

Philippine Rice Policy Reconsidered in Terms of Urban Bias*

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The Rice Problem

In 1971, the latter half in particular, we experienced another rice crisis. It was a crisis, like our previous crises, in that the [retail] price of rice had risen to a very high level, and the urban consumer was complaining. The (urban) newspapers, radio and TV played their usual role, and complained, with more or less eloquence. Of course, all factions of the political opposition, whether conservative, reformist or radical, complained too; they did their complaining where they felt they would be most appreciated and most effective, in Metropolitan Manila and other cities and urban centers, in speeches, telecasts, and writings, some in small letters and others in large red ones.

Research on
rural data

It seems clear from this that the long-run objective of the Philippines with respect to rice is a level of security and contentment, somehow defined, for the rice consumer, especially the urban rice consumer. This holds for past and present leadership and in all likelihood will hold for future leadership -- whatever political leaning may be the source -- as well. In this essay this objective is simply treated as a given. It is likewise a given that the welfare of rice farmers, landowners, millers and traders is of no real consequence except insofar as the actions and achievements of these persons affect the welfare of rice consumers. This will appear to be fair to some, and unfair to others. Do not rice farmers

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and their households constitute a very large portion of our population? This essay will not attempt to discourse on the fairness of the objective, but will simply accept it as it is.

Having defined the problem as basically an urban one, we then consider the reasons behind the high retail price. These are partly monetary and partly consisting of real demand and supply influences. It will be argued that the monetary, or inflationary, element has been extremely important in recent years and that, being monetary rather than real, can be countered only to a limited extent by real solutions such as large imports of rice. A second reason for emphasizing the inflationary element is that it is anti-equity in character, and policies promoting equity or at least dampening anti-equity have been long neglected. The real problems in supply and demand for rice in the past year have not been insignificant, but there would seem to be ground for the hope that these are temporary ones. From these considerations, some basic policy lines will be suggested.

The Effect of Inflation

"The price of rice in the Philippines fell continuously from 1967 to 1970, and rose only in 1971". This statement would evoke disbelief from most readers, simply because most readers are urban people and recall that the price of the rice they buy has always kept going up. Indeed it has. But then, prices of all other commodities have also continuously risen, and it is a simple fact that the price of rice has risen much more slowly than have prices of other commodities, so that the real price of rice, or its cost in terms of other commodities, has indeed fallen over 1967-1970, and risen again only in 1971. Although farmers, rice landowners and other sellers of rice are acutely aware of this fact,

the fact has not been heralded. Since the heralds, the newspapers and so forth, are urban institutions which respond to events of political interest, i.e., urban interest, we really could not have expected more of them. The price of rice may be growing too slowly for some people (farmers, and perhaps agricultural economists), but, slowly or quickly, it is growing, and that is bad from the urban viewpoint. (Not for all urban dwellers, though; more on this later) Relevant price data for rice and other commodities are given in Table 1.¹

Since the real price of rice has been falling, then it is elementary economics that growth in the supply of rice relative to the demand for it has been more rapid than growth in the supplies of other commodities relative to the demands for them. The nominal price, which faces consumers in the market, has been rising since the general rate of inflation has been more than a match for the real forces tending to depress the price of rice. Despite imperfections in prepared price indices,² it is obvious that the problem has been particularly serious in 1970 (20% inflation) and 1971 (15% inflation).

¹It is also of common knowledge that the international market for rice has been getting weaker. The price F.O.B. Bangkok of 25% broken white rice (a medium quality) peaked at about \$210 per metric ton in November 1967, and had fallen to about \$90 per metric ton by March 1971. The prices of other export grades have also moved downwards.

²For instance, a non-monetary phenomenon like bad weather will cut agricultural supplies and hence raise prices of products which are agricultural or dependent on agriculture; the prepared price indices will reflect this type of broad price increase as well.

Inflation in turn has been due to events in the monetary, fiscal and international trade spheres, some of these events being the result of domestic government policy, and others not. The rate of growth of the domestic money supply is a prime determinant of the rate of domestic inflation, though not the only one (a defender of domestic monetary policy has pointed to the fact that the money supply growth, though heavy in 1969 and 1970, was damped in 1971 to only 7%; yet strong inflation continues). The empirical study of inflation is far from a closed subject, and does deserve concentration in these times.¹ But this is straying from the subject, which is rice. Knowledge of the determinants of inflation and the policies by which it may be contained is imperfect, but can be improved. // This is simply to remind persons in government that, in suppressing inflation, one price, possibly the most important price, which they suppress is the price of rice. // *LES VEDDO! OUI.*

Si

It might be pointed out that not all of urban people are affected so harshly by inflation. An increase in a price index is but an average of some price changes which are relatively large and some relatively small. Those persons who produce goods and services which have prices flexible upwards will be net gainers, and those with rigid commodity prices and wages will be net losers. Those whose assets have flexible prices (real property) are protected, and those whose assets have fixed money values (bank accounts, insurance policies) are not. The first main problem, it has been stressed,

¹ One model has the determinants of the general price index as the domestic money supply (three months lagged, roughly speaking), the gross national product and the wage rate (as a cost-push factor). Cf. J. Encarnacion, Jr.; R.S. Mariano, and R.M. Bautista, "A Macro-economic Model of the Philippines, 1950-1969", U.P. School of Economics Discussion Paper 71-11 (Revised), June 22, 1971.

is that [urban people are adversely affected by increases in the market price of rice.]² The second problem is that, among urban people, those more adversely affected, [the net losers, are those who are poorer off to begin with.] Those with fixed incomes, such as government employees, those in regulated industries, such as jeepney drivers; those whose assets are mainly in savings accounts.¹ [Thus the differences in degree of flexibility of the various prices of commodities and services imply that inflation worsens the distribution of real income and real wealth.]

[This worsening of the urban equity situation is alleviated to a small extent by a rice price which increases relatively slowly.] In the past five years, the money wage rate has not succeeded in rising faster than consumer prices in general, but it has definitely risen faster than the price of rice. As Table 2 shows, wages were worth nearly twice as much rice in 1970/71 as in 1955; but they were worth a little less than in 1955 in terms of consumer goods as a whole (including rice). The average worker could in 1970/71 purchase only 93% of the number of consumer baskets which he purchased in 1955. With the change in the price of rice relative to other commodities, economic theory would suggest the hypothesis that the typical 1970/71 basket would however contain more ^{rice} ~~rice~~ than the 1955 basket.

¹A further complaint here is that government ceilings on the rate of interest which banks may pay to savers cut off a measure of protection from inflation and force such savers to endure negative real rates of interest. If the real rate of return on a safe investment were 10%, and the expected inflation rate were 10%, then competition among banks, in the absence of an interest rate ceiling, would push the rate offered to savers to a level close to 20%.

Real Supply Problems

The real or deflated price of rice is determined by real supply and demand conditions. ~~If there~~ were no growth in supply, from either production or imports, then the annual growth in demand, mainly population-based, would push the real price upwards; the annual growth in production counteracts this, and imports also play a role, though much less effectively. The contribution of these determinants to real retail price changes have been quantitatively studied.¹ The decline in the real rice price over 1967-1970, followed by the increase in 1971, there reflects a net improvement in supplies available over the past five years, except for the year just past.

The real supply problems in the past year can be enumerated. First, the weather: ⁽¹⁾Yoling of mid-November 1970 (the midst of the main harvest) has been rated the worst storm to hit Central Luzon since the nineteenth century. A second problem is that of peace and order in the South, Cotabato in particular; unfortunately, it is very difficult to estimate the effects of this situation on production. ⁽²⁾third, there is the tungro virus disease, which has affected the crops of both 1970 and 1971. The Bureau of Agricultural Economics expects that production in Central Luzon for crop year 1971/72 will be less than that of 1970/71 by 10.0 million cavans of palay, a drop of 30%, mainly on account of the tungro virus in this region. Production in all other regions appears to have risen substantially, such that the expected decline in national

¹M. Mangahas, "The Effect of Importation on the Price of Rice", The Philippine Review of Business and Economics 5:2 (December 1968), 30-42.

production is only 4.4 million cavans.¹ The tungro disease is not thoroughly understood; in any case it does not appear that it will be a permanent problem. Dr. Chandler has given his opinion:

" [Tungro] is not carried by the seed. Probably the outbreaks of the disease in 1970 and 1971 were due to the great increase in the population of the green leafhopper . . . It seems to come and go and is apparently related to the ecological factors affecting the green leafhopper population. This, of course, has yet to be proved conclusively."²

A fourth and not too visible problem has been the slowdown of the flow of credit to the rice sector.^④ Production loans for rice from commercial, rural and development banks were at their peak in 1967 (about P651 million), but they slipped away during 1968-1970 (about P550 million per year only), with some but not complete recovery in 1971 (P605 million). This information is in Table 3. The credit decline was mainly in the commercial banking sector, and there it was mainly in the Philippine National Bank. There was drastic cut in Central Bank lending to the PNB for rice and corn purposes in 1970 and 1971; and this was only slightly offset by increased Central Bank lending to rural banks for rice credit purposes (Table 4). The cut in Central Bank support of the PNB is said to have

¹Bureau of Agricultural Economics Palay Production Forecast as of January 1, 1972, covering the crop year July 1, 1971 to June 30, 1972.

²Letter of Dr. Robert F. Chandler (The International Rice Research Institute) to Dr. Gerardo P. Sicat (The National Economic Council), December 27, 1971.

been made in conformity to restraints imposed by the International Monetary Fund. It does seem clear that such lending has been inflationary, in view of the heavy outstanding account of the PNB with the Central Bank on loans for rice and corn (Table 5). Also, some banks have been unable to meet requirements¹ imposed for the privileges of the rediscount window; and it is claimed that land reform has implied the credit standing of some land owners with banks.

Fifth, ⁽⁵⁾ there has been an increase, consonant with the peso devaluation, in prices of fertilizer and similar chemical inputs which farmers purchase.] Table 6 contains a rough indication of this, the cost of nitrogen (from ammonium sulfate and urea), the prime rice fertilizer has risen by about 40-50%.

¹Central Bank Circular No. 306 of July 19, 1970 states that commercial banks have to meet the following requirements, among others, in order to have access to Central Bank credit facilities. (1) The ratio of past-due direct and indirect loans to the bank's own stockholders, directors and officials to its aggregate past-due loans should not exceed 5%. (2) The bank should have a minimum paid-up capital of P20 million. Increases in paid-up capital above the minimum entitle the bank to proportionate increases in its basic rediscounting ceiling. (3) The bank's capital account, as adjusted to cover any valuation reserves recommended by the Central Bank to cover doubtful and loss accounts, should meet the minimum capital required under Section 22 of R.A. 337 (15% of total assets less cash on hand, amounts due from banks, and government indebtedness held. (4) The bank should not have expanded its portfolio through rediscounting for purposes other than to finance desired economic activities, such as food production and export-oriented industries. (5) The bank's foreign exchange holdings in excess of 30% of outstanding letters of credit should be disposed of in the interbank market.

Nevertheless, there are a number of hopeful elements to the supply situation. Five years after the introduction of the new rice varieties, ⁽¹⁾over half of Philippine rice hectarage is now planted to them.] In Central Luzon, where new varieties were planted on 46%¹ of rice area in 1969-71, one would not expect any hindrances to a rapid shift from tungro-susceptible varieties (IR8, IR5, IR22, Wag-wag and some other Philippine Seed Board varieties) to tungro-resistant high yielding varieties (IR20, C4-63, C4-137), not a shift to tungro-resistant traditional varieties.² There is a possibility that in any case the severity of the tungro disease will decline. The ecological theory behind its cyclical appearance may be correct. It appears that the present rice stand (dry season) is much less affected by the disease than the previous wet season crop was.³

A second good note is found ⁽²⁾in the recent progress of irrigation.] The proportion of rice crop area irrigated rose from 31% (average) in 1963/65 to 42% in 1968/70 (Table 7). Better irrigation will both raise yields of any variety and hasten the adoption of the high-yielding varieties and one should hope that the irrigation trend can be maintained.

¹Bureau of Agricultural Economics, Agricultural Economics Statistics and Market New Digest, 5:22 (November 10, 1971).

²Varieties listed are from letter of Chandler to Sicat, cited earlier. In February 1972, the NEC's Inter-Agency Technical Committee on Rice and Corn Policy made a one-day visit to several points in Central Luzon. Many of the farmers met on that visit spoke of shifting to the better new varieties and there was no mention of a shift back to the traditional varieties.

³Guarded optimism, since the dry weather is inherently less favorable for disease.

Demand: The "Hoarding" Problem

People's first reason to demand rice is, obviously to consume it.^① The amount they wish to consume depends on their numbers (population), their real income, and the price of rice relative to other commodities, corn in particular. The force of the first two factors, population growth and real income growth, is unquestionably steady and regular through time. These are not the source of intermittent rice crises. The rice:corn price ratio is another matter. Although rice is ordinarily twice as costly as corn, by weight, in 1971 it was only about 40% more costly, due to the substantial increase in the price of corn.¹ It has thus been argued that some consumers, i.e., those in the Visayas who are accustomed to consuming corn as a staple, shifted to some extent from corn to rice in 1971, and thus exacerbated the rice crisis. There is some evidence of this, not altogether firm.² As a personal judgement, I do not think that rice-for-corn substitution was a factor of serious magnitude in the 1971 crisis.

¹Randolph Barker has computed the following rice:corn price ratios: 2:13 in 1967, 2.09 in 1968, 1.80 in 1969, 2.00 in 1970 and 1.39 in 1971.

²See C.T.Aragon and L.B.Darrah, "Cereal Consumption Patterns" Department of Agricultural Economics, U.P. College of Agriculture, Staff Papers Series 115, November 1971. This study, from a forthcoming M.S. thesis by Aragon, reports on two consumption surveys, one in October-November 1970 and the second in May-June 1971. The main finding is that per capita rice consumption was about 10% larger in the second period, when the rice:corn price ratio was about 10% lower. The survey is reported to have been nationwide, with a sample size of about 1,000 on each ground; no further details are given. A troubling result is the extremely high per capita rice consumption level obtained: 101.8 kg. per year in the first survey, and 113.4 kg. per year in the second survey. In contrast, Professor Leon A. Mears' annual estimates of per capita availability during 1954/55 to 1969/70 have a peak of 96.2 kg. (in 1969/70), and in twelve years out of the sixteen are less than 90 kg. These suggest that further checks for representativeness need to be done on the Aragon-Darrah samples.

A second reason ⁽²⁾ to demand rice is simply for the sake of holding it. Traders obviously need some inventory at all times, sometimes less and sometimes more. And so do ordinary households. They need some stocks of rice to hold, for mere possession does them some good much as a bank account does them good; one need not always spend money or consume rice in order to benefit from it. What will be argued is that the stock demands for rice by both traders and households can fluctuate violently from one year to the next, depending as they do on the political situation. These fluctuations tend to be serious obstacles to efforts to deflate a rice crisis. Translated: [both traders and ordinary households are hoarders who vary their hoarding to the situation.] Periodically, the sizes of these hoarding become huge.

For traders, first of all, it makes sense business-wise to hoard more when the government, a big competitor, is distributing imported rice. Everyone realizes that the government has not been permanently serious about subsidizing consumers in this way. For one thing, the Rice and Corn Administration has never had a regular budget for the purpose. Its traditional source of funds has been the Philippine National Bank, and its desire and ability to borrow do seem to depend on the current mood in Malacanang. For another, there is something about odd-numbered years that is conducive to rice importations, and something about even-numbered years that is not (usually). A trader makes more profits by timing his hoarding appropriately, and a consequence of this is the fact that rice imports,

historically speaking, have had very little effect on the real price of rice.¹ This in all likelihood has also contributed to the dearth of consumer confidence in the government, and forced consumers to hoard more than they otherwise would.

[Urban consumers for their part must hedge and change their hoarding patterns whenever their expectations change with respect to future prices of rice. Their expectations, naturally, are affected by the nature of the publicity on rice harvests; by announcements of rice imports; by the sight of rice queues; by the state of urban disorder from demonstrations, strikes, riots and bombings; by the suspension of the privilege of the writ of habeas corpus] (and by its restoration as well). Suppose the average household in a city feels it would be prudent at the moment to keep on hand four gantas instead of two? This would hardly mean complete security, and yet if the city's households tried to fill such demands within a few days' space, the retail price could hardly be unaffected.

Manila during election 1971 is a relevant if extreme case. As the campaign progressed, large shipments of imported rice arrived (Table 8), of which 52% was distributed in Greater Manila.² The RCA thus distributed about 12,000 tons in September, 33,000 tons in October and 30,000 tons in the first half of November, to the metropolis. Whereas Greater Manila

¹The effect of an equivalent amount in extra domestic rice production on the real price would be four or five times larger. See Mangahas, "The Effect of Importation on the Price of Rice", *op. cit.*

²J.D. Drilon, Jr., The RCA in the Last Eight Months (Terminal Report), December 6, 1971, mimeo, p. 10. The strategy was to try to contain consumer prices nationwide by concentrating forces in Greater Manila. The figures cited in the paragraph above are obtained by applying 52% to the data in Table 8.

consumes roughly 30,000 metric tons of rice per month¹, RCA by itself supplied this much in October and double this much in the first half of November. Yet the price of rice in the city continued to rise, in both real and nominal terms, in October, and only slightly declined in November (Table 1). In October there must have been large hoarding unless we suppose that the city received no rice all² from sources aside from RCA, which seems rather unlikely. In early November, even if no other source but RCA existed, it would appear that for every ten sacks distributed, one was consumed and the other was added to hoards. Whose hoards? Very likely those of our familiar culprits, the unscrupulous middlemen, to some extent. However, given Plaza Miranda and the loss of the writ, at no other time in the post-war history of our rice crises, in my opinion, have urban households had stronger motivations to build up their personal stocks of rice. Thus 1971 is uncharacteristic among our rice crises in that, in addition to problems of inflation and production, we appear to have had an extraordinary increase in demand as well. We have experienced the results both price-wise and election-wise. (If they had been different, perhaps we would not have had Mr. Drilon's Terminal Report.)

What Kind of Rice Policy Should We Have?

It has already been stressed that rice-wise Philippine society favors the welfare of the urban household over the rural household, and that among urban households it favors the welfare of those who are poor over those who are not. By "society" here is meant the government, both the administration and the opposition, and most other pressure groups.

¹Drilon's estimate, ibid., p. 30.

²I.e., if we suppose that all the "commercial" rice in the market was in reality RCA imported rice.

The mass media are among the latter, and so are the radicals (has anyone heard the slogan Itaas ang halaga ng palay?). Judging by the excitement generated by high rice prices at the retail level, avoiding such prices has top priority, even if rice imports are required. "Self-sufficiency" in practice gets second priority.

[High rice prices are prevented by (1) halting inflation, (2) improving the supply of rice and (3) containing civil disorder, as it inflicts unusual stresses on the demand for rice.] (With respect to the third item I have no specific recommendations.)

[⁰ Inflation is stopped primarily by keeping the money supply in check; lessening government borrowing from banks, particularly from the Central Bank; raising taxes, and the efficiency with which they are collected; eliminating theft of public funds; counteracting expansionary effects of export surpluses,] etc. A paragraph obviously cannot do the problem justice, particularly one written by an amateur. The point is that stopping inflation cannot be expected to be the responsibility of the Rice and Corn Administration/Department of Agriculture. The solution rests with Malacañang/Central Bank/Department of Finance/National Economic Council, and/or with tax legislation. And, obviously, the benefits from halting inflation go further than preventing rice crises.

(² As it may be difficult to stop inflation quickly, one can simultaneously try to counterbalance its effects. In any case, social justice would require that past inflation's harmful effects be counter-

balanced. It is apparent enough who the losers and the gainers from inflation are. The straightforward solution is to tax away the gains of the gainers, and redistribute these, in one way or another, to the losers. There are some taxes whose collections automatically rise, because the tax base increases as there is inflation: personal and corporate income taxes; property taxes, but only if assessments are increased as market values do, without delays; all ad valorem taxes on commodities whose prices are flexible with inflation. An egalitarian would draw from these taxes, and from new ones well -- since present taxation probably does not siphon off all windfall inflationary gains -- to pay for subsidized rice to be distributed to persons who are losers from inflation. The recipients would be the poor; those with fixed salaries, such as government employees¹; those whose wages might be restricted because the prices of the products or services they produce are institutionally fixed, such as jeepney drivers; and perhaps others. No doubt this would be a difficult job for the Social Welfare Administration or whatever other agency. But it would be a task clearly oriented in favor of particular income-classes, and pro-equity. Without such a program, continued inflation will imply a further worsening of the real distribution of income and wealth. Indeed, even if inflation were stopped today, would we not care to redress the injustices it brought about in 1970 and 1971?

(2)
The second front against high rice prices is concerned with the supply side. In the very short run, first of all, additional supply can only come from imports. This solution has been rather ineffectual

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This recalls how the Indonesian government had to pay its employees partly in rice, during the inflation-ridden mid-sixties.

in the past, as argued earlier. I think it has a better chance of success in 1972, because government distribution of imported rice did not peter out after election 1971, as traders may have expected. If it grows clear that government competition against traders will continue indefinitely as long as prices are unsatisfactory, and not merely election-oriented, the expected gains from hoarding by traders will diminish.

A few words might be said of the common fallacy that the [RCA would be better able to keep consumer prices down if it had more funds to obtain rice from domestic farmers, rather than from abroad. Prices can be lowered if total supply rises, but the total supply will not increase when farmers sell a million cavans to RCA rather than say to private millers.]

[The result is merely a reallocation of the trade between the public and the private sectors.] Conversely, neither can farm prices be supported if it is expected that all RCA purchases from farmers will be distributed to consumers; some part must be kept for indefinite storage, or exported. Otherwise there will be no net increase in demand, but merely a diversion of part of the demand of urban households away from private traders and towards RCA.

[Next, there are various types of subsidies. The easiest subsidy program to expand appears to be credit. Rural banks can be told that, if they grant additional rice loans, at certain rates of interest far below those offered by unrestricted lenders, the Central Bank will replenish their funds, through rediscounting.] In effect new money is introduced so that more seed, fertilizer, etc. can be purchased. Unless these funds come from a diversion of Central Bank support away from other sectors of the

economy, net inflationary pressure is increased at the same time. Thus the benefits and costs of this sort of policy need to be put to careful, quantitative study; it is simpler to produce money than to produce goods, but the implications are far more complex. In 1972 an argument of weight is the fact that many Central Luzon farmers have been so devastated by tungro that they have not even been able to recoup seed for the following planting. Lack of credit is then seen as a special bottleneck hampering seed distribution to such farmers.

The main case for subsidies in 1972 is that rice farmers in Central Luzon and some other areas could use some relief from the calamities of 1971. This argument can be granted. Relief requirements aside, there may also be a case for temporary subsidy of the industry. Those farmers of less technical expertise and exposure to communications channels may not well appreciate, and therefore not try, the high-yielding varieties and another innovations which increase productivity. The question is whether rice farmers need a subsidy at this time in order to modernize faster. My own guess is that they don't. More than half of our rice area is now planted to HYV, only five wet seasons after introduction.¹ This is a very fast rate of acceptance, for any part of the world, and I think we may have confidence in the perception by present-day farmers of worthwhile innovations. Nevertheless, it is more prudent not to err on the side of optimism.

What will be less disputed -- expect by those with vested interest -- is that any subsidy should be strictly temporary, with a maximum life of say five years. The benefits of increased productivity

¹Admittedly, this was aided by price support in the early years of introduction, when the RCA support price had not yet been eroded by inflation.

must be shared by producers with the non-producing consumers, and this can only be done through lower prices.¹]

Among temporary subsidies, one would prefer those types most [directly related to sources of high productivity.] The product price subsidy is not one of these. Under it, some farmers will switch land from corn or perhaps sugarcane to rice, and then make quick gains despite traditional, costly methods. This would be attaining self-sufficiency on the U. S. or Japanese plan. [A preferable concentration of subsidies would be on seed, protective chemicals, minor irrigation equipment, and credit.] A subsidy on the consumption of fertilizer, if designed also to protect domestic fertilizer manufacturers from foreign competition, would not be recommended. In the long-run, the agricultural sector is entitled to fertilizer at as low a cost as world technology will allow, and domestic manufacturers, if coddled, will have less of a tendency to adapt more efficient technology.²

Large gravity irrigation projects, agricultural research and extension work are in a class by themselves. Continuing work on these projects can only be undertaken by the public sector as it would be most

¹Briefs for the maintenance of subsidies on the basis of cost of production figures must be rejected. Cost figures vary across the map, and vested interests can be presumed to cite those of the most inefficient producers. Under ordinary conditions, i.e., no dumping of rice from Japan or U.S. into the Philippines, the market price must be presumed to cover the cost of production. If it did not, it would soon rise of itself until it did.

²Since 1964/65, there has been a series of declines in the price of fertilizer, due to advances in technology for producing nitrogen. See Gian S. Sahota, Fertilizer in Economic Development, Praeger, 1968. The Esso Fertilizer plant (now owned by Planter's Products) was established just before this period. ESFAC's subsequent failure to compete with foreign low-cost fertilizer leads us to suspect that the technology incorporated in its plant is of the obsolete type; the argument holds a fortiori for the other, older domestic fertilizer plants.

difficult for any profit-motivated organization to finance itself out of sales or hire of the products of such projects. The term "public sector" is obviously being stretched to include institutions, such as the one whose Director we honor at this time, which often serve publics beyond mere national boundaries.

Some mention can be made of two "solutions" which are in vogue: [the quedan system, and producers'/consumers' cooperatives] These are attempts to lower the price of rice by concentrating on lowering the transactions costs pertinent to purchasing of inputs, milling, transporting, storing and trading.] Frankly, I do not expect that very much can be accomplished here. The retail price of rice consists of about 75% in production costs and 25% in processing and the other elements mentioned earlier. Of the latter 25%, basic costs of milling and transporting probably take the bulk, and the costs of transactions per se must be a minor portion. [Even granting that transactions costs were reduced to nil, the resulting decrease in retail prices will not be too significant.] However, this is not to imply that cooperatives or the quedan system should be dispensed with; they can be justified on other grounds. The RCA needs a measure of order in its own transactions with the private sector, and the quedan system has apparently been a useful innovation. In true cooperatives, on the other hand, the unique element is democratic control rather than control in proportion to capital, and, for most people, more democracy rather than less is satisfying in itself. The point is simply that, against the criterion of effectiveness against the consumer price -- which I argue is the main criterion -- these suggestions do not hold much promise.

If the first objective -- containing rice crises -- is met, attention passes to the second objective, namely "self-sufficiency". It appears that Philippine society's conception of self-sufficiency is the absence of imported rice under conditions of "reasonably" low prices. In searching for a rationale for this universal anti-imports feeling, I am led to conclude that there is a latent desire to avoid any leverage being applied on this society from foreign sources of this critically important food. The leverage may be for all sorts of purposes -- economic, political, military, etc. It is avoided to some extent by purchasing rice commercially, if rice must be imported in a given year, rather than seeking it as a "gift" from certain countries which, on account of their own domestic policies, have overproduced rice and accumulated unwanted stocks.

On the basis of the lack of a rice crises over 1968-1970 -- remember, our crises are always consumer price crises -- and the lack of imports, possibly we were self-sufficient in those years. "Possibly" because some left-over stocks from the 1967 importations were used up during this period. I should point out that the presence of imports during a year does not necessarily imply that the country is not self-sufficient in rice for that year. It simply implies that the government thinks we are not, and the government can make a mistake (there is the case of reexports of 1967). The crux of the matter is that we have never allowed the market to indicate how much in imports the country needs. The government by law monopolizes the international trade in rice, and is forced to decide whether or not to import or export, and if so, by how much.¹

¹See Mangahas, "Efficient Forecasting and Philippine Rice Import/Export Policy" in a Seminar on Consumption and Marketing of Rice in the Philippines, sponsored by I.R.R.I. and U.P.C.A., December 1969, mimeo proceedings.

Whether this legal monopoly contributes to the national welfare or not, is rather unclear. The real test of self-sufficiency will be prices that urban consumers consider reasonable, without imports, and without restrictions on imports by the private sector. If the rice price is tending to be higher than the landed import price from commercial sources, private groups should be allowed to import freely; if our rice is exportable at the current domestic price, the private sector should freely be allowed to export. Private parties can be counted upon to seek lowest possible import prices and highest possible export prices. Import/export licensing or authorization requirements probably attain little aside from imputing money values to the licenses, which is a definite potential for graft. Freer international trade in rice will of course keep our producers on their toes, and tend to benefit consumers. But then, this essay has argued at length that, fair or unfair, that is what our society really wants.

Table 1. The Price of Rice in Greater Manila,
Nominal and Deflated, 1967-1971.

	Price of Rice in Greater Manila (Macan ordinario) Pesos per ganta	Consumer Price in- dex (Excluding Rice) in Greater Manila (1955=100)	Price of Rice Deflated by CPI, Greater Manila Pesos per ganta
<u>1967 Simple Mean</u>	<u>1.71</u>	<u>134.4</u>	<u>1.272</u>
January	1.59	133.9	1.19
February	1.65	134.7	1.22
March	1.70	131.4	1.29
April	1.70	126.9	1.34
May	1.70	127.8	1.33
June	1.70	130.4	1.30
July	1.75	131.7	1.33
August	1.80	134.0	1.34
September	1.79	136.6	1.31
October	1.71	138.9	1.23
November	1.72	142.9	1.20
December	1.75	143.2	1.22
 <u>1968 Simple Mean</u>	 <u>1.74</u>	 <u>137.4</u>	 <u>1.266</u>
January	1.87	137.5	1.36
February	1.77	134.9	1.31
March	1.73	134.2	1.29
April	1.74	133.9	1.30
May	1.74	134.2	1.30
June	1.78	135.6	1.31
July	1.78	135.8	1.31
August	1.78	137.9	1.29
September	1.75	140.6	1.24
October	1.71	142.4	1.20
November	1.60	141.7	1.13
December	1.64	140.3	1.17

	Price of Rice in Greater Manila (Macan Ordinario) Pesos per ganta	Consumer Price In dex (Excluding Rice) in Greater Manila (1955 = 100)	Price of Rice Deflated by CPI, Greater Manila Pesos per ganta
<u>1969 Simple Mean</u>	<u>1.65</u>	<u>138.8</u>	<u>1.189</u>
January	1.51	137.6	1.10
February	1.50	135.6	1.11
March	1.50	135.8	1.10
April	1.50	136.0	1.10
May	1.52	137.0	1.11
June	1.58	138.1	1.14
July	1.63	139.0	1.17
August	1.69	142.2	1.19
September	1.87	141.4	1.32
October	1.86	141.2	1.32
November	1.82	141.8	1.28
December	1.79	140.5	1.27
<u>1970 Simple Mean</u>	<u>1.96</u>	<u>165.4</u>	<u>1.185</u>
January	1.68	149.3	1.12
February	1.98	148.9	1.33
March	1.74	154.4	1.13
April	1.69	159.4	1.06
May	1.71	161.3	1.06
June	1.76	162.3	1.08
July	1.82	167.8	1.08
August	2.13	169.4	1.26
September	2.21	170.3	1.30
October	2.25	176.1	1.28
November	2.27	182.9	1.24
December	2.25	182.1	1.24
<u>1971 Simple Mean</u>	<u>2.71</u>	<u>192.7</u>	<u>1.406</u>
January	2.21	188.8	1.17
February	2.31	186.4	1.24
March	2.45	181.9	1.35
April	2.50	180.5	1.38
May	2.56	182.6	1.40
June	2.63	186.9	1.41
July	2.81	196.6	1.43
August	2.97	199.7	1.49
September	3.07	201.7	1.52
October	3.16	207.2	1.52
November	2.98	207.8	1.43
December	2.88	-	-

SOURCE: Bureau of Agricultural Economics, Agricultural Economics, Statistics and Market News Digest, Volume VI, No. 5, (February 2, 1972) Table 1 on p. 3.

Table 2. Wage Rates in Terms of Rice and in Terms of Consumer Goods in General, 1966/67-1970/71.

Fiscal Year	Index of wage rate deflated by the price of rice (1955=100)	Index of wage rates deflated by the consumer price index (1955=100)
1966/67	144	94
1967/68	145	91
1968/69	159	100
1969/70	164	96
1970/71	190	93

SOURCE: Computations of R. Barker, International Rice Research Institute, January 1972.

Table 3. Loans Granted to the Rice Industry 1961-1971

(In Million Pesos)

	All banks		Commercial banks		Rural banks	Development banks ^a
	All loans	Production loans	All loans	Production loans		
1961	224.5	224.5	171.9	171.9	49.8	2.8
1962	281.5	281.5	197.8	197.8	68.2	15.5
1963	363.7	363.7	227.8	227.8	120.8	15.1
1964	440.2	440.2	237.2	237.2	183.4	19.6
1965	341.1	341.1	245.2	245.2	80.4	15.5
1966	402.7	402.7	281.9	281.9	92.1	28.7
1967	651.1	651.1	390.4	390.4	219.9	40.8
1968	870.3	556.1	654.1	339.9	180.6	35.6
1969	820.6	536.9	606.2	339.9	188.7	25.7
1970	850.0	576.0	617.2	343.2	213.0	19.8
1971 ^b	705.5	605.5	445.2	345.2	240.5	19.8

^aAll loans = production loans during 1961-1971.^bEstimates

SOURCE: Table I of "Rice Financing through Banks in the Past Ten Years", prepared by Central Bank representatives, Annex 17 to the Report of the Inter-Agency Technical Committee on Rice and Corn Policy to the Chairman of the National Economic Council, January 6, 1972.

Table 4. Central Bank Loans to Commercial and Rural Banks for Rice and Corn, 1965-1971.

(In million pesos)

	Loans to commercial banks for rice and corn		Loans to rural banks for rice	Central Bank rediscount rate (in %).	
	Total	PNB		Rice & Corn	Basic
1965	271.6	271.6	n.a.	3	6
1966	74.2	60.1	41.1	3	4.75
1967	370.3	342.4	45.5	3	6
1968	1079.9	866.4	46.1	4	7.50
1969	1013.5	916.5	63.6	6	8-10
1970	122.2	100.1 ^a	81.4	6	8-10
1971	5.4 ^{a,b}	5.4 ^{a,b}	85.7 ^c	6	8-10

^aRice only.

^bEmergency advances under Section 90 of R.A. 265. January to December 16 only.

^cJanuary to November only.

SOURCES: Tables III and IV of "Rice Financing through Banks in the Past Ten Years," prepared by Central Bank representatives, Annex 17 to the Report of the Inter-Agency Technical Committee on Rice and Corn Policy to the Chairman of the National Economic Council, January 6, 1972.

Table 5. CB Loans Outstanding to Commercial Banks for Rice and Corn, 1965-1971

(In Million Pesos)

	All commercial banks	PNB
1965	151.7	141.4
1966	179.6	168.8
1967	348.8	331.2
1968	514.6	443.8
1969	633.2	606.8
1970	343.9	343.9
1971(Dec. 20)	302.4	302.4

SOURCE: Table V of "Rice Financing through Banks in the Past Ten Years," prepared by Central Bank representatives, Annex 17 to the Report of the Inter-Agency Technical Committee on Rice and Corn Policy to the Chairman of the National Economic Council, January 6, 1972.

Table 6. Fertilizer Price Quotations Before
and After the 1970 Peso Devaluation

	<u>Before Devaluation</u>	<u>After Devaluation</u>
<u>Atlas Chemical</u>		
<u>Ammonium Sulphate</u> <u>(21-0-0) in pesos per 100 lb.</u>		
Luzon	13.50-14.00	17.60-18.50
Visayas	11.18-14.70	16.50-18.83
Mindanao	15.00-16.00	19.13-20.13
<u>Ammonium phosphate</u> <u>(16-20-0) in pesos per 100 lb.</u>		
Luzon	17.50-19.00	25.30-26.00
Visayas	14.80-19.30	22.50-25.72
Mindanao	19.60-20.60	26.02-27.02
<u>Esso Fertilizer</u>		
<u>Urea (40-0-0)</u> <u>in pesos per MT</u>		
Luzon	420-485	630-710
Visayas	440-520	540-750
Mindanao		
<u>Ammonium phosphate</u> <u>(16-20-0) in pesos per MT</u>		
Luzon	440-520	540-750
Visayas	375-460	500-615
Mindanao		

SOURCE: Collected by Mrs. Meliza H. Agabin at the
Fertilizer Institute of the Philippines;
original data from the fertilizer companies.

Table 7. Philippine Rice Yields and Irrigation Rates, 1968/70.

(Three-Year Averages)

Period	Yields in MT palay per ha.	Percent of crop area irrigated
1948/50	1.15	19
1951/53	1.17	n.a.
1954/56	1.20	22
1957/59	1.11	24
1960/62	1.17	28
1963/65	1.25	31.
1966/68	1.34	38
1968/70	1.46	42

^aIrrigated area available only for 1948, 1956, 1959 and yearly thereafter.

SOURCE: Randolph Barker, William H. Meyers, Cristina Crisostomo and Bart Duff, "Employment and Technological Change in Philippine Agriculture," Paper prepared for the UN. International Labor Office, October 1971, Table 2; basic data from the Bureau of Agricultural Economics.

Table 3. Incoming Shipments of Imported Rice,
Philippines, April-November 15, 1971

Month in 1971	Number of Shipments	Volume in Metric Tons
April	1	2,460
May	0	0
June	4	17,681
July	5	18,550
August	7	61,259
September	3	23,000
October	11	44,042
November 1-15	9	59,234
TOTAL	40	246,226

SOURCE: J. D. Drilon, Jr. The RCA in the
Last Eight Months (Terminal Report)
mimeo, December 6, 1971, p. 10.

