for longer than a year.[37/]

Generally, price performance between the 3 major Philippine centers was excellent, reflecting reasonably adequate transportation and communication between traders in these separated markets. During these years, NARIC and RCA did attempt to implement a buffer stock with ceiling price maintenance in these areas and shares in the credit for this market performance. At the same time, it is interesting to note that most of the years in which prices in Iloilo and Cotabato rose more than 10 percent above Manila prices were election years. Could there have been more emphasis on maintenance of price stability in Manila when the overall stock situation did not permit stability throughout the country? Another striking observation is that price deviations between Cotabato and Manila generally resulted in prices of Cotabato being the higher. This suggests a possible bias in the risk premium by traders who tend to be reluctant to ship from the deficit area of Manila to the surplus region around Cotabato.

A decided contrast is evident in comparing retail price variations in excess of transport costs between Manila and two outlaying trading centers in Luzon, Legaspi and Tuguegarao (see Chart VIII-12). The market operated with outstanding efficiency in maintaining Tuguegarao prices comparable with those in Manila. It was only in 1968, with bumper crops both in Cagayan Valley and the country as a whole, plus a surplus of imports arriving in Manila, that the risk of transfer of surpluses from Tuguegarao to relieve the pressure on prices must have appeared to be too high. This reaction was

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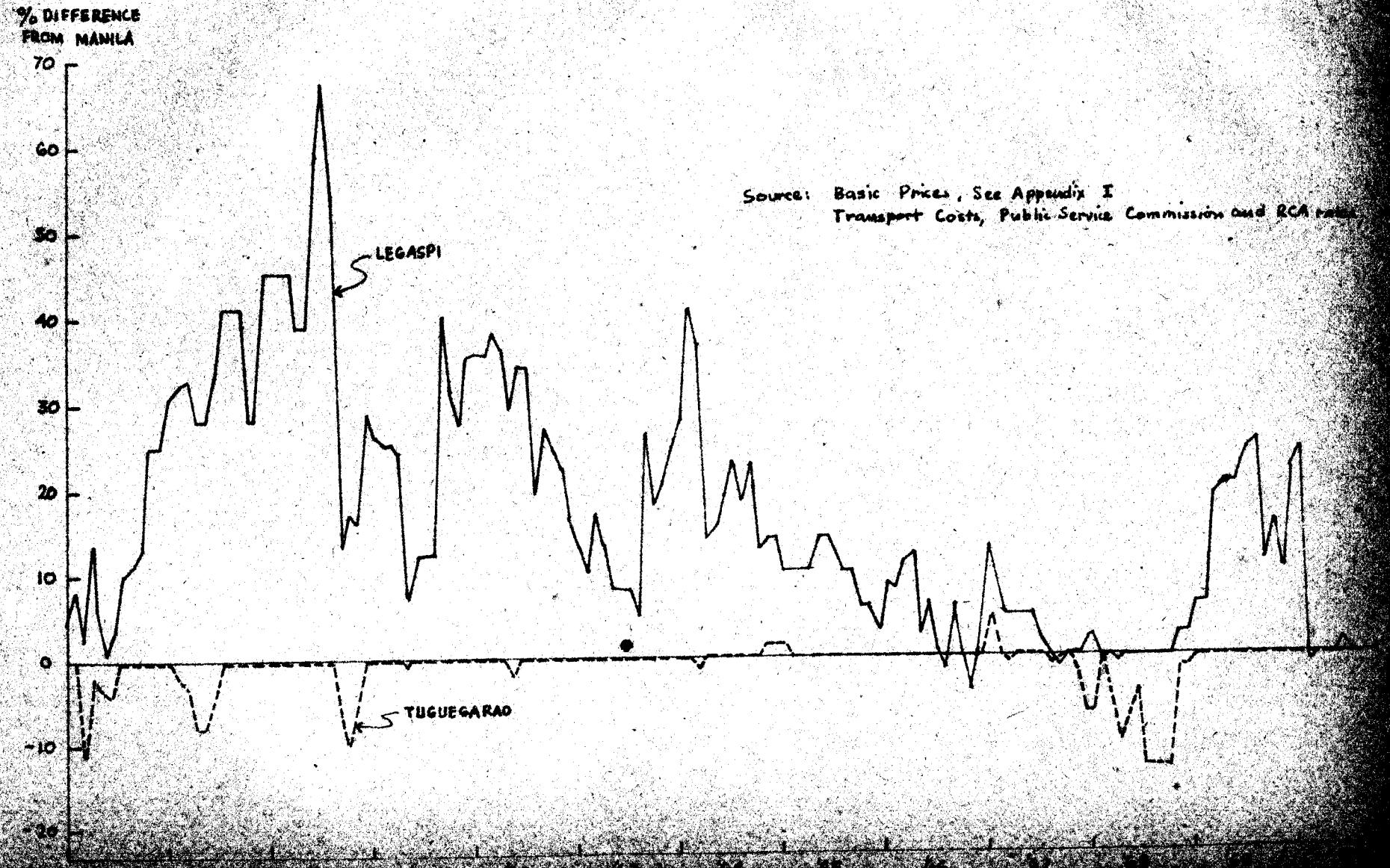
37/ Mears, Rice Marketing in the Republic of Indonesia, op. cit., p. 115.

CHART VIII-12

PERCENTAGES THAT LEGASPI AND TUGUEGARAO RETAIL PRICES (IN EXCESS OF TRANSPORT COSTS) WERE ABOVE OR BELOW MANILA RETAIL PRICES (MACAN 2ND CLASS, 1958-1970)



Source: Basic Prices, See Appendix I
Transport Costs, Public Service Commission and RCA rates

reinforced by the perennial shortage of storage in the Cagayan Valley which could not be relieved by transfer to Central Luzon where the bumper crop was likewise crowding existing storage.

On the other hand, retail rice prices in Legaspi exceeded Manila prices (after allowing for transport) by large amounts, especially from 1958 to 1965 (and again in 1969). From 1958 to 1961, the Legaspi prices remained at least 10 percent above Manila prices for 33 months. Of these, 26 months showed a difference greater than 25 percent with a peak of 68 percent in July 1960. Other periods of marked disequilibrium were evident from 1961 to 1963 (23 months with difference over 10 percent), 1963 to 1965 (25 months over 10 percent) and 1969/1970 (11 months above 10 percent). Even though transportation facilities were poor and subject to interruptions from flood and typhoon, differentials of this magnitude would not persist over such long periods unless other constraints were also present. The market performance shows improvement over time, which may have reflected success of RCA in offsetting some of the constraints, especially between 1966 and 1969. Explanation of the years of high differentials include the probability of extra-legal costs of transport, and an impression shared by Manila wholesalers that traders in the Bicol region were poor credit risks (and local finance was scarce in Bicol). And, it is difficult to rule out collusion when differentials persisted for such long periods.[38/]

At the farm level a different type of bias was evident in RCA's

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38/ Among other areas studied in Luzon, Tarlac was the only one to evidence protracted periods of disequilibrium, but extremes did not approach those of Legaspi. Tarlac prices were more than 10 percent above those in Manila from 1961 to 1963, reaching a peak of 32 percent in January 1962.

pattern of regional support prices. Between 1966 and 1969 RCA set their floor support price at P17/cavan of palay for Central Luzon and Southern Tagalog, dropping the support to P16/cavan in other areas. RCA explained that they desired to equalize all areas with Manila, after considering transport costs. One exception was made for Ilocos with a floor of P18/cavan, with no explanation given by RCA in public announcements. This practice was discontinued when a uniform support price of P16.50 was introduced by RCA for the entire country in January 1970. Whether there is valid ground for a uniform national support price or for one tied by transport differentials to Manila or a number of marketing centers deserves serious study. Mangahas suggests that consideration might be given to regional deficits and surpluses in addition to transport differentials.[39/]

2. Inter-barrio price comparisons. Unfortunately, the BAE sample of barrio prices is too small to provide any reasonable level of confidence in prices reported for individual barrios. So, only broad generalizations are possible and these must be subject to future confirmation. Where price reports were available for 1964 and 1965 for barrios near Cabanatuan, Iloilo and Cotabato cities, and after allowing for transport costs, the imbalance usually favored stock movement to the larger cities. The imbalance appeared greatest after harvest, often disappearing entirely in the pre-harvest season. If these differences are confirmed, they suggest need for improved dissemination of price information and improvement in transport plus more active price support at least for the short run.

39/ Mahar Mangahas, op. cit., pp. 70-ff.

IV. Relationships of Price to Quality and Other Factors

Preferences of Philippine consumers for different rice varieties and other product characteristics and their influence on the price structure are summarized in Chapter IV.[40/] In general, variety and appearance characteristics have the most important influence on price. The degree of milling affects grain appearance. Generally, greater polishing brings a price premium in addition to that resulting from the translucence and length of the grain. This is illustrated on Chart VIII-13 with Macan first class showing a price consistently several percent higher than that of Macan second class. The percentage of broken rice is positively correlated to price but much less important than in world markets. These observed marketing standards influencing price are not the characteristics detailed in the Philippine Trade Standard specifications which are more closely related to world standards.[41/]

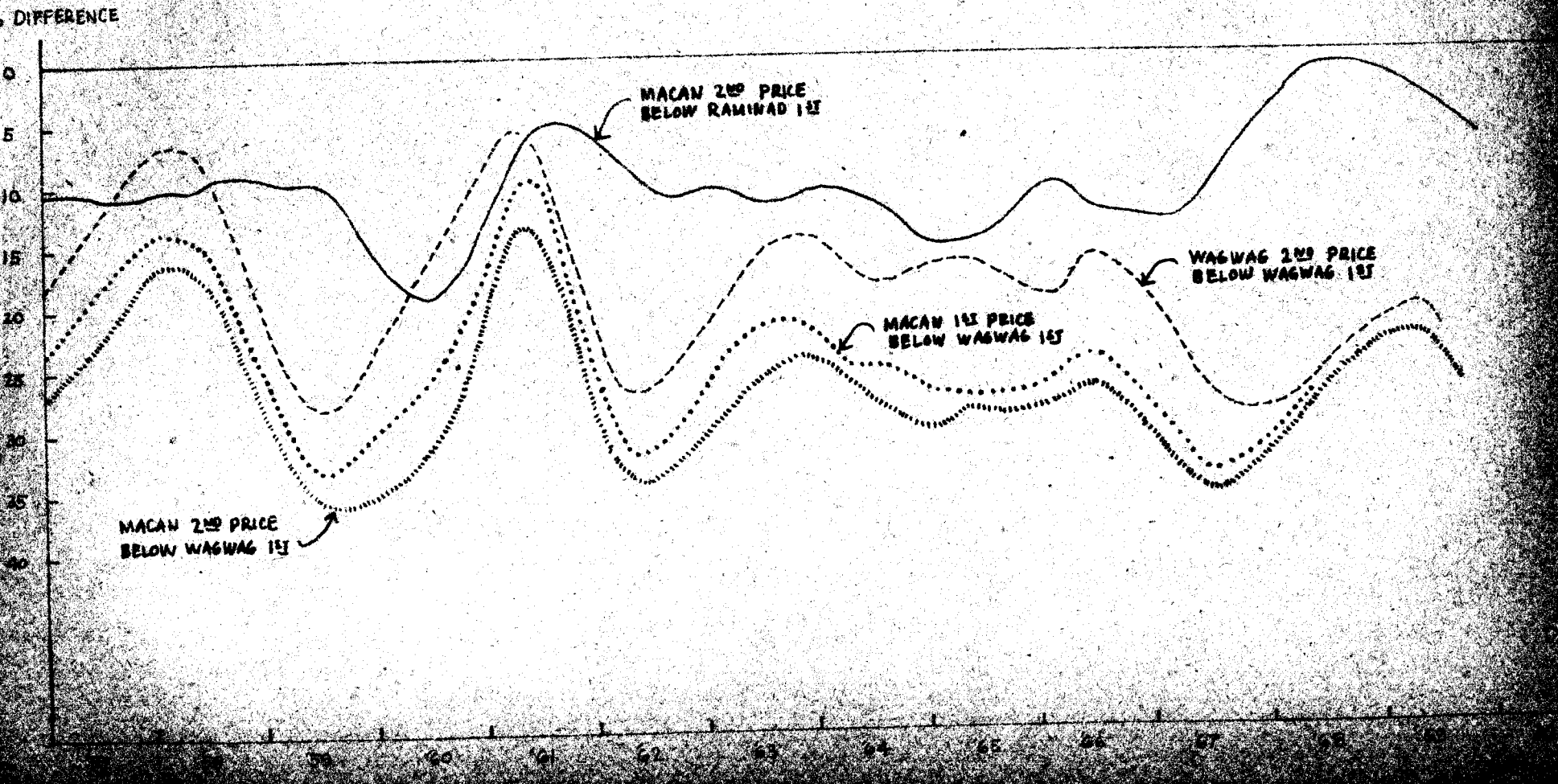
Chart VIII-13 also illustrates how wholesale price trends of typical fancy (Wagwag), special (Raminad) and ordinary (Macan) varieties differed between 1957 and 1969. In the earlier years, the price differences from Wagwag variety of the special and ordinary varieties varied cyclically, a relationship that appears to have been dampened in more recent years. In the late 1960's, the new IR-5 and IR-8 varieties were generally priced about 10

40/ See Leon Mears, "Rice Consumption Characteristics Influencing Rice Marketing in the Philippines," IEDR Discussion Paper No. 70-23 (Dec. 3, 1970), pp. 45-ff.

41/ See Chapter VI for details of the Philippine Trade Standards, pp.___. For study examining these price/quality relationships, see Roger A. Aspiras, "The Relationship Between Quality and Price in Philippine Wholesale Rice," mimeographed paper of IRRI (1971).

CHART VIII-13

PERCENTAGE DIFFERENCES OF TRENDS OF WHOLESALE RICE PRICES WAGWAG 1ST, RAMINAD 1ST, MACAN 1ST AND MACAN 2ND VARIETIES MANILA MARKET, 1957-1970



percent lower than the older Macan second class variety. Introduction of new varieties in Asia frequently requires a price discount until tastes become readjusted. However, with the high amylase content, which brings cooking qualities distasteful to the Filipino, these two IR varieties may continue to sell at a discount.

The fact that the factors which are important in determining domestic quality are not the most critical ones affecting world prices has implications for any new investment in rice processing facilities. Any plans to modernize milling equipment must consider the market expected to be served. Domestic preferences probably do not justify additional expense to replace existing cono mills by sophisticated milling equipment. If rice is to be milled for export, then major modification of existing equipment is required. And similarly, expensive mechanical dryers cannot be justified by the premium expected domestically for the resulting improved quality, since domestic markets provide but a small premium for reduction in broken grains. Such investment must be justified either on its advantage in preventing loss to rainy season harvests or by premiums in the world market for better quality rice.

V. Price Policy

Over the past 20 years the Government, through NARIC and RCA, has been actively engaged in programs to support a floor and control a ceiling price for palay and rice. Under the most recent law, RA 4643 (1966), rice producers are guaranteed a floor price of not less than P16 per cavan of palay and consumers a price ceiling not greater than P1.40 per ganta of rice.

The rice price spiral of 1971 is only the most recent evidence of the continuing desirability for implementing the price stabilization function by an appropriate agency of the Government. Other economic reasons have been emphasized earlier in this chapter, such as: 1) the large annual price fluctuations, far exceeding holding costs, that occur frequently at both farm and retail levels; 2) the evidence of several persistent inter-regional disequilibria in excess of transport costs; and 3) emphasis placed by rice millers on trading profits at the expense of efficient management of processing activities.

Further, there is overwhelming evidence that existing legal guidelines have lacked sufficient flexibility to permit effective implementation under continually changing conditions. They also have not sufficiently delineated general policy objectives to guide administrators toward synchronization with other development objectives and corrective action where market performance is inefficient.

1. Elements of a rice price policy. In its simplest effective form, a rice price policy must satisfy the following Government objectives: 1) provide a price stability of this basic staple in line with the needs of uninterrupted development, 2) support a floor price that will appropriately stimulate production, 3) control a ceiling price that will assure rice at reasonable prices for consumers, 4) permit a seasonal range between these two prices to cover costs of holding stocks between harvests (including a premium for risk), 5) provide suitable relationships with other domestic and world prices, and 6) minimize Government implementation costs taking into account the social and other Government objectives.

In terms of marketing efficiency these policies imply: 1) seasonal price increases commensurate with holding costs, 2) inter-market price differentials commensurate with transport costs, 3) processing costs commensurate with those possible with effective management, 4) a marketing system conducive to the introduction of cost reducing technology, and 5) domestic/world price relationships commensurate with the degree of self-sufficiency and the consequent export or import imperatives.

To satisfy these criteria will require strict financial and managerial discipline. However, similar policy objectives have been successfully implemented in other countries in Asia where the development was less advanced than in the Philippines.[42/] The only precaution would be to ensure that the specifics of the policy were realistic to the Philippine situation. They should take into consideration constraints relating to transportation, weather, processing, storage, cultural characteristics and organizational and financial capacities. These are discussed along with suggested procedures for determining relative prices within the policy guidelines.

2. Determination of price levels. Price determination can appropriately begin with the establishment of a floor price at RCA receiving bodegas that will bring forth desired production response.[43/] Determination of this

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[42/] For details see IRRI, Country Papers, papers presented at Rice Policy Conference at IRRI (May 9-14, 1971). Particular attention is called to Saleh Afiff and C. Peter Timmer, "Rice Policy in Indonesia," and Jin Hwan Park, "Food Consumption and Rice Production in Korea".

[43/] John Mellor has disagreed with this approach, stating that "costs of production should not be an explicit basis for determining the support level partly because the context assumed is one of improving technology and hence declining costs. The basic incentive for expanding production is provided by declining unit costs and not by rising prices," see "The Agricultural Marketing System and Price Stabilization Policies," op. cit., p. 10. Mellor appears to assume self-sufficiency (and an apparently rigid import/export policy) and then to allow equilibrium to take place by market price fluctuations as crop size varies with the weather or insect attacks. This might provide a more stable income for producers under varying crop conditions but its opposite effect on the consumer is unacceptable to the authors. Further, under Philippine conditions in 1971, foreign exchange constraints dictate a strategy for reaching self-sufficiency by stimulating production through rising prices, as well as declining unit costs.

price level should take into account the effects of relative price changes on hectarage (and yield) and on use of modern yield increasing inputs. Studies of the price elasticity of hectarage by Mangahas provide guidelines of hectarage and resulting yield changes but subjective evaluation must be relied upon to judge effect of expected palay price on increased input use.[44]

The relative price structure existing in the late 1960's did induce increased input use with resulting increased yields. Total output was probably close to self-sufficiency by 1970.[45] So, a floor price at harvest that would maintain for the 1971/72 harvest the late 1960 terms of trade for the farmer would appear to be an appropriate first approximation. Such a floor price for the Central Luzon region would approximate P21.50/cavan of palay ordinario.[46] This price should be announced several months ahead of each major planting season and maintained through the related harvest if it is to have the desired effect.

Time is fast approaching when the guaranteed floor price can be reduced relative to other goods. Profitability of modern technology with improved seed is widely recognized in the Philippines. At 1971 fertilizer prices and a palay price of P21.50/kg., incremental benefit cost ratios are above 3 to 1 for incremental fertilizer application of up to 90 kg. nitrogen/ha.

44/ Mahar Mangahas, op. cit., pp. 102 ff.

45/ The need to import again in 1971 might seem to contradict this self-sufficiency conclusion. However, with the heavy typhoon damage of the 1971 crop the low production could be a reflection only of a near maximum negative deviation from a self-sufficiency trend.

46/ This assumes a 33.3 percent inflation of the Consumer Price Index excluding rice between period immediately preceding the February 1970 devaluation and harvest season 1970/71. If inflation persists, further adjustment would be required in floor and ceiling price levels. This price might be biased on the low side for the 1971/72 harvest considering the possibility that farmers would tend to substitute corn for rice after the relatively high corn prices in [illegible]. In the longer run, this bias would tend to disappear as corn/rice relatives [illegible] returned to historical relationships.

(compared to no fertilizer use). Such ratios far exceed those necessary to attract and hold farmers with assured water supply to high-yielding seed and the modern inputs required. With realization of the self-sufficiency objective the higher income generated by this technology can be transferred to other investment to the extent the floor price can be lowered and still induce production at a level to balance demand at the related ceiling price. To continue unnecessarily high price supports would tend to discourage spread of modernization to a diversified agriculture. It also would perpetuate -- without reason -- the regression income effects, the affluent farmer is more apt to have the irrigation which permits benefit from the new technology.

Given the historical average marketing margin in the Central Luzon/Manila market of approximately 25 percent from farm to retail, this floor price would lead to a retail price in Manila at harvest time of P2.08/ganta of maoan 2nd class rice.[47] The retail price later in the year must be sufficiently higher than the harvest-time price to allow for costs and risk of holding (for 4 to 5 months). This would require a 10 percent rise or a ceiling price before harvest of approximately P2.30/ganta.[48] It is important that this range allow for full storage costs as otherwise Government operation will have to displace private storage, with responsibilities and financing that the Government is probably not desirous of assuming.

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[47] See analysis of marketing margins in Chapter IX.

[48] This price rise allowance of 10 percent is 2 percent greater than the average seasonal swing of the seasonal index for the Manila market (see Table VIII-2) and provides a risk premium above holding costs. This allowance is low compared to the 20 percent range in effect in both Indonesia and Korea in 1971. But in both these countries the interest rate structure was approximately double that in the Philippines. For a discussion of the Korean policy, see Jin Hwan Park, op. cit.

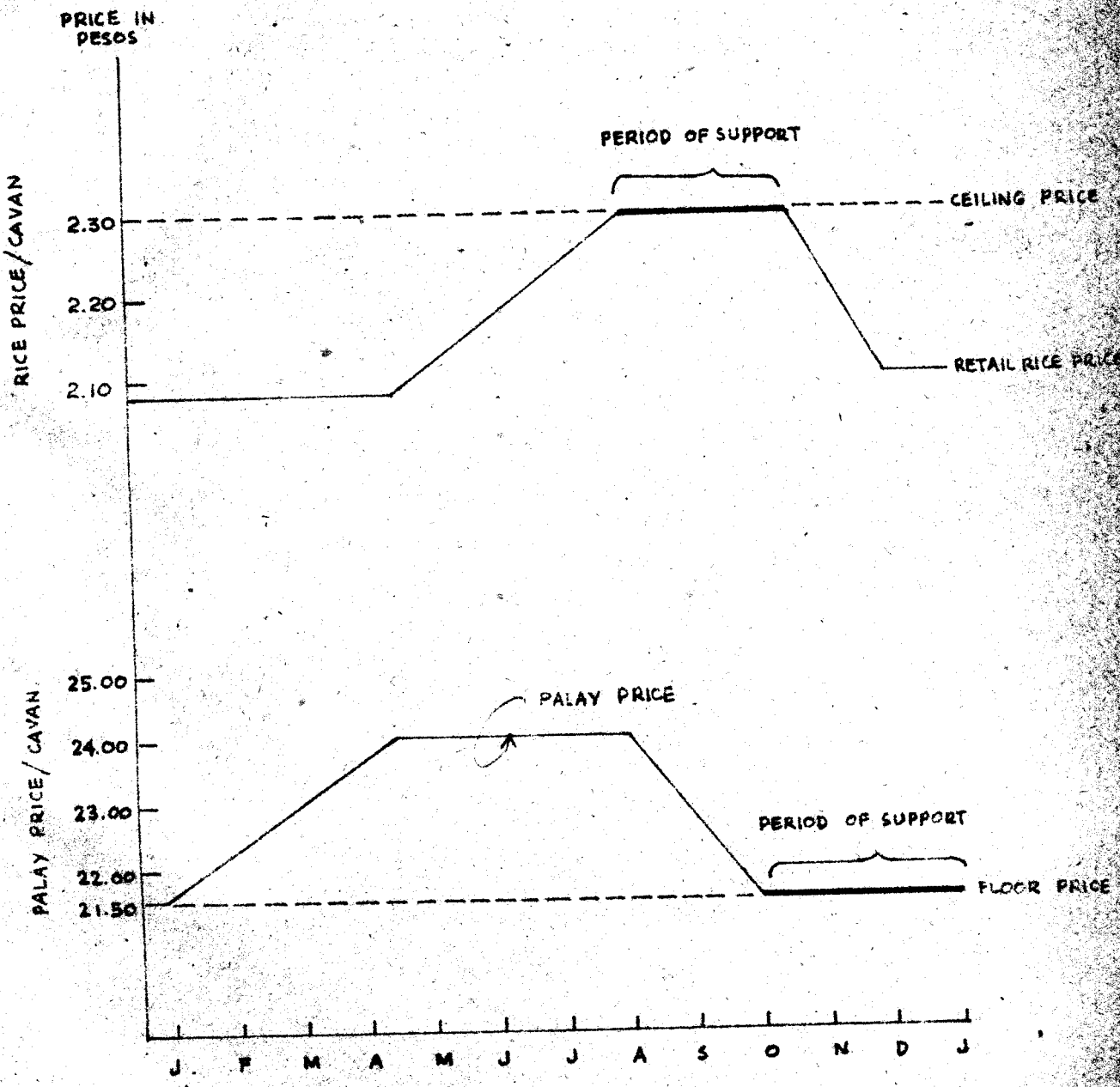
With production near self-sufficiency in the Philippines, this retail price seasonal range should include the world price to enable importation or exportation with greatest overall advantage, as may be required. The center of the range indicated above would correspond to an FOB Manila price of approximately US $145/ton on ordinary quality rice, 35 percent broken. This is almost double the 1971 export price for equivalent quality from either Thailand or Burma. The suggested price level therefore would prove profitable only for imports but would require a heavy subsidy for exports. This potential profit from imports explains why continued isolation of the domestic from the world market is necessary; unprogrammed imports by the private sector could interfere seriously with floor price maintenance. Uncertainty both as to production response and world price levels gives emphasis to the need for flexibility in legal price policy directives.

The seasonal pattern of rice and palay prices that might be expected in the Central Luzon/Manila region when maintaining the above floor and ceiling price limits is illustrated in Chart VIII-14. The agency administering this policy for the Government would be expected to purchase at the floor price all quantities of palay offered at that price by the farmers and to inject rice in markets of major urban areas whenever required to keep the retail price below the ceiling.

3. Spatial price dimensions. The retail ceiling price level at major rice marketing and population centers outside Manila should correspond closely to the Manila ceiling if equilibrium is to be established through the market by private traders and speculators. Inter-market price ceiling differentials should not exceed transport costs. Deficit regions are an example

CHART VIII-14

EXPECTED SEASONAL PATTERN (—) OF RICE AND PALAY PRICES UNDER PRICE POLICY IN MANILA AREA: (ORDINARY QUALITY)



Source: Basic Price Data, See Appendix I

where ceiling price might exceed that in Manila but within [illegible] cost limits.[49]

Small regional differences will appear seasonally reflecting varying harvest patterns. This does not require differences in control prices inter-regionally. It means seasonal support and injection periods will tend to differ, a consideration sometimes forgotten by head office administrators who are often caught by surprise when price fluctuates in regional centers.

4. <u>Varietal standards</u>. Two questions arise relative to rice varieties: Should different floor and ceiling prices be specified for key varieties or, if only one set of floor and ceiling prices is used, to what variety should it apply?

As illustrated previously, commonly consumed varieties maintain price differentials that change but little over time. Thus, it can be expected that maintenance of floor and ceiling prices for one popular variety will set the relative price pattern of other varieties.

Selection of the standard variety depends on price policy objectives and market considerations. Considering the usual objective of assuring a reasonable price for the poorer consumer, most countries have chosen to support the floor price of an inexpensive common variety of palay. This tends to minimize subsidy requirements for stocks purchased at support levels and injected at the ceiling price. In the Philippines, this would mean a floor price for palay *ordinario*, a category which includes some difference in

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49/ In other developing countries, it is rare to provide such regional differentials because of the complications added to implementation.

varieties from region to region and over time, especially considering the rapid adoption taking place of new high yielding varieties. The ceiling price then must apply to common inexpensive varieties, with a 2nd class milling that permits larger conversion (and thus lower price) from the palay ordinario.[50/]

5. The buffer stock. The price policy described above requires a buffer stock carefully spread out around the country to enable expeditious market injections for ceiling price maintenance. Such stocks are replenished by rice imports when floor price support does not warrant palay purchases of the total required for the next season's buffer. Optimally, the size of the buffer stock will vary seasonally, injections reducing stocks to a minimum prior to harvest, with a maximum some months after harvest.

Subsidies to RCA can prove a heavy drain on Government revenues to the extent ceiling prices are set too low for recovery of storage and financing costs. Since these costs will vary depending on the degree of stability provided, serious consideration need be given to this decision. The buffer stock required to maintain a given ceiling price depends on the amount that annual production deviates from trend, with provision for additional allowance to allow for transport constraints and variable stock dispersion requirements. One standard deviation from the production trend approximates

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50/ Some countries in Asia have attempted supporting improved qualities as well as the cheaper ones. Given political and social realities in developing countries, such a policy has invariably increased stabilization costs. Government buying depots tend to classify most receipts at the higher price level, but political pressure requires that all stocks be sold at the ceiling price of the common varieties. To support only a higher quality variety leads to the same pitfalls.

90,000 tons of rice. In other words, with an allowance of 10 percent of stock dispersion, it would be expected that a maximum buffer of about 100,000 tons of rice (3.4 million cavans palay) would prove adequate to offset below-trend production and support the ceiling price in two-thirds of the years. A buffer of 200,000 tons of rice (6.8 million cavans palay) would be expected to be adequate 95 percent of the time. This second alternative is the balance of risk against costs frequently chosen in other Asian countries. At mid-1971 prices, it represents an investment in palay of P150 million with holding costs over a normal year of approximately P15 million.

Management of buffer stocks would then anticipate a decline in stocks before harvest one year in twenty to as low as 20,000 tons. Handling of imports and exports would depend on crop reports early in the year. With poor crops and small buffer carryover, imports need be planned for arrival by mid-year. When forecasts indicate bumper crops, surplus for export may be predicted soon after harvest. Whether to hold large surpluses or export depends on relative costs. If exports are resorted to soon after harvest, with adverse weather or disease reducing later harvest, sufficient time remains to arrange for imports which may bring foreign exchange gain if low quality rice is imported to replace higher quality exported earlier.

5. Implementation and cost considerations. The above recognizes that RCA cannot in a normal year cover costs of holding its base buffer stock, although this subsidy can be reduced by careful stock management.[51/] It also is unlikely that the 10 percent seasonal support spread will be sufficient to cover their costs on domestic palay bought and sold.

51/ A theoretical study by Shlomo Reutlinger suggests that budgetary costs might be reduced and social benefits increased by maintaining a smaller domestic buffer stock supplemented by more frequent imports and exports. See "A Simulation Model for Evaluating Buffer Stock Programs," in Symposium on Food Grain Marketing in Asia, Asian Productivity Organization, APO Project SYP/VI/70, Tokyo, Japan (December 1970), pp. 115-122. Such a plan would require exacting stock management and should be studied carefully under Philippine conditions before considering adoption.

The subsidy necessary to cover the above could be partially offset by widening the seasonal price spread through raising the ceiling price. While this would conserve Government revenues and benefit the taxpayer, the rice consumer would tend to suffer through higher prices, with the middlemen sharing in the benefits. It is unlikely that much of any benefit would be passed on to the producer. For each 100,000 tons sold by Government at a 5 percent higher ceiling price, budget savings would approximate ₱4 million. The effect on the Consumer Price Index would be an increase of less than one-half of one percent.

Finally, there are details of policy implementation critical to success. As can be seen, the decisions to buy palay or inject rice are determined by market price alone. During critical seasons, management requires daily price quotations of controlled varieties, more specific than quotations currently being supplied by BAE. Decentralized authority for purchase and injection can reduce time lag in taking action. And, management must anticipate requirements for dispersion of credit facilities in advance of harvest. For appropriate dispersal of buffer stocks, management must have frequent stock reports. Inter-regional shipments will be required at times. Also, firm arrangements must be made for milling palay so that rice will be available when needed. As there are limits to the time that rice or palay stocks can be held without excessive deterioration, arrangements are required for economically replacing old with new stocks when necessary.

The stabilization organization and its methods of arranging finance are of price importance. These are discussed in detail in Chapter 11.

VI. Summary and Conclusions

1. While rice prices in the Manila market decreased secularly pre-war, they have shown a slight rate of increase since 1950 both in money terms and relative to movement of the Consumer Price Index.

2. In recent years, the Philippine rice market has been insulated from the world markets. Higher Philippine prices may have helped feed inflation but generally they enabled importing rice to meet consumption deficits with little or no drain on Government revenues.

3. Since 1957, the trend of retail prices has increased in real terms at a rate between 1 and 2 percent a year in most regions with greater variability between regions on a year-to-year basis.

4. While the price relationships between rice and both corn and wheat have remained fairly constant over time, large variations occur from year to year. With the probability of important elasticities of substitution, these price variations must be considered in demand predictions.

5. Retail rice prices tend to reach seasonal highs before harvest with lows toward the end of harvest time, with some differences between regions. Palay price fluctuations lead retail fluctuations from 1 to 3 months.

6. The range of seasonal price fluctuations was less at retail than on the farm. Both declined in recent years with larger declines in retail prices. In the 1960's, seasonal fluctuations of retail prices approached the low levels of Taiwan.

7. As a guide to foreign trade in rice, seasonal fluctuations of the Thailand export price of rice are not advantageous during the period of seasonal need in the Philippines. On the other hand, requirements in Asian deficit countries come at seasons when Philippine surpluses would be available.

8. Annual price peaks 40 to 50 percent above the yearly low are not uncommon either at retail or farm levels even though spreads of seasonal indices approach holding costs of about 10 percent. These wide price variations likely result largely from inadequate information for marketing decisions accentuated by credit, transport and storage deficiencies. These fluctuations can bring severe political repercussions with concern both for the urban poor and small farmer. Also, the millers are affected directly, tending to turn to speculation rather than efficient processing. Buffer stocks and price stability policies are suggested but could bring market deterioration unless accompanied by effective management and consistent financial support.

9. After harvest, price rise follows different patterns from year to year, sometimes not rising at all. And the seasonal price index is not an accurate guide for predicting price patterns in any specific year. The probability of loss is high for the trader/miller who holds stock after harvest. The farmer also faces similar high probabilities of loss from holding if he considers all holding costs, a necessity for loans from formal credit sources. He could expect low probability of loss dropping to tolerable levels only if he assumed zero opportunity cost for his own funds plus no storage costs. Thus the stereotype of large profit possibilities missed by the farmer if he could only afford to hold stocks for later season price rise appears to be misleading. The trader who profits does so as

an astute trader and must be able to shoulder losses that small farmers could not afford to absorb.

10. In spite of frequent weather disturbances and imperfect transport, the forces of the market (with some help from RCA) were generally effective in maintaining inter-market retail price differentials less than inter-market transport costs. Legaspi was a major exception with prices over long periods remaining far above those in Manila. Ceiling price support could provide a short run answer but longer run solutions suggest need for better price communication and improved credit climate.

11. Filipino demand brings a price premium to rice variety and appearance differences, with less value placed on whole grains than in the world market. These differences dictate that rice mill investment will be guided by the market to be served.

12. Evidence was given indicating the need for price stabilization to accomplish Government objectives. A price and associated buffer stock policy to meet these needs were described and their advantages and shortcomings evaluated.

APPENDIX VIII-1

Rice and Corn Prices: Variety, Periods, Sources and Geographic Areas Covered

Variety	Period	Area	Source
	Farm Prices (Palay prices received by farmers, 44kgs)		
Macan ordinario or equivalent	1957-1970, monthly	Nation, regions	(1)
Wagwag 1st class or old harvest	1959-1970, monthly	Central Luzon	(1)
	Wholesale Prices (Palay, 44 kgs)		
Macan ordinario or equivalent	1957-1970, monthly	Cabanatuan	(2)
Macan ordinario or equivalent	1957-1970, monthly	Cotabato	(2a)
Macan ordinario or equivalent	1957-1970, monthly	Laoag	(2b)
	Wholesale Prices (Milled rice, 56 kgs)		
Ave. of all classes quoted	1914-1926, monthly	Manila	(3)
Ave. of Macan 1st & 2nd class	1926-1951, monthly	Manila	(2)
Macan 2nd or equivalent	1952-1970, monthly	Manila	(2)
Macan 1st class	1955-1968, monthly	Manila	(2)
Wagwag 1st & 2nd class	1956-1970, monthly	Manila	(2)
Raminad 1st class	1956-1970, monthly	Manila	(2)
Macan 2nd or equivalent	1957-1970, monthly	Cotabato	(2a)
	Retail Prices (Milled rice, ganta)		
Macan 2nd or equivalent	1955-1970, monthly	Manila	(2)
Macan 2nd or equivalent	1957-1970, monthly	20 Trading Centers outside Manila	(4a)
Wagwag 1st class	1957-1970, monthly	Manila	(2)
	Corn Prices		
Corn grain, red and white, retail	1950-1970, monthly	Manila	(4)
Milled white corn, retail	1958-1970, monthly	Cebu City	(4)

(1) DANR, Bureau of Agricultural Economics
(2) Bureau of Commerce, Manila
(2a) Bureau of Commerce, Cotabato Branch
(2b) Bureau of Commerce, Laoag Branch
(3) Rice Commission, Report of the Rice Commission to the President of the Philippines 1936, Manila, Bureau of Printing, 1936, p. 72. (Converted from per sack of 57 kgs. to per sack of 56 kgs).
(4) Central Bank, Dept. of Economic Research
(4a) Central Bank, Dept. of Economic Research, except for Cotabato from Bureau of Commerce - Cotabato Branch up to July 1966. After July 1966 from Bureau of Commerce, Manila.