

Policy Reforms and Agricultural Development in the Philippines

Arsenio M. Balisacan

This article examines the character of agricultural development and the policy environment influencing the performance of the rural economy during the postwar period. It shows that, while domestic and global shocks could be blamed for the poor performance of agriculture and the slow decline of rural poverty in recent decades, they are hardly sufficient reasons. The more fundamental reasons have to be found in domestic policies directly and indirectly affecting agricultural structures and incentives, particularly market regulations and public investment biases against the rural sector. Moreover, contrary to common perception, growth-enhancing policy reforms in recent years, albeit largely incomplete, have favourably changed the economic environment facing the poor.

Introduction

It is well-known that agriculture's importance in output and employment declines in the course of development owing to the generally low income elasticity of agricultural commodities, particularly food, *vis-à-vis* manufactured goods and services, as well as to the rapid development of new farm technologies which lead to expanding food supplies per hectare and per worker. The smaller the land endowment per worker (and, hence, the lower the marginal product of farm labour), the earlier in the development process will be the growth in non-agricultural (typically industrial) activities. Moreover, the faster the technological progress in non-agricultural sectors relative to that in agriculture and the more rapid the accumulation of industrial capital, the quicker will be the decline in agriculture's comparative advantage and its share in the labour force.

However, even for countries at similar stages of development, the variation in agricultural performance in inducing rural non-farm growth and, hence, in reducing rural poverty, is substantial. For example, rural supply response to agricultural growth appears to be weak in the Philippines, while it is quite strong in other countries (for example Indonesia and India). To a large extent, differences in prevailing agrarian structures, rural institutions and overall economic-policy environment determine the character of rural non-farm responses to agricultural growth; they also determine the subsequent pattern of agricultural growth and development. The postwar experience of Philippine agricultural development illustrates how misguided policies and institutional factors could constrain the responses of rural areas to the stimulus provided by agricultural growth, thereby stifling economic development.

This article examines the character of agricultural development and the policy environment influencing the performance of the rural economy during the postwar period. The article first provides a brief background of the agricultural sector's performance. It then discusses the policy environment of agriculture, focusing on agricultural policy reforms in the 1980s and early 1990s; it examines the responses of rural household welfare to this environment and to boom-bust growth that characterized this period. Finally, it gives conclusions and policy implications.

Agricultural Sector's Performance

Agriculture continues to account for a sizeable proportion of total employment and, to a lesser extent, national income. Its share in total employment dropped only slightly from 59 per cent in the mid-1960s to 46 per cent in the early 1990s (Table 1). Its share in GDP declined from about 32 per cent to 23 per cent during the same period. These changes are in accord with the well-known stylized fact of development noted above. The slow drop of agriculture's share in total employment, together with the sluggish absorption of

labour in the industrial sector, suggests that the large increments to the labour force over the last three decades were nominally employed in agriculture and in the informal services sector where self-employment is more common and wages more flexible. This process, however, limited the growth of labour productivity and real income in these sectors.

In recent development experiences, especially in the celebrated newly-industrialized economies of East Asia, the development process is also shown to be accompanied by a declining share of agriculture in total exports, an increasing dependence on food imports, and an increasing share of non-farm income in total household income (Oshima 1987). The development process could also bring about absolute declines in the number of farm workers (Chenery and Syrquin 1975). In the Philippines the growth of per capita income, albeit small in relation to those of neighbouring countries, was accompanied by a sharp fall in agriculture's share in total foreign trade. For exports, agriculture's share plummeted from 86 per cent in the mid-1960s to 28 per cent at the turn of the 1990s. In the case of imports, the fall was from 22 per cent to 13 per cent.

TABLE 1
Agriculture in the National Economy,* 1965-95

	1965	1975	1985	1990	1995
Per Capita GDP (1965=100)	# 100	131	128	139	143
Share of agriculture (%) in:					
GDP	31.5	26.9	28.6	27.0	21.8
Employment	58.6	56.7	48.9	45.1	46.0 [†]
Imports	22.2	13.6	12.4	12.7	—
Exports	85.6	66.2	35.8	27.8	—
Ratio of agricultural imports to agricultural exports (%)	26.8	27.6	38.0	64.7	—

NOTES:— not available.

* Three-year averages centred on the year shown.

† for 1994.

SOURCES: *Philippine Statistical Yearbook* (various issues); *Asian Development Outlook 1997 and 1998*; *Foreign Trade Statistics* (various issues).

The agricultural sector of the Philippine economy performed remarkably well during the 1965–80 period, the height of the so-called green revolution (Table 2). The sector's average annual growth was substantially higher than the averages for most developing Asian countries and compared favourably well with those for Thailand and Indonesia. However, the growth in the 1980s and early 1990s was way below the averages for these countries and those of the East and South Asian countries.

In recent decades, LDCs with relatively high growth rates of agricultural output tended to have also comparatively high GDP growth rates (World Bank 1986, pp. 79–80). The correlation is clear

for the developing Asian countries in Table 2. This observation is, of course, not surprising given that agriculture and agriculture-dependent manufacturing in a typical LDC is a large fraction of the economy. In the Philippine case, the remarkably robust agricultural growth for the period 1965–80 was accompanied by a GDP growth that closely matched the averages for the developing Asian countries (2.3 per cent a year) and the middle-income developing countries (3.6 per cent a year). Similarly, the dismal growth of agriculture in the 1980s and early 1990s paralleled the poor performance of the overall economy.

Growth, however, has not been uniform among

TABLE 2
Average Growth of Agriculture and GDP in Developing
Asian Countries
(% per year)

	Agriculture		GDP	
	1965–80	1980–95	1965–80	1980–95
Malaysia	—	3.9	7.3	6.6
Thailand	4.6	4.3	7.2	8.3
Indonesia	4.3	3.6	8.0	6.1
Philippines	4.6	1.3	5.9	1.8
Sri Lanka	2.7	2.4	4.0	4.2
Pakistan	3.3	4.0	5.1	5.8
India	2.5	3.3	3.6	5.4
Bangladesh	1.5	2.6	2.4	4.2
Nepal	1.1	3.5	1.9	5.1
China	2.8	5.3*	6.4	9.6*
Vietnam	—	5.4†	—	7.5

NOTES

— Not available.

† Refers to value of gross material output for 1980–90.

* for 1980–93.

SOURCES: Asian Development Bank, *Key Indicators of Asian Pacific Countries*, 1995 and Asian Development Outlook 1997 and 1998; World Bank, *World Development Report* (1990; 1995); Food and Agriculture Organization, *Agricultural Policy Analysis for Transition to a Market-Oriented Economy in Vietnam*, FAO Economic and Social Development Paper 123 (Rome, 1994).

the major subsectors of agriculture (Table 3). Fishery registered the highest annual growth rate, averaging 7.1 per cent, during the 1965–80 period. Consequently, the share of fishery in agriculture's gross value added (GVA) rose from 10 per cent in the mid-1960s to about 18 per cent in the early 1980s (Table 4). The growth of crop GVA, averaging 3.1 per cent a year, was also impressive by historical standards. This subsector contributed about three-fourths of the observed

growth of agriculture's GVA during this period. The growth was particularly high in corn, banana, and "other crops". Surprisingly, the average growth of rice, the nation's staple crop, was relatively low, although its share in total crop GVA remained substantial (about 25 per cent in the early 1980s). Thus, the commonly-held view that the production gains in agriculture during the 1965–80 period was primarily attributable to the green revolution in rice is a myth. The growth

TABLE 3
Average Annual Growth Rates of Gross Value
Added in Agriculture, by Sector, 1965–94^a

	1965–80	1980–94	1989–94
Agriculture	4.2 (100)	1.8 (100)	2.1 (100)
All Crops	3.1 (75.5)	1.4 (48.2)	0.8 (22.5)
Rice	3.1 (13.6)	3.5 (29.7)	3.0 (22.2)
Corn	6.4 (8.9)	3.3 (11.5)	-0.4 (-1.2)
Coconut	3.0 (4.7)	0.5 (1.8)	-5.8 (-16.2)
Sugar-cane	3.2 (5.3)	-2.8 (-6.5)	8.6 (15.3)
Banana	8.8 (6.8)	-0.2 (-0.3)	3.4 (4.4)
Other Crops	9.7 (36.1)	0.8 (11.9)	-0.2 (-2.0)
Poultry and Livestock	1.3 (5.2)	5.3 (57.1)	7.1 (77.7)
Fishery	7.1 (26.7)	1.4 (13.0)	1.8 (13.8)
Forestry	-2.0 (-7.4)	-12.1 (-18.4)	-24.3 (-14.0)

NOTE

a Growth rates are based on three-year moving average trends. Figures in parentheses are contributions of the indicated sector to total agricultural growth.

SOURCES: *Philippine Statistical Yearbook* (various issues); National Statistical Coordination Board.

TABLE 4
Commodity Shares (%) in Gross Value Added of Agriculture,
Selected Years^a

	1965	1975	1985	1994
All Crops	53.6	59.9	62.7	59.3
Rice	19.7	17.7	16.2	14.9
Corn	4.5	6.3	6.3	6.2
Coconut	8.8	6	7.3	5.7
Sugar-cane	8.4	7.9	4.3	3.9
Banana	0.9	3.2	3.2	2.9
Other Crops	11.3	18.9	25.3	25.6
Poultry and Livestock	21.0	14.6	15.9	23.2
Fishery	10.3	17.2	18.5	16.5
Forestry	15.1	8.3	2.9	0.9
Agriculture	100.0	100.0	100.0	100.0

NOTE

a. Three-year averages centred on the year shown.

SOURCES: *Philippine Statistical Yearbook* (various issues); National Statistical Coordination Board.

of rice GVA contributed only 14 per cent to the observed growth of agricultural GVA during this period.

The category "other crops" was the fastest growing sector during the 1965–80 period, contributing about one-third of the total agricultural growth. The growth came mainly from the rapid expansion of fruits and vegetables, particularly non-traditional export crops such as pineapple and coffee. Consequently, the share of "other crops" in agriculture's GVA rose from 11 per cent in the mid-1960s to about 30 per cent in the mid-1980s.

The growth rates for virtually all crops decelerated in the 1980s and early 1990s. One reason for this is the slowdown in new lands brought into cultivation. While agricultural land increased at a rate of 3.6 per cent a year in the 1970s (brought about primarily by deforestation), the rate decelerated to only 0.8 per cent a year in the 1980s and early 1990s. Another reason is the uncertainty concerning the implementation of the government's Comprehensive Agrarian Reform Program. Launched in June 1988, this programme not only

discouraged the flow of private investments into agriculture but encouraged non-planting and premature conversion of agricultural lands into non-agricultural uses (Medalla and Centeno 1995). Still another reason is the sharp fall of public investments in agriculture — especially rural roads, irrigation, and research — during the 1980s and early 1990s (David et al. 1993). Investments in agricultural research and development (R&D), the single-most important source of long-term production growth, stagnated in the 1970s, then dropped in absolute value in the 1980s. The total spent on R&D in the early 1990s was only about 60 per cent of that in the early 1970s.

For rice, other factors causing the slowdown of output included the continued decline of world rice prices, stagnation of public investments in irrigation, exhaustion of the productivity potential of high-yielding varieties, and degradation of crop production environment owing partly to monoculture cultivation — especially in irrigated areas — and to soil erosion induced by rapid deforestation. For sugar, while output contracted in the

early 1980s, growth rebounded in the late 1980s and early 1990s owing primarily to the recovery of world sugar prices.

Surprisingly, the macroeconomic difficulties of the 1980s and early 1990s did not prevent the poultry and livestock subsector from achieving respectable growth rates. It had the highest growth rate (5.4 per cent a year) among the subsectors of agriculture, contributing about 60 per cent of the observed growth of agriculture's GVA. GVA growth in poultry (mainly chicken) accounted for much of the growth in this subsector. As shall be shown below, the growth could have been contributed partly by favourable domestic prices owing to the relatively high nominal protection afforded by domestic policy in this subsector.

Policy Environment

The 1970s saw an unprecedented rise of government interventions in Philippine agriculture. These interventions took the form of various levies and charges on agricultural commodities and the government's direct control of agricultural activities, including domestic production, processing, distribution, and international trade. The granting of monopolistic rights to quasi-public and private entities was also an important feature of the decade. The Marcos government's departure from the political scene and the ascension to power of the Aquino government in 1986 promised prospects for an undoing of policies towards a market-oriented, fairly unregulated agricultural economy, one relieved of the onerous burden of explicit as well as implicit taxation of agriculture.

Deregulation in agriculture has meant the phasing out of price and quantitative controls as well as levies and taxes on agricultural inputs and outputs, the elimination of barriers to entry (and exit) in agricultural activities, and the realignment of government functions towards the provision of so-called public goods (and its exit from activities or areas in which the public-good argument for government interventions is fundamentally weak or non-existent) as well as the maintenance of food price stability. More concretely, starting in

the mid-1980s, the deregulation has taken the following forms.

- Lifting of the export ban on copra and the export tax on coconut oil;
- Abolition of monopsonistic arrangements in sugar and coconut trading;
- Liberalization of fertilizer distribution and importation;
- Removal of price controls on rice, poultry products and pork;
- Opening up of import trade in wheat, flour, and animal feeds to the private sector;
- Divestment of the National Food Authority (NFA) from non-grain activities and the reorientation of its primary function to price stabilization of rice and corn; and
- Consolidation of commodity-specific funds into the Comprehensive Agricultural Loan Fund.

However, the deregulation of agriculture has been substantially incomplete. It has not included the abolition of:

- NFA monopoly of international trade and domestic market operations in rice and corn;
- Import controls on sugar;
- Import prohibitions on onions, potatoes, garlic, cabbages, coffee, and seeds;
- Hectareage controls on banana production;
- Centralized importation of ruminants (for breeding and/or slaughter) and beef;
- Bans on buntal and ramie planting materials;
- Export restrictions on animal and animal products; and
- Unnecessary licensing and/or registration of production and domestic trade for agricultural goods.

The economic justifications for further deregulation of agricultural markets have been well articulated (see, for example, David [1983]; de Dios [1984]; Bautista [1987]; David et al. [1993]). The road to deregulation is, however, not smooth since there are political economy factors to reckon with. Those who are harmed by the deregulation,

normally large farmers (such as sugar and seeds producers), could exert considerable political pressure on the instrumentalities of government, while those who stand to benefit from the deregulation (small farmers and consumers) seldom have their interests heard. Moreover, unlike during the Marcos-Aquino transition period when policy reformers in government had a relatively free hand in undertaking reforms, the deregulation process now involves not only the executive branch of government, particularly the Department of Agriculture (DA) and its various attached agencies, but also the legislative and judicial branches. Undoing numerous economic regulations would involve the difficult process of getting Congress to repeal, amend or enact applicable laws.¹

In the early 1990s, instead of further expanding the scope of deregulation, the government moved to strengthen regulation in agriculture, especially international trade of agricultural products. A few months prior to the 1992 national elections, Congress, with the endorsement of the executive branch, passed Republic Act 7607, otherwise known as the Magna Carta of Small Farmers. This Act stipulates that importation shall not be allowed on agricultural products that *are produced locally in sufficient quantity*. Malacañang's Memorandum Order implementing the Act specifically prohibits the importation of corn and its substitutes (including wheat used for feeds), poultry and poultry products, hogs and pork products, and meat and meat products (except beef and beef products), unless the importation is certified by the DA as necessary to meet an actual or anticipated shortage in the local production of such products. This has placed enormous regulatory power on the DA and practically swept away whatever gains made from earlier trade deregulation.

A summary measure of the impact of trade and regulatory policies in the early 1980s and early 1990s is the nominal protection rate (NPR), defined as the proportionate difference between the domestic price and the comparable border price evaluated at the official exchange rate. An NPR value greater than zero suggests that

domestic policies confer protection to producers of the commodity; otherwise, these policies penalize domestic producers of the commodity. The NPRs for major locally produced agricultural commodities competing with imports are shown in Table 5. Clearly, the NPRs in the early 1990s were higher than those in the early 1980s, also a period of pervasive regulation of agricultural markets.

Another government programme that has profound effect on agriculture is the Comprehensive Agrarian Reform Program (CARP). Launched in 1988, the programme covers all agricultural lands, regardless of commodity produced and tenurial arrangement, and is to be fully implemented within 10 years. However, the huge budgetary requirement of the programme, together with the limited technical capacity of the agencies tasked to implement it, has stood in the way of *swift* implementation. Moreover, certain sectors (for example, prawn and sugar farms) have continued to lobby in Congress for exclusion from the programme. The uncertainty surrounding the programme has discouraged the flow of investments into agriculture as well as encouraged non-planting and premature conversion of agricultural lands into non-agricultural uses (Medalla and Centeno 1994).

The CARP has also diminished the collateral value of agricultural lands. If a land is foreclosed

TABLE 5
Nominal Protection Rates for Selected
Agricultural Products
(Percentages)

Commodity	1980-82	1990-92
Rice	1	16
Corn	20	62
Sugar	4	89
Chicken	85	94
Pork	6	31
Beef	57	na

SOURCES: David (1983); David et al. (1994).

by a lending institution owing to loan default, the lender could not dispose of the property to a party other than the government which solely decides the amount to be paid for the land, the timing of acquisition, and the entity or person who eventually gets to own the land. This feature of the programme has caused the demise of private markets for agricultural lands.

Indeed, the amount of loans (at constant prices) granted by private and government banks in the early 1990s was only one half of that in the early 1980s. Loans by private institutions, including private commercial banks, dropped by much more than loans by public institutions. Loan per peso of agricultural value added fell from about 0.42 in 1980–82 to 0.20 in 1985–87 and to 0.16 in 1991–92.

Rural Performance during a Boom-Bust Period of Growth

The economy grew at an annual average of 5.6 per cent in the 1960s and 1970s. The economic crisis of 1984 and 1985 led to an overall contraction of the economy by an average of 2 per cent annually in the first half of the 1980s. Combined with a relatively high population growth, the contraction led to a decline in per capita income by an annual average of 4.3 per cent, effectively reducing per capita income to the 1975 level. The economic recovery in the second half of the 1980s — GDP grew at an annual average of 5.8 per cent — proved to be short-lived. The growth of GDP per capita plummeted from 3.8 per cent in 1988 to –3.2 per cent in 1991. Growth, though very modest, resumed in 1993; by 1994 GDP had grown by about 5 per cent.

The boom-bust pattern of economic growth in the 1980s and early 1990s could have severely limited poverty reduction, especially in rural areas where social services were not only grossly inadequate but also disproportionately distributed in favour of the non-poor. In recent years, the rural poor comprised about two-thirds of national poverty; the large majority of them depended on agriculture and agriculture-related activities. Unfortunately, very little is known about the

changing profile of rural poverty and inequality during this period. In this section, we construct indices of poverty and inequality using national household survey data.

One set of data used in this article is the National Statistics Office's *Family Income and Expenditures Surveys* (FIES) for 1985, 1988, 1991, and 1994.² Unfortunately, this data set is inadequate for monitoring changes in poverty during recent episodes of economic boom and bust. As noted earlier, the early 1980s saw a sharp contraction of national income, the second half of the 1980s an economic recovery, and the early 1990s a virtual stagnation of economic activity.

The *Labor Force Survey* (LFS) provides quarterly income data for the late 1970s, 1980s, and early 1990s.³ These data are, however, limited only to workers' earnings from employment (wages, salaries, and entrepreneurial incomes from self-employment), thereby excluding other sources of family income such as shares from crops, remittances, and gifts. Reported labour earnings therefore underestimate a worker's standard of living. The data also exclude members of households who are not part of the labour force, that is those who are below 15 years old and above 65 years old as well as those who have opted not to be part of the labour force. This exclusion tends to systematically create a downward bias on the magnitude of poverty in the population. It is well known, for example, that poor households tend to have large family sizes and have disproportionately young members who are not, in a formal sense, members of the labour force.

While income (or consumption) transfers may alleviate poverty, they are not likely to be important sources of long-term poverty reduction. It is sustained expansion of employment opportunities, leading to sustained expansion of labour earnings, that represents the long-term solution to poverty. The LFS data can provide useful information for monitoring long-term changes in the economic welfare of the population.

A note on the quantification of poverty is in order. In this article, we use per capita income as indicator of current welfare level.⁴ A household is

deemed poor if its per capita income is below the poverty line. For practical purposes, the poverty line is defined as the critical minimum amount of income below which a person cannot attain a pre-determined consumption bundle of goods and services deemed necessary for the fulfilment of certain basic needs, especially adequate nutrition. This article has adopted the poverty lines for 1991 estimated by the inter-agency Technical Working Group on Poverty Determination chaired by the National Statistical Coordination Board. These estimates cover the country's 13 regions subdivided into rural and urban areas and take into account regional price differences and consumption patterns.⁵ In obtaining poverty lines for other years, the estimates for 1991 are adjusted using the *food* price index. That is, the real poverty lines are held fixed for the period covered by the study. This is not an unreasonable assumption. Holding the poverty lines fixed over time simply reflects the view that it is *absolute* poverty — and the progress being made in reducing it — that deeply concerns policy makers in the Philippines.

Official publications report only the *incidence* of poverty (also referred to as head-count index), simply defined as the proportionate number of the poor in the population. This index has some shortcomings. It is, for example, insensitive to the *depth* of poverty as well as to the redistribution of income among the poor (that is the *severity* of poverty). Its advantage is that it is easily understood and communicated. However, for our purposes, we focus only on the head-count index. Fortunately, the exclusion of other poverty measures does not entail much loss of information on poverty profiles, at least for the Philippine data.⁶

Figure 1 summarizes poverty estimates for the country and for the agricultural sector, based on the FIES income data. Figure 2 shows poverty estimates based on the LFS data. Note that the population referred to in this figure is the total labour force, thereby excluding household members who are not in the labour force.

In both data sets, the poverty incidence did fall between 1985 and 1988. The improvement in the command over resources of the poor could have come from several factors. For one thing, the

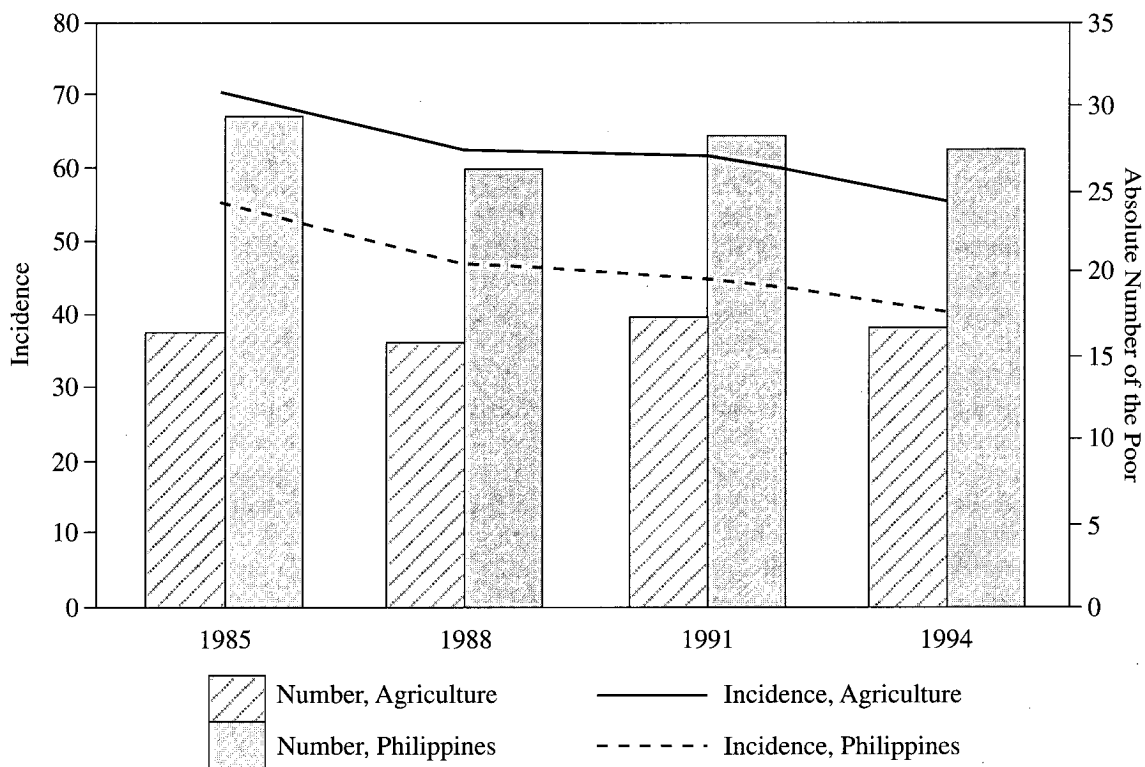
inflation rate dropped from 18 per cent in 1985 to 9 per cent in 1988, possibly benefiting the majority of the poor who tend to be fixed-income earners and subsistence self-employed workers. For another, in sectors where most of the poor are found, the increase in mean income (and consumption) appears to have been accompanied by improvement in the size distribution of income.

Poverty reduction in rural areas accounted for about two-thirds of the observed reduction in national poverty between 1985 and 1988.⁷ For both rural and urban areas, intrasectoral gains capture almost all the observed reduction in national poverty.

Distributionally neutral growth accounted for only 40 per cent of the observed aggregate poverty alleviation during the period. In rural areas, this contribution was 46 per cent, while that in urban areas was 44 per cent. The agricultural sector contributed about half of the observed reduction in national poverty during the period. The proportionate changes in the real incomes of the bottom two quintiles (poorest 40 per cent) of the population in agriculture were substantially higher than those for the top (richest 20 per cent) of the population. Entrepreneurial incomes accounted for about half of the total income of the poor, and these increased by 38 per cent for the poorest 20 per cent and by 29 per cent for the next poorest 20 per cent from 1985 to 1988. In contrast, entrepreneurial incomes increased by only 4 per cent for the richest 20 per cent of the population. Note that this period was marked by substantial deregulation of agricultural markets, particularly in coconuts, sugar-cane, and, to some extent, grains. The period also saw the recovery of world market prices for sugar-cane and coconut products. In real terms, farmgate prices rose by an annual average of 13 per cent for coconut and by 16 per cent for sugar-cane. It thus appears that the deregulation favourably affected small farmers.

The economic recovery in the second half of the 1980s which saw GDP grow at an annual average of 5.8 per cent proved to be short-lived. The growth of per capita GDP virtually stagnated from 1988 to 1991. Inflation rose from 8.8 per cent in 1987 to 18.7 per cent in 1991. The fiscal

FIGURE 1
 Magnitude of Poverty
 (Incidence in %; number in millions)



NOTES: All calculations are based on family incomes, adjusted for family size and for cost-of-living differences between urban and rural areas. Figures for 1994 are preliminary. All estimates are based on the *Family Income and Expenditures Survey* data for the National Statistics Office.

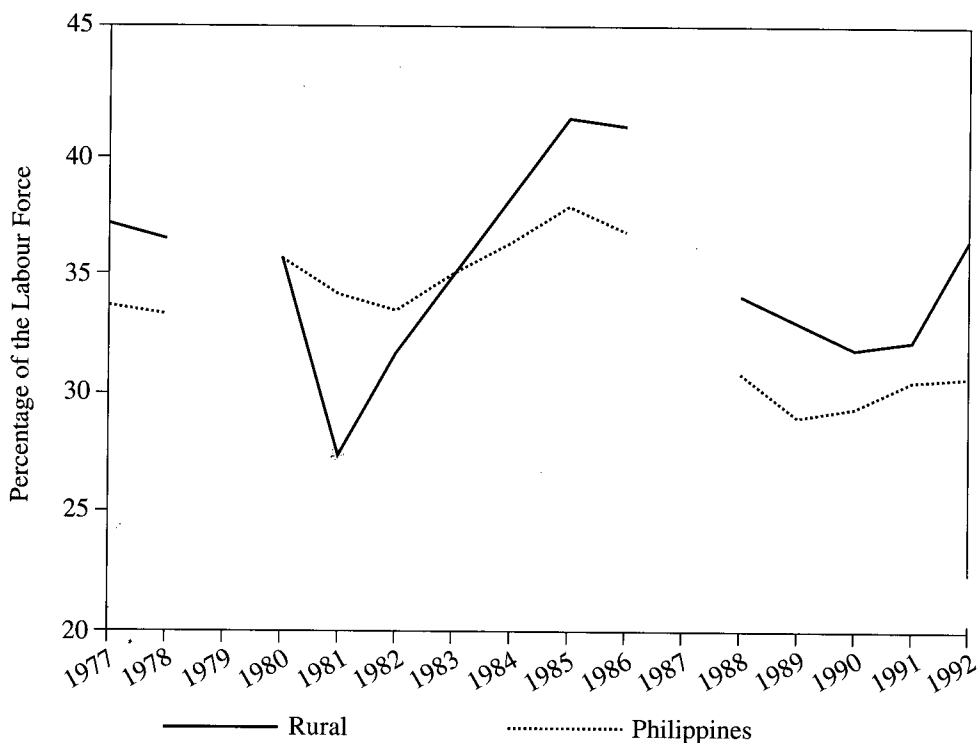
deficits grew to insupportable proportions, from 5 per cent of GNP in 1987 to 7 per cent in 1991, mostly because of interest payments on domestic debt. Total infrastructure spending fell substantially — the 1990 level was only 60 per cent of that in 1991. The neglect of infrastructure investment in the energy sector eventually led to crippling power shortages beginning in 1989. Unsustainable BOP problems eventually led to a currency devaluation by about 12 per cent in late 1990.

Based on FIES data, poverty incidence remained high at about 45 per cent during this

period; the absolute number of the poor rose to 28 million in 1991. The rise was even more evident for the labour force; poverty incidence for this set of the population rose from about 29 per cent in 1989 to 31 per cent in 1992, the latest comparable data available. Based on the FIES data, the Gini index rose from 0.45 in 1985 and 1988 to 0.48 in 1991. In 1985 and 1988, the income of the richest 20 per cent of the population was about nine-fold that of the poorest 20 per cent; in 1991, the disparity rose to about eleven-fold.

Poverty incidence dropped from about 45 per cent in 1991 to 41 per cent in 1994. Since the

FIGURE 2
Incidence of Poverty in the Labour Force



NOTES: No data available for 1979 and 1987. All estimates are based on earnings data reported in the *Integrated Survey of Households: Labour Force Survey*.

increase in average per capita income during this period was minimal, the decline could have come mainly from improvement in the distribution of income. Indeed, while the reduction in inequality was relatively small (the familiar Gini coefficient fell from 0.48 to 0.46), poverty incidence is very sensitive to (small) changes in summary measures of inequality (Balisacan 1995a).

In recent years, while the agricultural population accounted for less than half of the population, they represented about two-thirds of the total number of the poor in the country. The increase in the absolute number of the poor in the early 1990s came mainly from the proportionately greater increase in the number of the poor in agriculture. The latter increase arose not from increasing

inequality within agriculture but mainly from falling earnings in agriculture relative to those in the rest of the economy. Income inequality in agriculture is less severe than that for the country as a whole and has virtually not changed in recent years (Balisacan 1995b). As shown earlier, output growth in agriculture, particularly in crops, experienced serious setbacks in recent years.

Concluding Remarks

The growth of agricultural output has not only substantially slowed down but also considerably fallen *vis-à-vis* the country's population growth (suggesting either rising food imports or dwindling agricultural exports, or both). During

the 1980s and early 1990s, the average annual growth of agriculture — a meagre 1.8 per cent — is low by the standards of the 1960s and 1970s and of other developing Asian countries. The performance of the crop subsector, which accounted for about 60 per cent of total agricultural output, was even more disturbing: this subsector grew by only about one per cent a year from the early 1980s to the early 1990s and practically stagnated during the first half of the 1990s.

The poor performance of agriculture during the last 15 years has constrained overall achievement in poverty alleviation. While the evidence presented in this article shows a declining proportion of the population deemed poor, the decline was rather slow, particularly in the rural sector where the large majority of the poor are engaged in agriculture or agriculture-related activities. More importantly, the quite pathetic performance of the agriculture sector could derail the sustainability of the current economic recovery.⁸

While domestic and global shocks (for example falling world prices of agricultural products) could be blamed for the poor performance of agriculture, they are hardly sufficient. Other developing countries faced with the same international environment have managed to get their agriculture moving at a respectable rate. The more fundamental reasons for the poor performance have to be found in domestic policies directly and indirectly affecting agricultural structures and incentives. In recent years, there has been a tendency to embrace old habits of market regulations, particularly quantitative restrictions

on agricultural products locally produced. These regulations have tended to prevent the allocation of scarce resources to where they are most productive, inhibit investments in innovations and yield-enhancing measures, and promote growth-retarding rent-seeking activities. Public investments in agriculture, particularly irrigation, rural roads, and research and development, have also dwindled in recent years. Moreover, because it is taking the government too long to implement the Comprehensive Agrarian Reform Program, a pervasive atmosphere of uncertainty has not only discouraged the flow of private investments into agriculture but also encouraged non-planting and premature conversion of agricultural lands into non-agricultural uses.

Contrary to common perception in the Philippines, recent episodes of economic growth have benefited the poor, even more so than the non-poor. Conversely, the last episode of economic downturn disproportionately reduced the command over resources of the poor. Thus, in contrast to the 1960s and 1970s when economic growth did not significantly reduce poverty (Balisacan 1993a), the country's performance in poverty alleviation in recent years has become very sensitive to overall growth. This suggests that economic reforms in recent years, albeit largely incomplete, have favourably changed the economic environment of the poor. The details of transmission actually involved from policy reforms to improvement in economic well-being of the poor is an interesting area for future research.

NOTES

This article was presented at the Indochina Roundtable II 1995 held in Singapore on 14–15 December 1995.

1. See Balisacan (1995b) for a list of congressional acts and administrative issuances with provisions for regulation of international trade and domestic production.
2. Prior to 1985, reliable FIES data are available only for 1961, 1965, and 1971. For an evaluation of the usefulness of FIES data for household welfare analysis, see Balisacan (1994; 1995a).
3. Quarterly income data were not collected prior to 1977. No LFS data are available for 1979 and 1987.
4. Other analysts, especially economists, prefer to use current consumption as a welfare indicator, arguing that if a person can borrow or dissave, his or her welfare level need not be constrained by current income. The choice is an empirical and practical matter. It has been demonstrated, for example, that even if current consumption may vary less around long-term well-being, it may perform less satisfactorily compared to other welfare

-
- indicators, such as current income, in consistently identifying the chronically poor (Chaudhuri and Ravallion 1994).
5. These estimates, however, are rather high compared to those for Thailand and Indonesia.
 6. See Balisacan (1993a; 1994) for estimates of other aggregate measures of poverty.
 7. Balisacan (1993b) provides details on sources of poverty change from 1985 to 1988.
 8. GDP grew by about 5 per cent in 1994; it could grow by 6 per cent in 1995.

REFERENCES

- Balisacan, Arsenio M. "Agricultural Growth, Landlessness, Off-Farm Employment, and Rural Poverty in the Philippines". *Economic Development and Cultural Change* 41 (1993a): 533-62.
- . "The Human Face of Poverty during a Period of Macroeconomic Adjustment". In *Perspective on Philippine Poverty*, by A.M. Balisacan et al. Quezon City: University of the Philippines Press and Yale University Council on Southeast Asian Studies, 1993b.
- . *Poverty, Urbanization and Development Policy: A Philippine Perspective*. Quezon City: University of the Philippines Press, 1994.
- . "Anatomy of Poverty during Adjustment: The Philippine Case". *Economic Development and Cultural Change* 44 (1995a): 33-62.
- . "Agriculture in Transition: Arresting Poverty in the Rural Sector". In *Towards Sustained Growth*, edited by Raul V. Fabella and Hideyoshi Sakai. Tokyo: Institute of Developing Economies, 1995b.
- Bautista, Romeo M. *Production Incentives in Philippine Agriculture: Effects of Trade and Exchange Rate Policies*. Research Report 59. Washington, D.C.: International Food Policy Research Institute, 1987.
- Chaudhuri, Shubham, and Martin Ravallion. "How Well Do Static Indicators Identify the Chronically Poor?". *Journal of Public Economics* 53 (1994): 367-94.
- Chenery, Hollis B. and M. Syrquin. *Patterns of Development, 1950-70*. London: Oxford University Press, 1975.
- David, Cristina C. "Economic Policies and Agricultural Incentives". *Philippine Economic Journal* 11 (1983): 154-82.
- . Eliseo R. Ponce, and Ponciano-S. Intal, Jr. "Organizing for Results: The Philippine Agricultural Sector". In *Poverty, Growth and the Fiscal Crisis*, by Emmanuel S. de Dios and Associates. Makati: Philippine Institute for Development Studies and International Development Research Center, 1993.
- de Dios, Emmanuel, ed. *An Analysis of the Philippine Economic Crisis*. Quezon City: University of the Philippines Press, 1984.
- Medalla, Felipe and Luz Centeno. "Land Use, Urbanization, and the Land Conversion Issue". In *Spatial Development, Land Use, and Urban-Rural Growth Linkages in the Philippines*, by A.M. Balisacan, F. Medalla, and Ernesto Pernia. Pasig, Philippines: National Economic and Development Authority, 1995.
- Oshima, Harry T. *Economic Growth of Monsoon Asia: A Comparative Survey*. Tokyo: University of Tokyo Press, 1987.

Arsenio M. Balisacan is Professor of Economics at the School of Economics, University of the Philippines, Diliman.