | 23,422 | 12,574 | 12,515 | 5,098 | 9,375 | 2,784 | 9,810 |
| 1967 | 93,046 | 4,623 | 8,500 | 23,624 | 13,692 | 9,072 | 6,395 | 11,612 | 3,758 | 11,771 |

Table 3. (Continued)

| Year | Philippines | Ilocos | Cagayan | Central Luzon | Southern Luzon | Bicol | Eastern Visayas | Western Visayas | Northern & Eastern Mindanao | Southern & Western Mindanao |
|---|---|---|---|---|---|---|---|---|---|---|
| 1968 | 103,652 | 5,715 | 10,931 | 26,367 | 15,233 | 9,861 | 6,756 | 12,525 | 4,223 | 12,041 |
| 1969 | 101,015 | 5,750 | 8,112 | 25,667 | 14,094 | 10,217 | 7,543 | 11,481 | 5,629 | 12,520 |
| 1970 | 118,941 | 5,217 | 11,672 | 32,085 | 13,981 | 12,619 | 6,358 | 13,657 | 6,345 | 17,007 |
| 1971 | 121,430 | 4,572 | 15,920 | 33,291 | 14,574 | 8,587 | 7,597 | 15,042 | 7,742 | 14,105 |
| 1972 | 115,911 | 6,010 | 15,413 | 23,839 | 13,282 | 12,387 | 7,375 | 13,479 | 7,642 | 16,484 |
| 1973 | 100,332 | 9,777 | 13,087 | 17,854 | 14,099 | 9,947 | 6,118 | 11,827 | 5,398 | 12,226 |
| 1974 | 127,139 | 12,277 | 15,201 | 24,951 | 16,131 | 12,444 | 7,347 | 15,057 | 7,427 | 16,304 |
| 1975 | 128,637 | 9,591 | 16,196 | 22,802 | 16,465 | 13,273 | 7,511 | 15,713 | 8,552 | 18,535 |

Source: T. Anden and Palacpac, A., Data Series on Rice Statistics, Philippines, IRRI and PCARR, 1976.

Table 4. Paddy (rough rice) Area Planted (or harvested) by Region, Philippines for 1954-1975 (hectares).

| Year | Philippines | Ilocos | Cagayan | Central Luzon | Southern Luzon | Bicol | Eastern Visayas | Western Visayas | Northern & Eastern Mindanao | Southern & Western Mindanao |
|---|---|---|---|---|---|---|---|---|---|---|
| 1954 | 2,645,440 | 105,810 | 216,280 | 634,120 | 325,390 | 281,080 | 329,770 | 437,120 | 212,320 | 103,550 |
| 1955 | 2,655,540 | 100,850 | 237,340 | 573,340 | 331,620 | 265,330 | 297,130 | 484,900 | 155,820 | 209,210 |
| 1956 | 2,742,480 | 95,500 | 234,010 | 588,800 | 320,080 | 253,870 | 294,980 | 547,450 | 169,730 | 238,060 |
| 1957 | 2,768,120 | 102,400 | 236,960 | 602,170 | 337,120 | 260,810 | 285,400 | 531,070 | 169,590 | 242,600 |
| 1958 | 3,154,100 | 105,503 | 249,780 | 698,180 | 399,210 | 293,230 | 294,680 | 508,870 | 215,010 | 389,610 |
| 1959 | 3,329,410 | 115,420 | 260,880 | 769,630 | 480,030 | 302,990 | 323,080 | 569,840 | 198,100 | 309,440 |
| 1960 | 3,306,460 | 104,760 | 344,380 | 682,520 | 377,080 | 239,650 | 428,980 | 569,080 | 252,070 | 307,950 |
| 1961 | 3,197,750 | 110,630 | 453,890 | 545,730 | 363,850 | 317,800 | 377,940 | 414,310 | 172,380 | 441,220 |
| 1962 | 3,197,190 | 104,620 | 370,620 | 513,550 | 406,860 | 290,540 | 283,770 | 400,960 | 254,490 | 553,780 |
| 1963 | 3,161,320 | 119,920 | 313,250 | 520,760 | 398,410 | 310,530 | 289,760 | 415,950 | 243,350 | 549,390 |
| 1964 | 3,087,450 | 120,080 | 289,710 | 495,700 | 414,080 | 305,370 | 274,600 | 396,310 | 226,100 | 565,500 |
| 1965 | 3,199,670 | 139,220 | 344,180 | 510,240 | 433,280 | 299,260 | 299,470 | 383,680 | 218,600 | 571,740 |
| 1966 | 3,109,180 | 144,170 | 354,390 | 519,310 | 467,290 | 366,910 | 323,480 | 377,870 | 145,090 | 410,130 |
| 1967 | 3,096,120 | 132,290 | 265,520 | 602,060 | 466,990 | 300,980 | 346,850 | 333,200 | 180,850 | 467,380 |

Table 4. (Continued)

| Year | Philippines | Ilocos | Cagayan | Central Luzon | Southern Luzon | Bicol | Eastern Visayas | Western Visayas | Northern & Eastern Mindanao | Southern & Western Mindanao |
|---|---|---|---|---|---|---|---|---|---|---|
| 1968 | 3,303,660 | 140,950 | 296,760 | 628,010 | 529,740 | 314,560 | 349,780 | 376,210 | 207,630 | 460,020 |
| 1969 | 3,332,150 | 129,190 | 271,980 | 608,840 | 538,080 | 300,320 | 382,940 | 384,900 | 248,650 | 467,250 |
| 1970 | 3,113,440 | 144,820 | 314,040 | 634,750 | 345,370 | 357,960 | 256,580 | 397,810 | 194,330 | 467,780 |
| 1971 | 3,112,630 | 127,410 | 361,170 | 641,490 | 387,030 | 298,480 | 252,950 | 420,570 | 212,960 | 410,570 |
| 1972 | 3,246,380 | 158,920 | 383,910 | 657,760 | 410,700 | 273,560 | 275,830 | 417,930 | 229,860 | 437,910 |
| 1973 | 3,111,800 | 332,140 | 359,340 | 451,310 | 432,440 | 305,980 | 232,330 | 370,560 | 251,200 | 386,500 |
| 1974 | 3,436,800 | 351,370 | 392,570 | 506,550 | 446,250 | 340,530 | 241,650 | 419,560 | 272,790 | 465,530 |
| 1975 | 3,538,840 | 338,500 | 414,810 | 500,640 | 447,040 | 347,780 | 226,860 | 438,910 | 294,050 | 490,250 |

Source: T. Anden and Palacpac, A., Data Series on Rice Statistics, Philippines, IRRI and PCARR, 1976.

Table 5. Total paddy or rice stocks in government and private warehouses by region, Philippines as of Jan. 1, 1958 to 1972.[1]

(Metric ton in rice equivalent)[2]

| Year | Philippines | Ilocos | Cagayan | Central Luzon | Southern Luzon | Bicol | Eastern Visayas | Western Visayas | Northern & Eastern Mindanao | Southern & Western Mindanao |
|---|---|---|---|---|---|---|---|---|---|---|
| 1958 | 58,158 | 87 | 523 | 19,745 | 2,109 | 15,059 | 3,473 | 7,751 | 820 | 8,591 |
| 1959[3] | 373,627 | 979 | 41,456 | 266,296 | 14,595 | 24,796 | 3,971 | 6,543 | 2,628 | 12,363 |
| 1960[4] | 362,168 | 133 | 31,208 | 260,706 | 14,619 | 19,402 | 7,280 | 13,284 | 994 | 14,542 |
| 1961 | 262,514 | 151 | 21,130 | 204,074 | 3,842 | 13,582 | 8,114 | 1,612 | 713 | 9,296 |
| 1962[5] | 313,491 | 163 | 8,419 | 238,844 | 15,051 | 2,319 | 11,464 | 8,399 | 5,044 | 23,788 |
| 1963[6] | 446,761 | 457 | 10,319 | 307,503 | 11,381 | 48,623 | 18,204 | 8,816 | 6,357 | 35,100 |
| 1964[7] | 265,172 | 259 | 6,012 | 171,202 | 10,476 | 24,492 | 10,121 | 8,151 | 1,984 | 32,475 |
| 1965[8] | 451,692 | 1,357 | 57,231 | 200,070 | 42,680 | 43,395 | 18,044 | 20,925 | 8,967 | 59,021 |
| 1966[9] | 267,490 | 463 | 5,920 | 151,362 | 31,188 | 35,403 | 8,828 | 6,797 | 2,402 | 25,127 |
| 1967[1] | | | | | | | | | | |
| 1968[1] | | | | | | | | | | |
| 1969 | 465,486 | 6,919 | 21,054 | 271,596 | 48,290 | 10,841 | 4,915 | 21,400 | 8,931 | 71,440 |
| 1970 | 229,375 | 3,677 | 5,817 | 98,294 | 23,643 | 11,332 | 6,316 | 24,786 | 8,346 | 47,164 |
| 1971 | 165,223 | 1,312 | 8,275 | 88,767 | 26,525 | 5,663 | 4,749 | 9,524 | 8,171 | 12,237 |

Table 5. (Continued)

| Year | Philippines | Ilocos | Cagayan | Central Luzon | Southern Luzon | Bicol | Eastern Visayas | Western Visayas | Northern & Eastern Mindanao | Southern & Western Mindanao |
|---|---|---|---|---|---|---|---|---|---|---|
| 1972 | 140,446 | 297 | 10,655 | 38,991 | 16,208 | 9,717 | 3,481 | 9,317 | 4,710 | 47,070 |
| 1973 | 114,187 | 92 | 6,960 | 50,183 | 21,818 | 61402 | 2,614 | 11,400 | 3,995 | 10,723 |

1/ No data for 1967 and 1968.

2/ Stock figures given include palay converted to rice equivalent.

3/ Partial stock as of February 1, 1959.

4/ Partial stock as of February 29, 1960.

5/ Partial stock as of January 31, 1962. Excludes stocks in Metropolitan Manila.

6/ Excludes stock in Metropolitan Manila.

7/ Excludes stock in Metropolitan Manila, Batanes, Palawan, Masbate, Surigao del Sur, Sulu and RCA stocks in Pangasinan and Southern Cotabato.

8/ Excludes RCA stocks in Bataan, Pampanga, Pangasinan, Aklan, Romblon, Misamis Occidental.

9/ Partial stock as of January 1, 1966.

Source: T. Anden and Palacpac, A., Data Series on Rice Statistics, Philippines, Dept. of Ag. Economics, IRRI and PCARR, 1976.

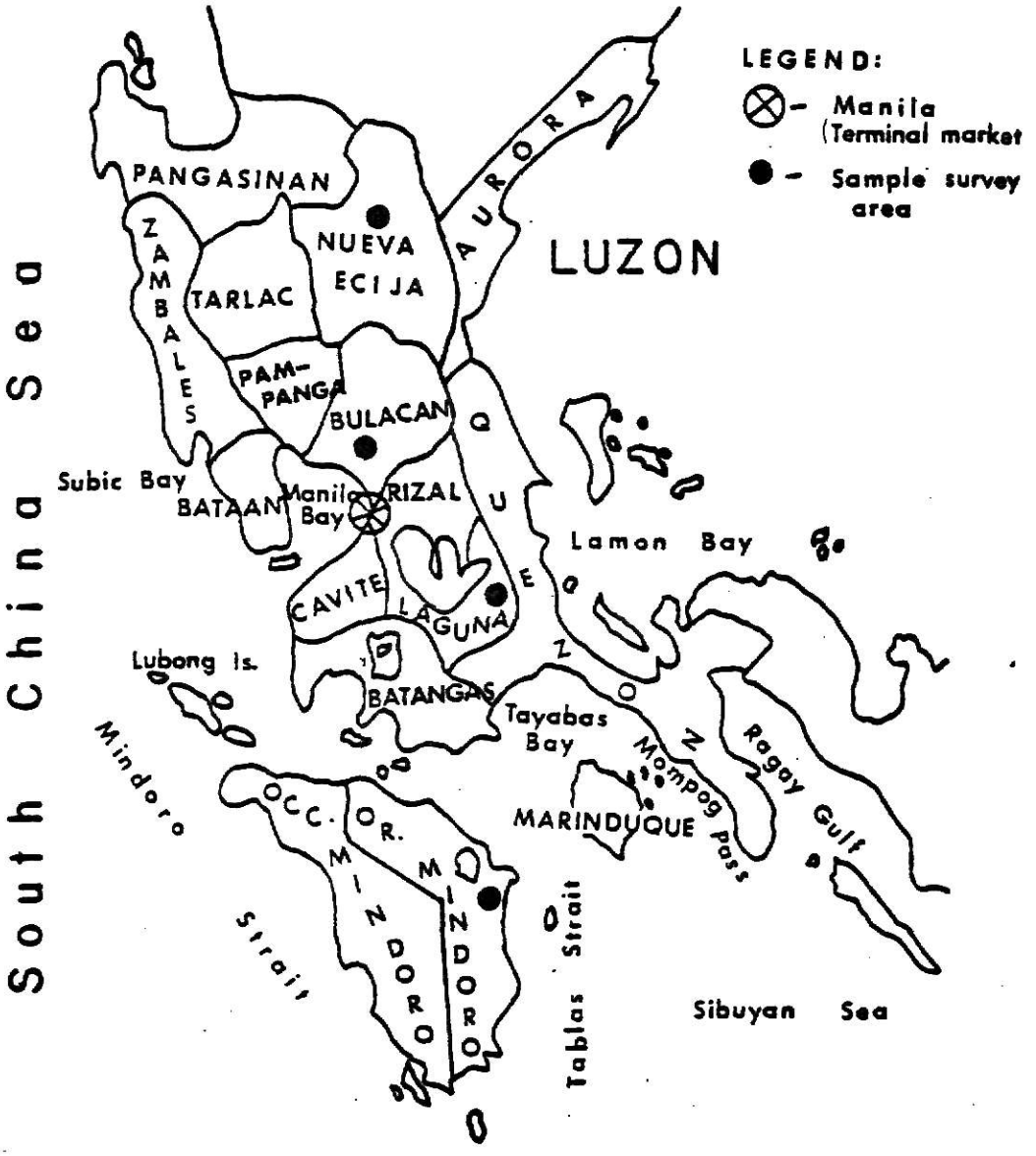



Fig. 3. Survey area for the study on market intermediaries and their contributions to rice marketing. Central and Southern Luzon, 1978-79.

producing area) will be surveyed in this study. Manila which is the major commercial trading center for all agricultural crops, will be the sample terminal market.

## Selection of Samples

Selected channels. Primary data will be used in this study. The data will be obtained through personal interview with the following respondents: (1) sample farmers in the rice producing areas, (2) sample commission agents and "kiskisan" millers in the assembly markets; (3) sample of large rice millers, (4) government-owned millers/warehouses, (5) "viajeros" (mobile traders), (6) paddy/rice wholesalers and retailers in the transit markets; and (7) sample of rice wholesalers and retailers in the Manila terminal market.

The marketing flows and rice distribution as discussed earlier have already been covered in studies done by Leon Mears and others and by the National Grains Authority. From these studies, four private channels and one government channel are selected. In the selection of the private marketing channels, it is considered that the common outlets operating in three types of markets are well represented. The proposed marketing channels that will be studied are:

Private Channels

A. Local Assembly Market

1. Producer → Commission Agent → "Kiskisan" Miller → Consumer

B. Transit Market

1. Producer → Commission Agent → Large Miller → Wholesaler →

→ Retailer → Consumer

2. Producer → Large Miller → "Viajero" → Wholesaler →

→ Retailer → Consumer

C. Terminal Market

1. Producer → Wholesaler → Retailer → Consumer

Government Channels

1. Producer → NGA Field Buyer → NGA Miller → Barangay Customary Outlet →

→ Consumer

Selecting interview units. The list of producers in the sample assembly markets in the village will be obtained either from the Bureau of Agricultural Extension, Municipalities, Village Head or Head of the Barangay. A pre-survey of the rice producers will be done in the sample areas before the actual data collection starts to have an overview of the characteristics of the farmers and their respective farms. To facilitate sampling procedures, only the farmers who are raising rice for two cropping seasons will be considered in the sample. The names and addresses of the intermediaries will be taken from the reports of the farmers e.g. to whom they sell their produce and from the Bureau of Agricultural Economics. Buyers will be classified according to their basic marketing functions i.e. either as a miller, wholesaler, retailer, etc. A stratified random sampling with replacement will be used in drawing 80 sample farmers and 155 private market outlets. The criterion to be used in stratifying sample intermediaries will be the

volume of business handled, capitalization, location and nearness to market. These data are available in the municipalities and market offices. Since the focus of the study is on the intermediaries, the total sample size as mentioned above is greater than the total sample farmers. Five farmers will be taken from one village. For the market outlets, the sample size is identified by type of markets. In assembly areas, 10 commission agents and 10 kiskisan millers will be interviewed. Under transit market, 10 commission agents, 10 large millers, 5 viajeros, 30 wholesalers, and 20 retailers will be randomly selected. In Manila, which is the survey terminal market, 30 of each of the sample wholesalers and retailers business operation will be studied. During the selection of sample farmers and intermediaries, every effort will be made to draw samples who are representatives for the two groups in the sample area. For the government channels, 10 NGA field buyers, 10 NGA millers, and 10 Barangay customary outlets will be interviewed.

Frequency of Data Collection

The frequency of data collection depends on the reliability and accuracy of data as well as the degree of cooperation generated from the respondents. In the Philippines, the farmers, commission agents, wholesalers, retailers and "viajeros" have no written records of their farm activities and market transactions. These people usually rely on memory recall which according to Norman is critical in data

collection.[22] Hence, to minimize this problem, frequent interviewing is recommended.

Rice producers are divided into two set with different scheme of data collection. Those rice producers who dispose their paddy immediately after harvest will be interviewed twice during the year; on or immediately after the harvesting period for each season (wet and dry season). Rice producers who store their paddy and dispose it as a future date in speculation of higher prices will be interviewed on a weekly basis for a period of 12 months or a total of 48 weeks. A weekly interview of the intermediaries which include commission agent, wholesaler-retailer, "viajero", NGA field buyer and Barangay customary outlet will be done within the period of 12 months.

Rice millers who keep a complete record of their business transactions will be interviewed in each season within the period of the study. Data collection for the wet season operation will be done one month before the start of dry season harvest and for the dry season operation, data collection will be done one month before the start of the wet season harvest in order to get the total purchases, sales, quantity stored, prices and costs incurred by rice millers. The registered data must reflect the seasonal pattern of purchases and sales of rice/paddy for the whole year.

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[22]David W. Norman, Problems Associated With the Gathering of Technical, Economic and Social Data at the Farm Level in West Africa. A Paper given at the International Conference on the Economic Development of Sahelian Countries (Universite de Montreal, Canada: October 13-14th, 1970), p. 6.

Data Required

This study will include information on (1) paddy production and disposal by farmers in sample producing areas, (2) prices received by farmers and costs incurred in marketing paddy or rice to various intermediaries, (3) intermediaries' purchases, sales, prices, costs and margins, (4) amount of rice stored, (5) marketing functions performed, (6) weekly wholesale and retail prices in transit and terminal markets, (7) seasonal prices of paddy/rice, (8) monthly marketing margins of paddy/rice, (9) marketing practices, and (10) criteria for evaluation to measure marketing efficiency using marketing margins, operational and technical efficiency and extent of product losses and waste in the market.

Analytical Framework

Arithmetic means will be used in the majority of the computations in this research. Descriptive analysis supported by tabulated data will also be employed.

To compute marketing margins, two methods will be used. In the computation, using the aggregate method, the total purchases will be deducted from the total sales divided by the total quantity handled at every stage of marketing. Another way of calculating marketing margins for the different groups of middlemen will be by subtracting cost per unit from returns. Examination of the marketing margin between the producer in the assembly area and the consumer in the terminal market will also be done in order to determine their relationships. The monthly

total marketing margin along with the share of final price of one sack of rice each marketing intermediary gets for his services in distributing it from the village level to terminal market will be taken into account. While the final retail price is obtained by adding the prices received by producers to the marketing margins of each intermediary involved in the distribution of goods, the total marketing margin is calculated by getting the difference between the retail price and producer's price.

Evaluation of marketing efficiency will be done using marketing margins, input-output measurements and evaluation of product loss and waste in the market. For the first measure, which is the marketing margin, the costs of performing specific functions will be examined and compared with the return component. The costs must be evaluated in the light of input prices such as labor, management, capital, containers, and many others. In the evaluation, concepts such as normal profits, risks and uncertainties and opportunity costs are useful instruments.

Input-output measurements are used to determine the effects of distance, length of storage and form of commodity on differences in prices of the product. If markets are operating efficiently geographic price differences must be equal to the transportation costs from one area to another. Price changes for stored paddy or rice between points in time normally would reflect storage costs. Notably, the price of processed rice must be higher than unprocessed only by the equivalent cost of

processing. These conditions exist in a perfectly competitive economy. To determine whether the post-harvest price rise will equal the cost of storing grain, a statistical formula below will be used.[23]

$$E(Pt_i) = Pt_0 + t(R + I + L + D + M)$$

where

$E(Pt_i)$ = expected price per cavan of 50-kilogram paddy stored in the $i^{th}$ (includes the storage costs)

$t$ = time in months; i = 0...12 months

$Pt_0$ = price of one cavan of 50-kilogram paddy stored at harvest, e.g. t=0

$R$ = rent per month per cavan of paddy stored

$I$ = interest of capital per month required for the purchase of one cavan of paddy for storage

$L$ = amount of grain losses over time; expressed in percentage

$D$ = depreciation of sacks and other equipments used in storing one cavan of paddy

$M$ = Managerial and labor inputs

The net seasonal increase in price (the increase above that considered consistent with storage costs) for any period would be:[24]

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[23] R.G. Bressler Jr., "Research on the Structure of Agricultural Markets," Market Structure Research, ed. Paul L. Farris (Ames: Iowa State University Press, 1964).

[24] M.O. Farruk, Structure and Performance of the Rice Marketing System in East Pakistan, Cornell International Development Bulletin No. 23, Cornell University, Ithaca (New York, 1972), p. 80.

$$NSIPt_i = Pt_i - E(Pt_i)$$

Any price rise which is greater than the costs of storing paddy provides the opportunity for traders to make more than normal profits.[25] Assuming perfectly competitive conditions prevail, the net seasonal increase in price will equal zero, which means the seasonal price increases are just equal to incurred storage costs. All the information concerning actual storage cost items will be obtained from the rice millers.

To measure operating or technical efficiency observations as to whether intermediaries do some technical improvements like substitution of less expensive but durable and less bulky packaging materials to increase rice transport, facilitate storage and reduce damage and spoilage will be done in this study.

The last objective in the analysis of marketing efficiency of rice intermediaries will be the measurement of physical losses in handling the product from the farm gate to the consumer. One way of determining losses will be by weighing the paddy before and after storage and transport. Identification of various causes for damage and losses of rice particularly in rice mills will be given great attention in this study.

Questionnaires for Producers and Intermediaries

The questionnaires are divided into four classes depending

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[25]Hays, Jr., p. 86.

on the type of data needed, frequency of data collection and the type of respondents. These questionnaires are tentative in nature and are subject to further revision and modification as the study progresses.

Class I. Date to be collected once for each season on or immediately after harvesting

Form A. Producer (farmers who dispose their paddy immediately after harvest)

1. Characteristics of the Farmers
2. Production and Sharing Arrangements
3. Quantity Sold and Prices Received
4. Marketing Costs
5. Marketing Practices

Class II. Data to be collected weekly for a period of 12 months by type of respondents

Form B. Producer (farmers who store paddy for future disposal)

6. Disposal Information of Stored Paddy
7. Marketing Costs
8. Marketing Practices
9. Financing

Form C. Commission Agent

10. Quantity Purchased and Prices Paid
11. Number of Farmers Contracted and the Commission Amount Received
12. Marketing Practices
13. Financing

Form D. Wholesaler/Retailer

14. Quantity Purchased and Prices Paid

15. Quantity Sold and Prices Received

16. Storage Practices

17. Marketing Costs

18. Marketing Practices

19. Financing

Form E. Viajero (Mobile Trader)

20. Quantity Purchased and Prices Paid

21. Quantity Sold and Prices Received

22. Transportation Activities and Expenditures

23. Additional Expenditures

24. Marketing Practices

25. Financing

Form F. NGA Field Buyers

26. Quantity Purchased and Prices Paid

27. Procurement Policies

Form G. Barangay Customary Outlet

28. Procurement and Disposal Information

29. Procurement Policies Set by NGA to follow

Class III. Data to be collected one month before the start of the dry season harvest and one month before the start of wet season harvest from the Rice Miller

Form H. Kiskisan/Rice Miller

30. Procurement and Disposal of Paddy

31. Dryer Operation and Cost

32. Storage Operation and Cost

33. Milling Operation and Cost

34. Marketing Practices

35. Financing

36. Storage Fees

Class IV. Data to be collected once for the entire survey period such as characteristics of the intermediaries, other marketing information and marketing investment

Form I. Commission Agent

Form J. Wholesaler/Retailer

Form K. Viajero (Mobile Trader)

Form L. NGA Field Buyer

Form M. Barangay Customary Outlet

Form N. Kiskisan/Rice Miller

Form O. Marketing Investment For All Intermediaries

Class I Data

Form A. Producer

Record No._____ Date interview_____

Name_____ Province/town/barrio_____

1. Characteristics of the farmer:

Age_____ Years in farming_____

Educational attainment_____ Tenure status_____

Size of the farm operated (hectares)_____

2. Production and Sharing Arrangement: Wet Season____ Dry Season____

| Varieties | Total Production | Tenant's Share | Tenant's Share | | | |
|---|---|---|---|---|---|---|
| | | | Qty. | Sold | Stored | Others (specify) |
| | cavans of 50 kilograms | | | | | |
| IR Series | | | | | | |
| UP Series | | | | | | |
| BPI Series | | | | | | |
| Traditional | | | | | | |
| Others (specify) | | | | | | |

3. Quantity Sold and Prices Received

| Varieties | Quantity (Cavan) | Price/ Unit (₱) | Cond. of Crop | |
|---|---|---|---|---|
| | | | Wet | Dry |
| IR Series | | | | |
| UP Series | | | | |
| BPI Series | | | | |
| Traditional | | | | |
| Others (specify) | | | | |

4. Marketing Costs

| Item | Quantity (Cavan) | Rate/Unit (Pesos) | Remarks |
|---|---|---|---|
| Loading/unloading | | | |
| Transportation | | | |
| Others (specify) | | | |

5. Marketing Practices

a. Method of Payment for Sale of Paddy

Cash_____

In kind_____

Installment basis_____ (specify arrangements)

Others (specify)_____

b. Place of Sale

Farm_____

Farmer's house_____

Cities/Town/ Barrio Market_____

Others (specify)_____

c. Reasons for Choice of Outlet

Better prices___

Regular buyer_____

Credit tie-ups_____

Services offered_____ (Credit, Cash Advance)

Only available outlet in the area_____

Nearness & accessibility_____

d. Source of Price Information

Local buyer_____

Other farmers_____

Mass media_____

Manila buyer_____

Market (barrio town or cities)_____

Extension worker_____

NGA procurement team_____

Others (specify)_____

e. Who Determines the Price of Paddy for Sale

Buyer_____

Seller (Farmer)_____

Both_____

Class II Data

Form B. Producer

Record No._____ Date interview_____

Name_____ Province/town/barrio_____

6. Disposal Information

a. Have you removed from storage any paddy since the last interview?

Yes_____ No_____

This form will be given weekly to each farmer. If the farmer answers Yes in Question 6, answer the following:

b. If Yes to question 6, how many cavans or paddy were removed from storage? _____

c. Purpose for which the paddy were removed:

Sold_____ Loan Repayment_____

Consume_____ Others (specify)_____

If paddy is sold, answer the following:

d. Quantity Sold and Prices Received

| Varieties | Quantity (Cavan) | Price/ Unit (₱) | Cond. of Crop | |
|---|---|---|---|---|
| | | | Wet | Dry |
| IR Series | | | | |
| UP Series | | | | |
| BPI Series | | | | |
| Traditional | | | | |
| Others (specify) | | | | |

7. Marketing Costs

| Item | Quantity (Cavan) | Ratio/Unit (₱) | Remarks |
|---|---|---|---|
| Drying | | | |
| Storage* | | | |

*If stored, state the place and length of storage.

7. (Continued)

| Item | Quantity (Cavan) | Rate/Unit (₱) | Remarks |
|---|---|---|---|
| Transportation | | | |
| Milling (if possible) | | | |
| Loading/unloading | | | |
| Others (specify) | | | |

8. Marketing Practices

a. Method of Payment for Sale of Paddy

Cash_____

In kind_____

Installment basis_____ (specify arrangements)

Others (specify)_____

b. Place of Sale

Farm_____

Farmer's house_____

Cities/Town/ Barrio Market_____

Others (specify)_____

c. Reasons for Choice of Outlet

Better prices_____

Regular buyer_____

Credit tie-up_____

Services offered_____ (Credit, Cash Advance)

Only available outlet in the area_____

Nearness & accessibility_____

d. Source of Price Information

Local buyer_____

Other farmers_____

Mass media (specify)_____

Manila buyer_____

Market (barrio, town or cities)_____

Extension worker_____

NGA procurement team_____

Others (specify)_____

3. Who sets the Price of Paddy for Sale

Buyer_____

Seller_____

Both_____

9. Financing

a. Have you borrowed any money since last interview?

Yes_____ No_____

b. If borrowed money, since last interview, from whom did you borrow?_____

c. What was the amount of money borrowed?_____

d. For what purpose did you use this borrowed money?___

_____

e. Do you receive a loan before harvest for productive purposes? If yes, answer the following:

| Source | Amount | Collateral | Interest | Maturity | Credit Arrangement |
|---|---|---|---|---|---|
| Buyer | | | | | |
| Relative | | | | | |
| Commercial bank | | | | | |
| Others (specify) | | | | | |

If the buyer is your financier is there any credit marketing tie-up? Yes_____ No_____

If Yes, state the terms:_____

## Form C: Commission Agent

Record No._____ Date interview_____

Name_____ Province/town/barrio_____

10. Quantity Purchased and Prices Paid

| Volume Purchased | Source | | Condition of Crop | | Prices Paid (₱) |
|---|---|---|---|---|---|
| | Type | Number | Wet | Dry | |
| Paddy: IR Series | | | | | |
| UP Series | | | | | |
| BPI Series | | | | | |
| Traditional | | | | | |
| Others (specify) | | | | | |

11. Number of Farmers Contacted and the Basis of Commission

a. How much is your commission this last transaction?

per sack of rice_____ per sack of paddy_____

per kilo of rice_____ per kilo of paddy_____

others (specify)_____

b. How many farmers have you contacted to sell paddy to you since last interview?_____

c. Are you the one who looked for them or they are the one who approached you?_____

12. Marketing Practices

| Marketing Practices | Paddy | Remarks |
|---|---|---|
| a. Source of Price Information<br>Buyer you are working with | | |

| Marketing Practices | Paddy | Remarks |
|---|---|---|
| Market (town, barrio, or cities) | | |
| Mass media (specify) | | |
| Others (specify) | | |
| b. How long does it take before you received your commission? Upon procurement/ delivery of product | | |
| After a week | | |
| After one month | | |
| Others (specify) | | |
| c. Who provides all the costs incurred in buying the product Transportation cost | | |
| Food (regular meals, snacks) | | |
| Sacks and tying materials | | |
| Others (specify) | | |
| d. How do you buy the products from the farmer? Use own capital | | |
| Capitalists (Financier) | | |
| Money (specify how it operates) | | |
| Make commitments | | |

13. Financing

a. Do you extend credit to your supplier since last interview?

Yes_____ No_____

If Yes, amount_____ maturity_____

collateral_____

b. Do you charge any interest? Yes_____ No_____
If no, state the terms of payment_____

If Yes, how much?_____ terms of payment_____

c. Do you owe some money from the buyers you are working with since last interview? Yes_____ No_____

If Yes, how much?_____

Form D: Wholesaler/Retailer

Record No._____ Date interview_____

Name_____ Province/town_____

Type of middlemen_____

14. Quantity Purchased and Prices Paid

| Volume Purchased | Source | | Condition of Crop | | Prices Paid (₱) |
|---|---|---|---|---|---|
| | Type | Number | Wet | Dry | |
| IR Series | | | | | |
| UP Series | | | | | |
| BPI Series | | | | | |
| Traditional | | | | | |

15. Quantity Sold and Prices Received

| Volume Sold | Outlet | | Condition of Crop | | Prices Received /Cavan |
|---|---|---|---|---|---|
| | Type | Number | Wet | Dry | |
| IR Series | | | | | |
| UP Series | | | | | |
| BPI Series | | | | | |
| Traditional | | | | | |
| Others (specify) | | | | | |

*Paddy or milled rice

Proportion of total income obtained from selling paddy/rice:

_____50% _____75% _____25% _____others (specify)

16. Storage Practices

Do you store your product? Yes_____ No_____

If Yes, how long?_____ where stored?

at home_____

in the market_____

other places (specify)_____

17. Marketing Costs (For One Week)

| Item | Rate of Payment | Quantity | Value (₱) |
|---|---|---|---|
| Transportation Owned: Driver | | | |
| Food | | | |
| Gasoline | | | |
| Repairs | | | |
| Hired: Loading and Unloading | | | |
| Food | | | |
| Market Fees | | | |
| Others (specify) | | | |

18. Marketing Practices

| Practices | Buying | | Selling | | Remarks |
|---|---|---|---|---|---|
| | Paddy | Rice | Paddy | Rice | |
| a. Method of Sale Cash | | | | | |
| Credit | | | | | |
| Installment (specify arrangement) | | | | | |

| Practices | Buying | | Selling | | Remarks |
|---|---|---|---|---|---|
| | Paddy | Rice | Paddy | Rice | |
| b. Place of Sale<br>Mill | | | | | |
| Market (barrio, town or cities) | | | | | |
| Others (specify) | | | | | |
| c. Reasons for Choice of Outlet<br>Better prices offered | | | | | |
| Regular customer | | | | | |
| Credit tie-ups | | | | | |
| Friend | | | | | |
| Relatives | | | | | |
| Others (specify) | | | | | |
| d. Source of Price Information<br>Local buyers | | | | | |
| Mass media (specify) | | | | | |
| Manila buyer | | | | | |
| Market (barrio, town or cities) | | | | | |
| Others (specify) | | | | | |

19. Financing

Did you borrow money since last interview?

Yes_____ No_____

If borrowed money, since last interview, from whom did you borrow?_____

What was the amount of money borrowed?_____

For what purpose did you use this borrowed money?_____

_____

Have you loaned any money out since last interview?

Yes_____ No_____

If yes, who did you loan it and how much did you loan?
Person loaned to_____ Amount_____

What is the terms of payment?_____

Have you been paid back any money you have loaned out since the last interview? Yes_____ No_____
Amount_____

## Form E. Viajero (Mobile Trader)

Record No._____ Date interview_____

Name_____ Address_____

20. Quantity Purchased and Prices Paid

| Volume Purchased | Source | | Condition of Crop | | Prices Paid (₱) |
|---|---|---|---|---|---|
| | Type | Number | Wet | Dry | |
| Paddy/Rice | | | | | |
| IR Series | | | | | |
| UP Series | | | | | |
| BPI Series | | | | | |
| Traditional | | | | | |
| Others (specify) | | | | | |

21. Quantity Sold and Prices Received

| Volume Sold | Source | | Condition of Crop | | Prices Received |
|---|---|---|---|---|---|
| | Type | Number | Wet | Dry | |
| Paddy/Rice | | | | | |
| IR Series | | | | | |
| UP Series | | | | | |
| BPI Series | | | | | |
| Traditional | | | | | |
| Others (specify) | | | | | |

22. Transportation Activities and Expenses

| Days | From: | To: | Owned | | | Hired | | | Utilization (%) |
|---|---|---|---|---|---|---|---|---|---|
| | | | Driver | Gas. | Oil | Driver | Gas | Oil | |
| Sunday | | | | | | | | | |
| Monday | | | | | | | | | |
| Tuesday | | | | | | | | | |
| Wednesday | | | | | | | | | |
| Thursday | | | | | | | | | |
| Friday | | | | | | | | | |
| Saturday | | | | | | | | | |

Main Source:

Distance_____

Place (Province/ Town/Barrio)_____

_____

Quantity (Cavan)_____

Main Outlet:

Distance_____

Place(Province/ Town/Barrio)_____

_____

Quantity (Cavan)_____

Farthest Source:

Distance_____

Place (Province/ Town/Barrio)_____

_____

Quantity (Cavan)_____

Farthest Outlet:

Distance_____

Place (Province/ Town/Barrio)_____

_____

Quantity (Cavan)_____

23. Additional Expenditures

| Item | Rate of Payment | Qty. | Remarks |
|---|---|---|---|
| Loading and Unloading | | | |
| Food | | | |
| Market Fees | | | |
| Others (specify) | | | |

24. Marketing Practices

| Practices | Buying | | Selling | |
|---|---|---|---|---|
| | Paddy | Rice | Paddy | Rice |
| a. Method of Sale<br>Cash | | | | |
| Credit | | | | |
| Others (specify) | | | | |
| b. Place of Sale<br>Farm | | | | |
| Market (specify) | | | | |
| Others (specify) | | | | |
| c. Reasons for Choice of Buyer & Seller<br>Nearness and accessibility | | | | |
| Regular customer | | | | |
| Credit tie-up | | | | |
| Better prices | | | | |
| Friend | | | | |
| Relatives | | | | |
| Others (specify) | | | | |
| d. Source of Price Information<br>Other buyers | | | | |
| Mass media (specify) | | | | |
| Market (barrio, town, cities) | | | | |
| Others (specify) | | | | |

25. Financing

Have you borrowed any money since last interview?

Yes_____ No_____

If borrowed money, since last interview, from whom did you borrow?_____

What was the amount of money borrowed?_____

Did you extend credit to your supplier? Yes_____
No_____

If Yes, Amount_____ Maturity_____ Collateral____

Did you charge any interest? Yes_____ No_____

If Yes, how much?_____ terms of payment_____

If No, state the terms of payment_____

Form F. NGA Field Buyer

Record No._____ Date interview_____

Name_____ Address_____

26. Quantity Purchased and Prices Paid

| Quantity Purchased | Source | | Condition of Crop | | Prices Paid (₱) |
|---|---|---|---|---|---|
| | Type | Number | Wet | Dry | |
| Paddy: | | | | | |
| IR Series | | | | | |
| UP Series | | | | | |
| BPI Series | | | | | |
| Traditional | | | | | |
| Others (specify) | | | | | |

27. Procurement Policies

What are the existing policies of the NGA about procurement of paddy that you need to follow?_____

_____

_____

How does the NGA pay you? on commission basis_____ per day basis_____ per month_____ _____

others_____
(specify)

Does the NGA provide you the transportation and food in buying paddy from the farmers?_____

How many farmers have you contacted to sell paddy to you since last interview?_____

Are you the one who looked for them or they are the one who approached you?_____

Did you encounter some problems in procuring paddy for the NGA? Yes_____ No_____

If Yes, cite them_____

Form G. Barangay Customary Outlet

Record No._____ Date interview_____

Name_____ Address_____

28. Procurement and Disposal Information

a. How many cavans of rice did you buy from NGA through its field buyers since last interview?_____

b. What is the price/cavan?_____

c. How many cavans of rice did you sell to the consumer since last interview?_____

d. What is the price/cavan?_____

e. Did you store rice before selling to the consumer?

Yes_____ No_____

If Yes, state where stored: _____home _____market _____others (specify)

29. Procurement Policies to Follow

a. What are the policies of the NGA that you should follow in buying and selling rice?

Buying_____ Selling_____

_____ _____

_____ _____

b. What are the advantages of being a NGA buyer over the private buyer?_____

Class III Data

Form H. Kiskisan/Rice Miller

Record No._____ Date Interview_____

Name_____ Province/town/barrio_____

30. Procurement and Disposal of Paddy

a. Procurement of Paddy (indicate the season of the year data referred to)

| Date Purchase Paddy | Varieties | Quantity Purchase (Cavan) | Price/ Unit (Pesos) | Total Value (₱) | Source | |
|---|---|---|---|---|---|---|
| | | | | | Type | Number |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

b. Disposal of Milled Rice

| Date Sell Paddy | Varieties | Quantity Sold (Cavan)* | Price/ Unit (Pesos) | Total Value (Pesos) | Outlet | |
|---|---|---|---|---|---|---|
| | | | | | Type | Number |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

*Specify the degree of milled rice whether 1st, 2nd, or 3rd in case of large rice miller.

31. Dryer Operation and Cost

a. Time of operation

| Time of Operation | Sun Drying | | | Total Operating Time | Mechanical Drying | | | Total Operating Time |
|---|---|---|---|---|---|---|---|---|
| | Hrs/day | Day/Wk | Week/Mo | | Hrs/Day | Day/Wk | Week/Mo | |
| Peak Months | | | | | | | | |
| | | | | | | | | |
| Lean Months | | | | | | | | |
| | | | | | | | | |

Specify the months when dryer is not operating_____

b. Volume Dried

| Volume Dried (Cavan) | Sun Drying | | | Mechanical Drying | | |
|---|---|---|---|---|---|---|
| | Owner's Stock | Customer's Paddy | Total | Owner's Stock | Customer's Paddy | Total |
| Peak Months | | | | | | |
| | | | | | | |
| | | | | | | |
| Lean Months | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

c. Capacity Utilization

1. Rated Capacity (per loading)_____
   Actual Capacity_____
   Capacity/Load_____
   Number of Load_____
   Number of Shifts/day_____
   % Utilization_____

2. Reason for Underutilization/Overutilization_____

d. Cost of Drying

1. Labor Cost

| Labor Cost | Sun Drying | Mechanical Drying | Total |
|---|---|---|---|
| Labor Required/Cavan | | | |
| Wage Rate (specify vol. & time) | | | |
| Fringe Benefits | | | |
| Others (Food, Cig. etc.) | | | |
| Sub-total | | | |

2. Fuel/Power Cost (Indicate Source of Power)

| Item | Fuel | Power | Total |
|---|---|---|---|
| Consumption/(day, week, etc.) | | | |
| Cost/Unit | | | |
| Total Value | | | |

c. What is the drying fee per volume (specify whether Cavans, etc)?

| | Sun Drying | Mechanical Drying |
|---|---|---|
| Drying fee/volume | _____ | _____ |

32. Storage Operation and Cost

a. Time of Operation

| Months | Turnover | Sack Storage | | | Bulk Storage | | |
|---|---|---|---|---|---|---|---|
| | | Owner's Stock | Customer's Deposit | Total | Owner's Stock | Customer's Deposit | Total |
| Peak | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Lean | | | | | | | |
| | | | | | | | |
| | | | | | | | |

b. Capacity Utilization

| | Sack Storage | Bulk Storage |
|---|---|---|
| 1. Rated Capacity_____ | | |
| Actual Capacity_____ | _____ | _____ |
| Turnover | | |
| No. of times (week/mo./3 mo./etc. (specify) | _____ | _____ |
| % Utilization_____ | | |

2. Reason for Underutilization/Overutilization_____

c. Cost in Storage

| Item | Rate/day/month etc. (specify) | Fringe Benefits |
|---|---|---|
| Labor | | |
| Weighers | | |
| Stock Pilers | | |
| Haulers | | |
| Sack menders | | |
| Others (specify) | | |
| Suppliers | | |
| Chemicals/Disinfectant | | |
| Sacks | | |
| Needle & Thread | | |
| Others (specify) | | |

33. Milling Operation and Cost

a. Time of Operation

| Months | Operating Time | | | | Volume Handled | |
|---|---|---|---|---|---|---|
| | Hrs./day | Day/wk. | Week/mo. | Total | Owner's Stock | Consumer's |
| | | | | | Own Use Sale | Own Use Sale |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Specify the months when mill is not operating_____

b. Capacity Utilization

1. Rated Capacity (Cavans/12 hours)_____
   Actual Capacity (Cavans/12 hours)_____
   % Utilization_____

2. Reason for Underutilization/Overutilization_____

c. Milling Cost

1. Labor Cost

| Salaries/Wages | Peak Month* | | Lean Month* | | Total | |
|---|---|---|---|---|---|---|
| | No. | Salary/Wage | No. | Salary/Wage | No. | Salary/Wage |
| Manager | ___ | _____ | ___ | _____ | ___ | _____ |
| Assistant Manager | ___ | _____ | ___ | _____ | ___ | _____ |
| Secretary | ___ | _____ | ___ | _____ | ___ | _____ |
| Treasurer | ___ | _____ | ___ | _____ | ___ | _____ |
| Mill Operator | ___ | _____ | ___ | _____ | ___ | _____ |
| Asst. Mill Operator | ___ | _____ | ___ | _____ | ___ | _____ |
| Weigher | ___ | _____ | ___ | _____ | ___ | _____ |
| Hauler | ___ | _____ | ___ | _____ | ___ | _____ |
| Sack Mender | ___ | _____ | ___ | _____ | ___ | _____ |
| Commission Agent | ___ | _____ | ___ | _____ | ___ | _____ |
| Others (specify) | ___ | _____ | ___ | _____ | ___ | _____ |

*Specify the number of peak and lean months.

2. Fuel/Power/Water Cost

| Item | Mill | | | Transportation | | | Others | | |
|---|---|---|---|---|---|---|---|---|---|
| | Unit | Cost | Value | Unit | Cost | Value | Unit | Cost | Value |
| a. Fuel/Power<br>Diesel | | | | | | | | | |
| Gas | | | | | | | | | |
| Electricity | | | | | | | | | |
| Consumption (day/week/ mo.) | | | | | | | | | |
| b. Oil/Grease<br>Consumption (day/week/ mo.) | | | | | | | | | |
| c. Water<br>Consumption (day/week/ mo.) | | | | | | | | | |
| d. Others (specify) | | | | | | | | | |

d. Milling Fees

| Paid in Cash | Pesos/Unit |
|---|---|
| Per cavan paddy | _____ |
| Per cavan rice | _____ |
| Per kgm. paddy | _____ |
| Per kgm. rice | _____ |
| **Paid in Kind** | |
| Per can paddy | _____ |
| Per can rice | _____ |
| Others (specify) | _____ |

34. Marketing Practices

| Practices | Buying | Selling |
|---|---|---|
| a. Method of Payment | _____ | _____ |
| Cash | _____ | _____ |
| Credit | _____ | _____ |
| Installment | _____ | _____ |
| b. Place of Sale | | |
| Rice mill | _____ | _____ |
| Miller's house | _____ | _____ |
| Others (specify) | _____ | _____ |
| c. Reasons for Choice of Source/Outlet | | |
| Better price | _____ | _____ |
| Regular customer | _____ | _____ |
| Credit tie-ups | _____ | _____ |
| Others (specify) | _____ | _____ |
| d. Source of Price Information | | |
| Local buyer | _____ | _____ |
| Other rice miller | _____ | _____ |
| Mass media (specify) | _____ | _____ |
| Manila buyer | _____ | _____ |
| Others (specify) | _____ | _____ |
| e. Who Set the price of paddy/rice | _____ | _____ |

35. Financing

a. Have you borrowed any money since last interview?
Yes_____ No_____

b. If borrowed money, since last interview, from whom did you borrow?_____

c. What was the amount of money borrowed?_____

d. Did you extend credit to your supplier? Yes___ No___
If Yes, Amount_____ Maturity_____ Collateral_____

36. Storage Fees

a. Specify storage fee (per volume/time) _____sack storage
_____bulk storage

b. What is your shrinkage allowance?_____

c. Who provides the sack? Mill owner_____
customer_____ If mill owner provides the sack, what is the term of payment?_____
_____

d. Any privilege or discount? Yes_____ No_____
If Yes, specify_____

## Class IV Data

### Form 1. Commission Agent

37. Characteristics of the Commission Agent

a. Age_____

b. Sex_____

c. Types of buyers whom you are working with?_____

d. How many buyers you are working with?_____

e. Educational Attainment_____

f. Years in business_____

38. Additional Information

a. Do you have the privilege to get additional money aside from your commission when you get a good bargain? Yes_____ No_____

If Yes, how much per sack of paddy_____ per kilo of paddy_____ Others (specify)_____

b. Is your commission affected by lean or peak period of operation? Yes_____ No_____

If Yes, how_____

c. Is your area of operation defined? Yes_____ _____No

If Yes, who determines and how does it operate?_____

_____

d. How many commission agents do you know exists in your area of operation?_____(specify if barrio or town).

e. Are you a member of any buyers association? Yes_____ No_____

If Yes, what are the membership requirements?_____

_____

f. Is there any pricing policy to be adopted by each member of the association?_____

_____

## Form J. Wholesaler/Retailer

39. Characteristics of the Wholesaler/Retailer

a. Age_____

b. Sex_____

c. What was your occupation before you became a wholesaler or a retailer?_____

d. Educational Attainment_____

e. Years in Business_____

40. Additional Information

a. Are you a member of any wholesaler/retailer association? Yes_____ No_____ Name of Assoc._____

If Yes, what are the membership requirements?_____

_____

b. How much do you pay for stall rent per month?_____

Does this include any storage space? Yes_____
No_____ Open space market_____
Room that can be locked_____

c. What is the maximum number of sacks of paddy/milled rice can you store at one time?
Paddy_____ Milled Rice_____

d. How frequent is your turnover?

| | Paddy (Specify Qty.) | Milled Rice (Specify Qty.) |
|---|---|---|
| Weekly | _____ | _____ |
| Monthly | _____ | _____ |
| Quarterly | _____ | _____ |

e. Do you have any preferences in buying and selling milled rice? Yes_____ No_____

If Yes, rank by priorities the following degrees of milling:

| | Buying | Selling |
|---|---|---|
| First degree milling | _____ | _____ |
| Second degree milling | _____ | _____ |
| Third degree milling | _____ | _____ |

f. Any other criteria you used in buying and selling milled rice:_____

## Form K. Viajero (Mobile Trader)

41. Characteristics of Viajero

    a. Age_____

    b. Sex_____

    c. What was your occupation before you became a viajero?
    _____

    d. Educational Attainment_____

    e. Years in Business_____

42. Additional Information

    a. Are you a member of any viajero association?
    Yes_____ No_____ Name of Association_____
    If Yes, what are the membership requirements?_____
    _____

    b. Does your association set some pricing policies about procurement and disposal of paddy and rice?
    Yes_____ No_____ If Yes, state them_____
    _____

## Form L. NGA Field Buyer

43. Characteristics of NGA Field Buyer

a. Age_____

b. Sex_____

c. Educational Attainment_____

d. Years in Business_____

44. Additional Information

a. Which time (week/month) do you buy the most?_____ the least?_____

b. What other fringe benefits do you get as NGA field Buyer?_____

_____

c. Is your area of buying operation defined? Yes_____ No_____. If Yes, who determines and how does it operate?_____

d. How many other NGA Field buyers do you know exist in your area of operation?_____ (specify barrio/town).

## Form M. Barangay Customary Outlet

45. Characteristics of Barangay Customary Outlet

a. Age_____

b. Sex_____

c. Educational Attainment_____

d. Years in Business_____

e. What barangay group do you belong?_____
(specify the number and place)

46. Additional Information

a. Which time (week/month) do you buy large quantity of milled rice?_____, less quantity of milled rice?_____.

b. Is your selling operation defined? Yes_____ No_____ If Yes, who determines and how does it operate?_____
_____
(specify if barrio or town).

c. What other fringe benefits do you get as a buyer?___
_____

Form N. Kiskisan/Rice Miller

47. Characteristics of Kiskisan/Rice Miller

a. Age_____

b. Sex_____

c. Educational Attainment_____

d. Years in Business_____

e. What was your occupation before you became a Kiskisan/Large Miller?_____

48. Additional Information

a. Storage Practices

1. Is your warehouse bonded?_____ not bonded?____
If bonded, how much is the bond?_____

2. Is your warehouse insured?____ not insured?___
If insured, how much is the premium (₱)?_____
Is this paid monthly_____ quarterly_____
semi-annually_____ yearly_____

3. Do you disinfect your warehouse? Yes_____
No_____ If Yes, how often?_____
What chemicals do you use?_____
What are the insects/pests that poses major storage problems?_____

b. Milling Practices

1. What are the varieties commonly milled?_____
_____

2. Do you mill mixed varieties? Yes____ No_____
If Yes, how do you operate/adjust mill?_____
_____

3. What is the smallest lot size you accept to start milling operation? (i.e. what volume will make you run the mill if there is only one customer for the day?_____

4. How many minutes (hours) does it take to mill a cavan of paddy (specify other volume if necessary)?_____

5. Do you mill glutinous rice? Yes_____ No_____
If Yes, what is the volume milled?_____
Is there any difference in milling fee? Yes__
No_____ If Yes, specify how much and why?____
_____

6. How much do you pay for NGA licenses_____
NGA fees_____ Municipal licenses_____
Municipal fees_____ Others (specify)_____
_____

c. Are you a member of any miller's association?
Yes_____ No_____ If Yes, what are the membership requirements?_____

_____

d. Does your association determine the storage fees and milling fees to charge to the customers?
Yes_____ No_____ If Yes, how?_____

Form O. Marketing Investment

| Item | Quantity | Acquisition Cost | Repairs & Maintenance | Years Acquired | Years To Last | % Used In Paddy/Rice |
|---|---|---|---|---|---|---|
| 1. Land* | | | | | | |
| Buildings<br>Rice Mill | | | | | | |
| Warehouse | | | | | | |
| Dryer | | | | | | |
| Others (specify) | | | | | | |
| 2. Transportation<br>Truck | | | | | | |
| Jeep | | | | | | |
| Forklift | | | | | | |
| Grain cart | | | | | | |
| Others (specify) | | | | | | |
| 3. Equipment/Apparatus<br>Mill Apparatus<br>Mill Engine | | | | | | |
| Scales<br>Platform scales | | | | | | |
| "Panega" | | | | | | |

Form O. (Continued)

| Item | Quantity | Acquisition Cost | Repairs & Maintenance | Years Acquired | Years To Last | % Used In Paddy/Rice |
|---|---|---|---|---|---|---|
| Cans | | | | | | |
| Others (specify) | | | | | | |
| Probe (Testing Equipment) | | | | | | |
| Moisture Equipment | | | | | | |
| Sacks | | | | | | |
| 4. Office Equipment Tables | | | | | | |
| Filing Cabinet | | | | | | |
| Typewriter | | | | | | |
| Others (specify) | | | | | | |

*Specify if rented or owned, the value if owned and the area.

# BIBLIOGRAPHY

Adeyokunnu, T.O. "Marketing Margins for Rice in Egba Division Western State, Nigeria," Bulletin of Rural Economics and Sociology, Vol. 8, No. 2 (1973), pp. 243-253.

Bauer, P.T. and Yamey, B.S. "Case Study of Responses to Price in an Underdeveloped Country," Economic Journal, Vol. LXIX, No. 276 (1959), pp. 300-305.

Bressler, R.G., Jr. "Research on the Structure of Agricultural Markets," Market Structure Research, ed. Paul L. Farris. Ames: Iowa State University Press, 1964.

Crops and Livestock Statistics. A Report Prepared by the Bureau of Agricultural Economics. Philippines: Diliman, Quezon, City Office, 1975.

Darrah, Lawrence and Alunan, Julio. Marketing of Livestock in General Santos City. Department of Agricultural Economics, UPCA, 1970.

Economic Research Service, USDA/USAID. "Improving Marketing Systems in Developing Countries, An Approach to Identifying Problems and Strengthening Technical Assistance," Foreign Agricultural Economic Report, No. 93 (February, 1972), pp. 48-49.

Farruk, M.O. Structure and Performance of the Rice Marketing System in East Pakistan. Cornell International Development Bulletin No. 23, Cornell University, Ithaca, New York, 1972.

Food and Agriculture Organization of the United Nations. Rice Marketing, Rome, 1972.

Hawkins, E.K. The Philippines: Priorities and Prospects for Development. A Report Prepared by the World Bank, Washington, D.C.: The World Bank, 1976.

Hays, H.M. Jr. "The Marketing and Storage of Grains in Northern Nigeria, Samaru Miscellaneous Paper 50, Institute for Agricultural Research, Amadu Bello University (Zaria, 1975), p. 63.

Kohls, Richard L. Marketing of Agricultural Products. New York: The MacMillan Company, 1961.

Mears, Leon and others. Rice Economy of the Philippines. Quezon City: University of the Philippines Press, 1974.

Norman, David W. Problems Associated with the Gathering of Technical, Economic and Social Data at the Farm Level in West Africa. Paper given at International Conference on the Economic Development of Sahelian Countries, Universite de Montreal, Canada, October 13th-14th, 1977.

Olayemi, J. "Rice Marketing and Prices: A Case Study of the Kwara State of Nigeria," Bulletin of Rural Economics and Sociology, Vol. 8, No. 2 (1973), pp. 211-212.

Phillips, Richard. Recommendation for Improving Philippine Grain Marketing and Price Stabilization Programs. A Report Prepared for AID/USDS, No. 46 (May, 1974).

Rashid, A. et al. Costs and Contributions of Market Intermediaries: A Case Study of Four Agricultural Commodities in Six Punjao, 1960-70. Department of Agricultural Economics, West Pakistan Agricultural University, Lyallpur, 1972.

Singh, R. and George, M. Marketing of Rice in the Punjao. ed. K. Dua. Ludhiana: Giani Printing Press, 1971.

Torres, Enriqueta B. and Lantican, Flordeliza A. "Middlemen and Their Operation in Fruit and Vegetable Marketing," Journal of Agricultural Economics and Development, Vol. VII, No. 1 (January, 1977), p. 85.

# A STUDY OF INTERMEDIARIES AND THEIR CONTRIBUTIONS TO RICE MARKETING IN THE PHILIPPINES

by

FLORDELIZA A. LANTICAN

B.S.A., University of the Philippines at Los Banos, 1974

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Agricultural Economics

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1978

This research proposal is designed to ascertain the marketing practices, functions performed and the costs and margins of market intermediaries. Assessment of marketing efficiency will be done using the costs and margins concept, input-output measures, and the extent of product losses and waste.

Primary data will be used in this study and the sources are the producers and market intermediaries. The sample intermediaries which are classified by functions are: local "kiskisan" millers, large private and government millers, commission agents, "viajeros", and wholesalers and retailers.

Two leading rice producing regions, Central and Southern Luzon will be selected. In Central Luzon, Nueva Ecija and Bulacan will be the sample provinces while in Southern Luzon, Laguna and Oriental Mindoro will be the study areas. The survey markets which are based on Leon Mear's study, are classified into three; local assembly, transit and terminal market. The most important intermediaries in the local assembly market are the local "kiskisan" millers and commission agents for the transit market; large millers/warehousers, palay and rice wholesalers and "viajeros"; and in the terminal market, rice wholesalers and retailers.

The study will cover a two year period, one year for data collection and one year for computation, tabulation and analysis.

The frequency of data collection depends on the reliability and degree of cooperation of respondents. Producers,

commission agents, viajeros, wholesalers and retailers will be interviewed weekly due to unavailability of farm and market records whereas millers/warehousers who keep business records will be surveyed once for each season to determine the seasonality and trend in prices of rice before and after storage.