

THE MACROECONOMIC POLICY ENVIRONMENT OF PHILIPPINE AGRICULTURAL PERFORMANCE

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Agriculture and agricultural policies do not operate within a vacuum. The macroeconomic environment strongly influences the overall viability of agriculture and the effects of agricultural policy. The paper discusses briefly key aspects of the macroeconomic environment that shape the pace and pattern of agricultural performance in the Philippines, namely, the macro price environment, trade policy and the manufacturing sector, and the role of the government. The paper suggests some policy directions.

I. THE MACRO PRICE ENVIRONMENT (This section draws heavily from Intal, David and Nelson 1985.)

The two most important macroeconomic prices for agriculture and agricultural trade are the prices of capital and foreign exchange because these are currently the scarcest resources. Both prices are heavily influenced by the government's financial (i.e., budgetary and monetary) policy.

The 1970s. The prices of capital and foreign exchange were artificially lowered during the 1970's, hurting agriculture more than other sectors.

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Because formal interest rates were not flexible during the 1970's and inflationary expectations were not reflected in the rates, real interest rates were very low and at times negative. With the cheap interest rate policy, the agricultural sector was at a disadvantage compared with the nonagricultural sectors because of the greater risk and higher transactions cost of agricultural lending. Indeed, despite government subsidies of nonsugar agricultural lending (through the Central Bank rediscount window at very low interest rates), agricultural lending declined over the course of the 1970's (David 1983).

The nominal exchange rate seldom adjusted to domestic inflation, which made the domestic price of foreign exchange cheaper (i.e., the peso was overvalued). By depressing the price of traded goods, the overvaluation of the peso reduced the potential private rate of return of investments in producing traded goods. Farmers producing import substitutes faced increased competition from imports (e.g., yellow corn imports vis-à-vis domestically-produced feeds). Farmers producing export goods received lower peso prices for their exports than under a more appropriate exchange rate. Because the agricultural sector produces a larger proportion of traded (and tradable) goods than the industrial and service sectors, the overvaluation of the peso adversely affected agriculture and agricultural trade more than industry and services.

Moreover, the overvaluation of the peso resulted in the real private cost of foreign borrowings being less than the social cost of foreign borrowings. This encouraged overborrowing compared to what was socially optimal. Finally, the low domestic interest rate encouraged an inefficient utilization of domestic and foreign capital resources.

The crisis and macro price policy. Aggregate demand restraint is the standard orthodox macroeconomic adjustment policy, together with exchange rate depreciation, to correct external payments imbalance. However, the burden of the macroeconomic adjustment during the past two years was borne disproportionately by the sectors which were the logical anchors for economic recovery; i.e., the private sector, agriculture, exports. This explains in part the severity of the decline in real GNP in 1984 and the continued stagnation of the economy in 1985.

Monetary and fiscal policy during the latter 1983 and much of 1984 was more restrictive on the private sector than on the govern-

ment. During the critical period between September 1983 and June 1984, for example, net domestic credits to the government sector increased by 72 percent while net domestic credits to the financial sector declined by 28 percent. During this period, the government continued to run budget deficits albeit to a lesser extent than in 1981 and 1982. Because of the debt moratorium, the government was forced to raise capital locally to finance the deficits. Given the aggregate monetary ceilings, the government domestic borrowings resulted in the enormous increase in the formal interest rate. Had the government deficits been reduced further, the Central Bank would have been less stringent in its credit policies vis-à-vis the private sector and less aggressive in its sales of government securities.

Agriculture and exports need a large working capital. Therefore the increase in the interest rate hit the two sectors hard. In addition, the high interest rates dampened investment activity in agrobased and export-related industries. (For the projects of doubtful profitability which were initiated during the years of low interest rates, the rise in the interest rates that resulted in the postponement or closure of the projects have little societal impact inasmuch as such projects have become largely sunk costs to the economy.) Furthermore, the high nominal interest rate artificially reduced the pressure for exchange rate depreciation and thereby penalized further the producers of agricultural tradables and exportable manufactures.

Toward decreasing government deficits. The macroeconomic policy environment most conducive to agricultural growth and productivity requires flexibility in interest rates and exchange rates combined with a less expansionary financial policy.

Given the monetary ceilings and constraints on government borrowing from abroad, the government needs to reduce further its deficits in order to reduce further the pressure on domestic interest rates. This means a reduction in real expenditures and/or an increase in real revenues.

Only a detailed analysis of the budget of the national government and public enterprises will reveal the extent of the "fat" in the expenditure plans that could be trimmed in order to reduce further the budget deficit and thereby reduce the government competition with the private sector for the scarce credit resources. Probably the best candidates for expenditure trimming are the subsi-

dies and capital support of government enterprises. Government corporate equity investment and net lending increased enormously during 1981-82 when the government experienced record high deficits. The continued budget deficits in 1984 arose primarily from the sharp rise in government net lending, from 0.63 percent of GNP in 1983 to 1.7 percent in 1984. There is a need therefore for an examination of and a reduction in the number of government enterprises.¹

In the light of the depressed economy, it is unrealistic to raise taxes from domestic sources in the short run. Nonetheless there are two possible sources of revenues that the government may tap in the short run. First, the government could go after the properties abroad of individuals or groups whose companies, which borrowed heavily at home or abroad with guarantees from government financial institutions, eventually soured. Government debt service is one reason for the government deficit. The second possible source of government revenue is to "tax" foreign soft loans to the Philippines, especially project soft loans. By definition, soft loans carry low interest rates. In order to prevent the misuse of resources, it is preferable that the funds are relent domestically at near market interest rates. The spread between the original soft loan rate and the domestic lending rate can include the payment for exchange rate risk, administrative cost and the "tax" payment to the general revenue of the national government.

In the medium term, it is important for the tax system to be restructured to rely primarily on income and wealth taxes. During the 1970's and the current crisis much of the increase in government tax revenues came from specific taxes, import tariffs, and export taxes and levies. These forms of taxes are distortionary and often bear more heavily on the poor than on the rich.

II. TRADE POLICY AND THE MANUFACTURING SECTOR

It is already well documented that the import tariff and export tax structures favored heavily the import competing nonagricultural

1. In disposing many of the government enterprises, however, the government must seriously take into consideration the danger that the sale of these enterprises will increase the concentration of resources and economic power in some groups/families.

industries (especially consumer goods manufactures) and were strongly biased against agriculture and agricultural trade (see Table 1). The bias in the tariff structure has been in place since the 1950's. It reflects an industrialization strategy that is based on artificially raising the prices of manufactured goods and reducing the prices of food and raw materials to increase the profitability of the industrial sector.

With the inclusion of the effects of the exchange rate policy, a recent study indicates that the exchange rate and trade policies during the 1970's became even more biased against agricultural exports (see Table 2).

TABLE 1
STRUCTURE OF PROTECTION

Sector	EPR Index
A. Agriculture and Primary	100
Manufacturing	489
All sectors	400
B. Exportables	100
Nonexportables	1525
All sectors	900

Source: Tan (1979).

TABLE 2
AVERAGE EFFECTIVE EXCHANGE RATES* (P/\$)

	1950-59	1960-69	1970-80
Traditional exports	2.00	3.07	6.60
New exports	2.29	3.70	8.02
All Imports	2.60	5.91	11.72
Nonessential consumer good imports	3.65	10.56	25.46

Source: Bautista (1984).

*Exchange rate adjusted for differential transaction cost, taxes and subsidies.

The government started a gradual reduction of the levels and dispersion of the tariff rates in 1981. In addition, it gradually lifted quantitative restrictions. The objective of a more uniform tariff system is to reduce the variation of the effective protection rates among industries. This would reduce inefficiencies in the allocation of resources due to a very uneven effective protection structure. However, the crisis reversed the trade liberalization process. Additional tariffs and taxes were imposed. Foreign exchange was prioritized, with virtually no allocation for consumer goods manufactures. Thus, the domestic import substitutes became more protected while exports became more penalized. These measures were instituted during an economic emergency. After the crisis, the process of tariff rate reduction and uniformity will have to be resumed in order that the bias in the tariff structure against agriculture and agricultural trade could be minimized.

The role of the nonagricultural sector. Although not very obvious, agricultural growth and welfare in the rural sector are dragged down by a sluggish nonagricultural (especially manufacturing) sector. The linkage is very apparent in the function of the nonagricultural sector as (1) a provider of inputs to agriculture, (2) a processor of agricultural products, and (3) a potential demander of the rural labor pool. Thus, for example, productivity growth in manufacturing which reduces the prices of manufactures reduces production costs in agriculture; in contrast, negligible productivity growth, coupled with protection from imports, increases the price of agricultural inputs.

An anomaly in the Philippine economic experience during the 1970's and early 1980's is worth emphasizing: Despite the high growth of agricultural production during the past decade (certainly one of the higher rates internationally), the Philippines experienced declines in real wages in agriculture (see, e.g., NEDA 1984, Table 4.3). This is because, on top of the comparatively high population growth rate, the sluggishness of the manufacturing sector failed to "mop up" the rural labor pool.

The Philippines had the worst industrial performance among the ASEAN countries during the 1970's. The average annual growth rate of manufacturing has largely sputtered since 1979, averaging only 3.5 percent per annum. More importantly, total productivity growth in the manufacturing sector during 1971-80 was *negative*. This decline in total productivity explains in part the failure of the manufacturing

sector to grow faster and its vulnerability to shortages in input supplies (Hooley 1984, p. 36).

The sluggishness and declining productivity in the manufacturing sector is disturbing because it indicates that the agricultural sector again carried the economy on its back during the 1970's as it did during much of the 1950's and 1960's. This indirect agricultural subsidy of the manufacturing sector provides a sharp commentary on the failure of the country's industrial policy and suggests that agricultural economists and policymakers need to worry also about the non-agricultural sector when they examine the problems and prospects of the agricultural sector.

The tariff structure that was heavily biased toward import substitution in consumer goods and against backward integration and production for export was a primary reason for the sluggishness of the manufacturing sector and the unsatisfactory growth in productivity. Because of the bias against backward integration, the increased investment expenditures during the 1970's failed to generate substantial domestic multiplier effects — much of it was siphoned off into increased imports. In fact, Hooley found that the tariff structure encouraged “. . . substitution of intermediate goods for *both* capital and labor. The result, in many industries, was a voracious demand for intermediate production, much of it imported, which helped create a foreign exchange bottleneck for *all* industry” (Hooley 1984, p. 55).

The remarkable growth in the gross value of exports of garments, semiconductors, and other electrical and electronic parts during the 1970's shows where the country's comparative advantage in manufacturing currently lies and points out the need to change the country's industrial incentive structure. The performance of garments and semiconductors proved that the country could do better by making fuller use of its abundant labor resources or, in other words, by drying up the labor surplus as fast as possible, rather than by trying to “leapfrog” into large, capital intensive industries so soon. What allowed the remarkable growth of garments and semiconductors during the 1970's despite the overall industrial incentive structure, however, was the creation, in effect, of an “enclave” through bonded warehouses. That is why the import component of garments and semiconductors was high and there has been little spillover effect on the rest of the manufacturing sector.

It appears that one tragedy of the manufacturing sector is that the overall industrial incentive structure discouraged increased articu-

lation between industries in the sector. Some subsectors are linked with the rest of the world more than with the rest of the sector. The policy-induced creation of "enclaves" in order to allow some industries (garments, semiconductors) to grow is fundamentally a *second best* solution compared with the reduction in differential biases in incentives (tariffs and fiscal) between industries, together with a more appropriate relative pricing of factors of production and a greater policy focus on raising productivity.

As in agriculture, the macroeconomic policy environment most conducive to sustained industrial growth and productivity requires flexibility in interest rates and exchange rates combined with a less expansionary financial policy. Perhaps more than in agriculture, lower tariffs and less dispersion of tariff rates would encourage efficiency and productivity in the manufacturing sector.

III. THE ROLE OF THE GOVERNMENT

One salient characteristic of the Philippine policy experience during the 1970's was the very active role that the government played in the economy. The increased government involvement in the economy was rooted in the activist government ideology of the New Society that was established in conjunction with the imposition of martial law in 1972.² What appear to have provided the push for this activist ideology, by allowing increased expenditures and a bigger government bureaucracy (including government enterprises) or by presumably necessitating increased government intervention, include the following; (1) the surge in government revenues during 1973-74 resulting largely from the world commodity price boom; (2) the availability of foreign loans which provided the impetus for the expansion of government bureaucracy and programs after the slackening of the growth of government revenues since 1975; and (3) the increased instability in the world economy (as indicated by the increased variability of the country's export and import prices) which,

2. As one indication, Pres. Marcos wrote, "My commitment to a comprehensive reform program for the New Society includes the formulation of a dynamic government expenditure policy to serve as an effective tool for development and growth . . . There had been a noticeable increase in the magnitudes of government spending, reflecting the increased commitments that I have placed upon the nation-building through the budget" (Marcos 1976, p. 69).

because the macroeconomic price environment was not very satisfactory, increased the pressures for government intervention in individual industries or sectors.

Recent experience and commentaries indicate that the government intervention in the economy has gone too far and needs to be reduced. This does *not* mean that the government should not intervene in the economy at all. What is needed is to consider carefully the extent, form, and focus of government intervention in the economy.

This raises the issue of what are the "proper" roles of the government in the economy. The three widely accepted roles of the government are (1) the provision of the so-called "public goods" (e.g., a legal system, roads, ports) which the market system cannot provide sufficiently and efficiently; (2) the use of tax transfer mechanisms for income and asset redistribution; and (3) the regulation of economic activity both in the macroeconomic sense of, say, reviving the economy in the case of recession, and in the microeconomic sense of adjusting for the failings of the market system arising from technology or market size limitations (e.g., pollution, public utilities).

A fourth role being attributed to the government, although of long historical standing, is less accepted and analytically shakier. This role is that of "public entrepreneurship"; that is, the presumed catalytic role that government agencies and (especially) government enterprises play in the growth and industrialization process. Public entrepreneurship is a major contributor to the increased role of the Philippine government in the economy during the 1970's.

The public entrepreneurship argument for government intervention is analogous to the infant industry argument for tariff protection of (private) domestic manufactures. Like indiscriminate and excessive tariff protection, however, indiscriminate public entrepreneurship breeds inefficiency and resource misallocation. Unlike tariff protection, however, indiscriminate public entrepreneurship has the additional burden of further increasing commodity prices or interest rates. This arises when the losses of government enterprises are financed through government budget deficits which need to be financed by money supply creation or by increased government borrowing from the private domestic sector. As noted earlier, public enterprise losses were a major contributor to the government deficits of the early 1980's.

An interagency committee is currently looking into the public

enterprises. The exercise should lead to some rationalization of the public enterprise set (including a reduction in number) and to a deeper understanding of the causes and effects of their proliferation during the 1970's and early 1980's (in order to prevent their indiscriminate proliferation again).

Research. One "public good" that the government should have provided more, but has not, is research and extension. Technology development, which calls for research and extension, is needed before agricultural development becomes a vigorous and sustained leading sector of national development. Research — agronomic and socioeconomic — is the best and ultimately cheapest way to be competitive internationally and to generate (and maintain) food self-sufficiency.

Table 3 shows that agricultural research expenditures as a percentage of the agricultural value added in the Philippines in 1980 was the lowest of the 15 countries. The Philippines registered the lowest rate of growth of agricultural research expenditures (in real terms) during 1970-80. In addition, it had a comparatively low growth rate of scientific staff during 1970-80. Finally, the table also indicates that the country's scientists are paid lower compared with other LDC scientists. The comparatively low salaries of Philippine scientists has the insidious effect of making it difficult to hold them in the country.

The adverse impact of the relative neglect of agricultural research in the Philippines can be illustrated by the following two examples. Rice research has not been a top priority of government research funding institutions; thus, funding for rice research has been especially meager. As a result, the Philippines undertook only meager research on other rice varieties that can be better suited to Philippine conditions and input availabilities. Another example, the recent success of Malaysia in propagating a higher-yielding palm tree (using tissue culture) can be expected to reduce further the competitiveness of Philippine coconut in the world oil market. Given that productivity increases reduce prices and given that palm oil is the closest competitor of coconut oil, the medium term outlook for Philippine coconuts would be secularly declining prices and a lower Philippine share in the world vegetable oil market (Barker 1985).

Because of the locational specificity of crops, Philippine agricultural growth (perhaps more than industrial growth) requires a vigo-

Table 3
INTERNATIONAL COMPARISON OF AGRICULTURAL RESEARCH
RESOURCES, 1980

Country	Agricultural research expenditure as % of agricultural value added	No. of Scientists	Postgraduates as % of total researchers	Growth rate of staff (1970/80)	Growth rate of research expenditures in constant 1975 U.S.\$ 1970/80 (in %)
Brazil	1.15	2,957	57	7.49	20.24
Argentina	1.64	1,064	27	1.05	7.90
India	0.29	7,103	29	2.25	6.53
Nigeria	0.70	1,084	25	17.27	19.95
Mexico	0.65	1,269	31	5.16	33.54
Colombia	0.67	333	55	-6.23	3.34
Indonesia	0.44	1,473	5	14.78	20.01
Malaysia	0.81	822	n.a.	21.90	8.49
Venezuela	1.32	365	31	3.55	12.14
Korea, Rep.	0.23	960	20	2.67	2.65
Bangladesh	0.48	1,642	77	33.32	36.96
Thailand	0.26	1,525	16	14.16	6.19
Pakistan	0.41	2,900	56	n.a.	n.a.
Kenya	1.08	400	89	6.48	27.41
Philippines	0.16	1,050	59	3.19	0.48

Note: The countries are ranked according to the level of agricultural research expenditures in 1980.

Brazil spent the most, U.S.\$160 million.

Source: ISNAR and IFPRI, 1981 Tables 4, 7 and Annex 2-A.

rous domestic research community. Furthermore, because much of agricultural research is not patentable or cannot be internalized by firms, government support of agricultural research is necessary.

Public Administration. Although not strictly a "public good," one form of "intervention" which the government should do more is improved public administration and a more responsive administrative structure/mechanism. Toward this end, there is a need for a decentralization of government decision making as, for example, in infrastructure. This could reduce bureaucratic red tape, allow local governments to decide on what infrastructure is needed in their localities even if the key technical expertise may come from Manila, and increase the flexibility of local governments/bodies in dealing with distinctly local issues and concerns. In order that decentralization could become more effective, it would be advisable for the local bodies/governments to handle and control a larger portion of the total government budget than they now have.

A related need is for policy delinkage. That is, there is a need to minimize the tie-in of the implicit taxing power of some national government entities with the supposed developmental function of the entities. It would be better for explicit and implicit taxation to be done within the framework of the overall tax program of the government. Similarly, it would be better for the budgetary allocation to be undertaken within the context of the overall expenditure program of the government.

Another related issue is the government's mechanism of re-lending foreign-sourced funds. Currently, there are agencies other than the Central Bank, public banks, and private financial institutions through which foreign-sourced funds (soft loans) are coursed (e.g., TRC). It is doubtful whether it is efficacious at all to turn some government agencies into quasi-financial institutions. Furthermore, to the extent that the soft loans carry interest rates much lower than prevailing market rates and the agencies do not tie their lending rates to the prevailing market rates, the government agencies can be expected to be faced with pressures to allocate the funds to "favored borrowers" even if the projects are marginal based on the prevailing market interest rates. It would be better if such foreign loans were coursed through the Central Bank to be on-lent through the financial system or were coursed through some link with the (hopefully less cumbersome) general budget process.

Pump priming. One impact of the current policy framework and

the IMF-imposed conditions is that the government cannot do pump priming operations. An orthodox Keynesian policy prescription is that the government undertakes pump priming (through increased expenditures and by incurring government deficits) in order to pull the economy out of a recession. Given the ceilings on the government deficit imposed by IMF, the government appears to have very limited options to stimulate aggregate demand. In addition, given the high interest rates which have dampened investment demand and given the relatively slow growth in exports, it seems that there is no built-in mechanism under the current policy framework to pull the economy out of the recession.

In the light of the above considerations, it appears therefore that the call made earlier in the paper for further reduction of the government deficit is counterproductive in the sense that the economy would go into deeper recession because of the reduction in aggregate demand. This conclusion is, however, not warranted. In this regard, the proposals for "taxing" foreign soft loans or "confiscation" of properties abroad of absconding Filipinos are very relevant. This is because with these revenues the government can have a more expansionary monetary policy stance vis-à-vis the private sector (through a reduction in interest rates) without overshooting aggregate monetary targets. Similarly, the extra revenues, if substantial, can allow a reduction in domestic income and indirect taxes (say, the gasoline tax), thereby increasing after-tax personal incomes. In either case, private domestic spending (investment and/or consumption) is encouraged. Thus, pump priming is possible albeit via a different route. In addition, this policy package would increase the share of the private sector in the national economy in contrast to the traditional means which tend to reduce the private sector's share.

Final Remarks

A sustained healthy growth in agriculture requires a sustained healthy growth in the macroeconomy. It is towards this end that policy directions are suggested in this paper.

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