

# Agriculture in times of crisis

## Impacts in South East Asia of the economic crisis

By Gus Hooke, Peter Warr, Barry Shaw, Adam Fforde and Caroline Brassard





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A report commissioned by the Australian Agency for International Development (AusAID) from Hassall and Associates International. The views expressed are not necessarily those of AusAID or the Australian Government.

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# Preface

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This report is published as a contribution to public knowledge of the impacts of the crisis on agriculture, rural development and agricultural institutions in Thailand, Indonesia, Vietnam and the Philippines. The report is based on one commissioned by the Australian Agency for International Development (AusAID) from Hassall and Associates International, entitled *Study on the Effects of the East Asian Economic Crisis on Agriculture and Rural Development in Major Recipients of Australian Aid*.

Economists familiar with current research and the country undertook the study. Their papers have been edited to focus on presenting the impacts of the crisis to a general audience. The views contained in the report are those of the authors and not necessarily those of the Australian Government or AusAID.

Readers interested in more detail and in the evidence from which conclusions are drawn can obtain the original report from:

Director  
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# Executive Summary

The major threat the economic crisis in South East Asia posed was whether large numbers of people brought above the poverty line over recent decades would now begin to fall below it. As this study shows, the major impacts were on urban areas. The impacts on rural areas and agriculture were not as great as initially feared. Impacts were considerable, but they varied widely from country to country, region to region, and crop to crop. Indeed, there have been some benefits.

For decades, most regional countries achieved remarkable rates of economic growth and succeeded in reducing poverty. In 1997, the economic crisis abruptly interrupted the miracle. In Thailand and Indonesia, the economic dislocation was due mainly to an excessive reliance on short term borrowing to fund high rates of economic growth. The effects, in much milder form, flowed through to Vietnam and the Philippines.

In all four countries, the adverse effects appear to have been less severe and protracted than many observers initially feared. This is due partly to poor estimates and projections, as well as difficulties in separating the effects of weather and other external changes from those of the economic crisis. It also reflects the effective operation of adjustment mechanisms in the four economies and coping mechanisms among their households.

The adverse effects appear not to have been correlated with initial levels of poverty, nor were they concentrated in the rural areas where most of the poor live.

## Origins

The economic crisis emerged first in Thailand. Thailand used short term borrowing to cover a large current account deficit while maintaining a fixed exchange rate between the baht and the US dollar. The fixed rate system was threatened when short term external liabilities rose above foreign exchange reserves and the more these liabilities rose, the more vulnerable the system became. By early 1997, the liabilities were more than double foreign exchange reserves. A slowdown in Thailand's exports generated panic among investors, who began to withdraw their capital from the country. With reserves falling rapidly, the Bank of Thailand was forced to float the baht on 2 July 1997. The exchange rate fell severely, the value of financial assets plummeted, and interest rates rose to high levels.

The crisis in Thailand triggered similar changes in Indonesia. However, Indonesia may have experienced a financial and economic crisis independently of developments in Thailand. Indonesia also had maintained a fixed exchange rate with the US dollar. Like Thailand, it ran a large current account deficit to achieve high and long term economic growth. It also relied heavily on short term borrowing to fund the deficit. The implications for the viability of the fixed exchange rate were the same. The events in Thailand probably brought forward, rather than caused, the crisis in Indonesia.

Vietnam avoided the traumatic aspects of the crisis. It did not rely heavily on short term capital to fund a deficit. Nor did it have a fixed exchange rate to defend. Accordingly, it was less vulnerable to changes in investor sentiment, and these adjustments and other changes could be made as they occurred, rather than being allowed to build up behind the wall of the fixed rate.

The effects of the crisis spread quickly to the Philippines. Economic growth declined and agricultural production fell sharply. However, the major cause appeared to be adverse weather conditions associated with *El Niño* and *La Niña*, rather than the East Asian economic crisis.

## Economic effects

The economic effects were most severe in Thailand and Indonesia. In Thailand, annual GDP growth fell to -0.4 per cent in 1997 and -7.5 per cent in 1998. In Indonesia, growth was 6 per cent in 1996, but fell to 4.6 per cent in 1997 and -15 per cent in 1998. In both countries, the falls were concentrated in urban areas, particularly in construction and financial services.

Unemployment increased in both countries, although not by as much as some observers had feared. Flexible labour markets moderated the adverse employment effects in both Thailand and Indonesia. Reduced demand for labour produced a fall in the real wage, which moderated the effect on employment. While unemployment did increase during the crisis, employment rose about twice as rapidly, especially among younger workers.

In Vietnam, economic growth declined, but not substantially. Following the onset of the crisis, the Philippines experienced a large contraction in building and construction, and a rise in unemployment. However, services increased and GDP growth appeared to remain positive.

## Poverty

The crisis increased poverty in three of the four countries, although not by as much as initially feared. In Thailand, the incidence of poverty rose, but to less than the rate in 1994. In Indonesia, poverty increased, but to less than one-tenth of the level that had prevailed 20 years before. The incidence of poverty in Vietnam is several times higher than in Thailand or Indonesia, but the crisis has not increased the rate. Poverty in the Philippines increased, but mainly because of *El Niño* effects.

## Inequality

Inequality increased slightly in Thailand. In Indonesia, the crisis mainly affected urban areas initially. Nature-based phenomena rather than the economic crisis mainly affected rural areas, where poverty is much greater. In Vietnam, the main impact of the crisis has been through indirect channels such as reduced rural employment opportunities and lower rural incomes. The crisis may not have worsened inequality in the Philippines, since the major impact was in urban areas. Nevertheless, the rural poor were adversely affected by crisis-induced cutbacks in government rural expenditures.

## Agricultural production

The crisis generally had a positive, but probably not very large effect on agricultural production by lowering the exchange rate in all four countries. The crisis, adverse weather, and fires combined to reduce rice production in Indonesia in 1997 and 1998 by around 10 per cent. Most of the decline was in Java, one of the richer areas of the country. In Vietnam, agricultural production increased in 1998, despite a drought caused by *El Niño*, as well as

storms and floods brought by *La Niña*. In the Philippines, the economic crisis was not responsible for poor agricultural performance. Rather, the drought in 1997, and publicity given to coming *La Niña* storms, meant fewer areas were planted with rice and corn as farmers went into survival/subsistence mode.

## Rural development

The crisis had a mixed effect on rural development. On one hand, the large currency depreciations made the production of many agricultural products more profitable. On the other hand, the crisis tightened central government budgets, except in Vietnam, where the fiscal impact was modest and planned rural expenditures were not scaled back.

Farm incomes probably rose in Vietnam and Thailand after the crisis began because of increases in farm production and exchange rate-induced price rises for many farm products. The incomes of farmers fell in Indonesia and the Philippines primarily because production was reduced significantly because of *El Niño* and *La Niña* induced weather conditions and, in Indonesia, serious fires.

Before the crisis, many rural households received remittances from family members who worked in urban areas, especially the construction industry. The increase in urban unemployment and underemployment and, more importantly, the fall in real wages of those who remained employed, reduced the flow of remittances. In addition, the return of

unemployed urban workers to rural areas increased the demands on the incomes of rural households.

The crisis affected rural institutions in the four countries. Some effects are beneficial and should contribute to the longer term economic development and poverty reduction. Others may have less favourable effects.

## Effects on activities of donors

The crisis led to demands for more assistance, to which donors quickly and generously responded. However, some cases indicate an over-reaction, with donors giving too much attention to ameliorating the perceived effects of the crisis at the expense of longer term programs aimed at sustainable reductions in poverty.

The crisis also increased the difficulties recipient country partners face in providing counterpart resources for some ongoing programs. Counterpart provisions of ongoing and planned programs will need to be reviewed and, where necessary, revised. There should be continuous monitoring of all projects, and adjustments made to take account of unforeseen developments.

While the deterioration in economic performance in the four countries has been considerable, it has been much less than was earlier feared, has not been concentrated in rural areas, and has not been especially focussed on the very poor. There are signs that the adverse effects are diminishing and may soon disappear.

The one clear and over-riding objective of all aid programs should be the reduction of poverty. It should not matter whether the cause of the poverty is an economic crisis, shortcomings in domestic policies, adverse weather, low land productivity, over-crowding on the land, inadequate infrastructure or whatever; though these will generally affect the selection of projects aimed at alleviating the poverty.



The great majority of the very poor live in rural areas. An important target group of poverty reduction programs should therefore be farmers. Poverty-reduction programs should also facilitate the movement of labour into non-farm activities.

Aid programs should recognise that recurring short-term difficulties are an integral part of the longer-term outlook for aid-recipient countries, as they are for other countries. These difficulties will normally have serious effects on the very poor and they can easily undermine important aspects of longer-term poverty-reduction programs. It might therefore be appropriate for aid efforts to include the development of quick-response mechanisms to ameliorate some of the short-term adverse effects.

## Overall

East Asia has experienced two major financial crises in the latter half of the twentieth century. The first, in the mid-1970s, was shared with most of the world's countries. The crisis beginning in July 1997 was limited to a small number of countries but, for these, was equally severe. A characteristic of both crises was that they produced a strong momentum among both aid donors and recipients for changes to aid policies and programs. A second characteristic was that they turned out to be less severe and protracted than initially feared. As a consequence, much of the momentum for reform has dissipated by the time the reform proposals had been drafted.

Nevertheless, both the need and the opportunities for reform remain. Perhaps the most important lesson from the recent crisis is that the groundwork for reform should be undertaken when the economies are performing smoothly, so that changes can be implemented quickly when difficult circumstances provide a more receptive climate.



# Agriculture in Thailand

Peter Warr

Thailand's economic crisis ended the boom that lasted from 1987 to 1996. During that period, the Thai economy was the fastest growing in the world, with the real growth rate of gross domestic product (GDP) averaging close to 10 per cent per year. Massive inflows of foreign capital fuelled the boom and, as the boom continued, the inflows consisted increasingly of short term capital such as portfolio capital, short term loans and non-resident bank accounts, rather than long term capital such as direct foreign investment and loans with long maturities.

Unlike long term inflows, short term inflows can turn into outflows at very short notice. By early 1997, Thailand's short term liabilities were almost double the country's foreign exchange reserves. If something happened to erode confidence among foreign investors, provoking an outflow of short term capital, the Bank of Thailand's reserves would be insufficient to maintain the prevailing fixed exchange rate system.

During 1996, such an event occurred. The annual growth of Thailand's exports dropped from around 20 per cent to just below zero. Various factors caused this fall, including depreciation of the Japanese yen relative to the US dollar (to which the baht was pegged).

## Macro effects

### *Economic*

The export slowdown would not have been so damaging if Thailand's current account deficits had not been so high, averaging around

8 per cent of GDP in the preceding years. On top of this, the stock of volatile capital was high. Market participants thus came to expect devaluation.

In response to this belief, short term capital moved out of Thailand at an unprecedented rate, putting irresistible pressure on the country's reserves. On 2 July 1997, the Bank of Thailand floated the baht, which depreciated throughout the remainder of 1997 from the pre-crisis rate of Baht 25:US\$1 until it reached Baht 55:US\$1 in January 1998.

Over the following eight months, the value of the baht gradually recovered, reaching Baht 35:US\$1 in the third quarter of 1998. It stabilised at around that rate for the remainder of 1998.

Interest rates in Thailand soared in late 1997 and remained at over 20 per cent until the third quarter of 1998, when they fell back to below 15 per cent.

Thailand's currency crisis damaged confidence in neighbouring countries with similar economic circumstances, including Indonesia, Malaysia and the Philippines, provoking economic crises in those countries. This became known as the contagion effect.



Currency depreciations normally make export production more profitable. Export industries usually respond quickly to currency depreciation by expanding their output, thus reducing the magnitude of the country's balance of payments problem. However, Thailand's export volume did not increase as rapidly as anticipated because:

- production decisions related to exports depended on estimates of future exchange rates and, under the new floating rate system and the post-crisis environment, future exchange rates remained highly uncertain
- the depreciation was slow to affect the prices received by producers of some export commodities, especially rice
- high interest rates signalled the difficulty of obtaining working capital to finance an expansion of output, whether for export or domestic sale
- many Thai export industries, especially in manufacturing, also depended on imports of intermediate goods. The depreciation of the currency made these inputs more expensive
- several of Thailand's neighbours also were suffering from the crisis. Like Thailand, they had depreciated their currencies and were attempting to expand exports of similar commodities. Thus, international prices of these key commodities declined significantly.



International prices of rice and, more particularly, rubber declined. Because several commodity-exporting countries suffered from the crisis and their currencies depreciated as a result, demand was depressed. In Thailand, slightly expanded rice exports were more than offset by proportionately larger declines in export prices, measured in US dollars, so export revenues fell. Total export revenue from crops fell from US\$6.1 billion in 1996 to US\$5.4 billion in 1997 to US\$4.5 billion in 1998.

During 1997, Thailand's total and per capita GDP stopped growing, falling by -0.4 per cent and -1.5 per cent respectively. This was the country's first year of negative per capita GDP growth since 1958. In 1998, the rates were -7.5 per cent for total GDP and -8.5 per cent for per capita GDP.

The sectors most severely affected were construction, where output declined by 20 per cent in 1998, and financial services. However, output also declined in manufacturing and other urban-based services industries. The initial impact of the crisis was thus in urban areas. The rural impact was primarily a consequence of the urban impact.

### *Social*

The economic developments produced the social effects of the crisis. Labour market developments affected the incidence of poverty and inequality, subsequently affecting employment, unemployment, underemployment and wages. Women and children were particularly affected.

The proportion of the population living in poverty was 11.8 per cent in the first quarter of 1996 and 10.6 per cent in the following quarter.

The corresponding estimates for 1998 were 13.0 per cent and 12.4 per cent, respectively. They suggest that the incidence of poverty increased by about 1.5 percentage points over the two years. On balance, the real incomes of one million people appear to have moved below the poverty line.

The economic crisis thus interrupted the long term trend of declining poverty incidence in Thailand. However, the rise in poverty levels from 1996 to 1998 must be viewed in perspective. The incidence of poverty following the crisis was still significantly below the corresponding level in 1994 and was 20 percentage points lower than a decade earlier. The actual increase is apparently well below many earlier projections, which suggested that several million Thai people would fall below the poverty line.

Crisis-induced suffering was reduced because:

- even poor households can maintain essential consumption in the short term, despite large falls in household incomes, provided they can draw on savings or borrow against assets
- in a society in which the extended family substitutes for a social security system for most people, transfers from other family members can ameliorate a large decline in a household's market-based income.

Changes in the incidence of poverty varied considerably among regions. In the north, it fell by 1.8 percentage points to 9.3 per cent in 1998. It also declined in the west. In Bangkok and its vicinity, where the incidence is low, the rise was from 0.6 per cent in 1996 to 0.75 per cent in 1998. Moderate increases also occurred in the central and eastern regions. However, the largest rises occurred in the north east and south, where the incidence increased by 3.4 percentage points to 22.7 per cent and by 4.2 percentage points to 15.6 per cent, respectively.

Poverty increased most in rural areas from 14.9 per cent in the first half of 1996 to 16.9 per cent two years later. The corresponding increase in urban poverty incidence was from

3.8 per cent to 4.4 per cent. Rural areas account for more than half the population, so the absolute increase in the number of people in poverty was much larger in rural than in urban areas.

Since the impact of the crisis was felt initially in urban areas, reverse migration, from urban to rural areas, was important. The crisis induced many urban residents whose incomes fell below the poverty line to return to rural areas. This shifted much of the incidence of poverty to rural areas.

### *Inequality*

Some observers speculated the crisis would reduce inequality in Thailand by concentrating the effects on the rich rather than on the poor. Preliminary results do not confirm this view. The Gini index of inequality of real incomes in Thailand (higher numbers mean greater inequality) rose from 47.4 in 1996 to 48.2 in 1998. The crisis thus reversed the trend since 1992 of declining inequality in Thailand. The share in total income of the poorest four-fifths of the population fell marginally. The share of the richest one-fifth rose from 55.3 per cent in 1996 to 56.2 per cent in 1998.

The average monthly real income of the richest one-fifth of the population increased from Baht 10 705 in 1996 to Baht 10 820 in 1998 (calculated in constant prices). Since the crisis made many rich people bankrupt, these data indicate many people made significant gains in their income. The average real incomes of all other quintile groups fell over the same period. For the poorest one-fifth, the decline was from Baht 843 to Baht 829 per month.

### *Employment and underemployment*

Poor people derive their incomes predominantly from their own labour; hence, developments in

the labour market significantly affect poverty incidence. In the first instance, the crisis was primarily an urban contraction. Many workers who were laid off returned to rural areas, increasing both unemployment and underemployment in these areas. However, a significant number remained in the urban areas, swelling the ranks of the urban unemployed and underemployed. As the contraction continued, many rural returnees seemed to move back to urban areas.

Compared with February 1997, in February 1998:

- total unemployment had increased from 700 000 (2.2 per cent of the labour force) to 1.5 million (4.6 per cent of the labour force)
- urban unemployment had increased, especially in the construction sector, but also in the manufacturing and services sectors. The unemployment rate in urban Bangkok rose from 1.4 per cent to 3.0 per cent
- rising urban unemployment had pushed some urban workers back to rural areas. Unemployment increased most in the rural north east (from 3.5 per cent to 8.2 per cent)
- underemployment (defined as people working from 1 to 20 hours per week) rose from 540 000 to 1.5 million (from 1.7 per cent to 4.6 per cent of the labour force). At the regional level, underemployment increased most in Bangkok (from 0.3 per cent to 12 per cent of the labour force), then in the rural south (4.2 per cent to 9.9 per cent). In the rural north east, underemployment increased from 1.5 per cent to 2.8 per cent of the labour force.

Unemployment increased by 2.4 percentage points (780 000 people) over the year to February 1998 and by 2.5 percentage points (850 000 people) and over the year to August 1998. The rises were significant in both urban and rural areas, but by August 1998, the increase in the *rate* of unemployment was higher in urban areas, even though the absolute increase in the number of unemployed was still



larger in rural areas. Underemployment increased moderately from 2.2 per cent of the total workforce in August 1997 to 2.9 per cent in August 1998. Most of Thailand's unemployment continues to be passive, as people are available for work but no longer actively look for work.

The labour market impact of the crisis appears to have occurred in three phases:

- the initial impact was in urban areas where large numbers of workers were laid off by urban enterprises
- these lay-offs increased the rate of urban unemployment and caused a movement of unemployed workers to rural areas. Some newly laid-off urban workers found part-time work in the cities
- the rural economy was unable to support the large number of urban people returning to rural areas because Thai agriculture had mechanised more over the preceding decade; agricultural production was drought affected; and rural production was not responding quickly to the increased profitability induced by the currency depreciation. Unable to find rural employment, many people returned to Bangkok and other urban centres in search of work.

### *Wages*

From February 1997 to February 1998, average money wages for both males and females increased slightly in most sectors. However, in urban areas, money wages for male construction sector workers fell by 15 per cent and male wages in services fell by 4 per cent. Male wages in the services sector also fell by 9.5 per cent in rural areas. Money wages of female workers did not fall in these sectors, but fell in urban manufacturing (4 per cent) and rural transport, storage and communications (15 per cent). In summary, male wages fell mainly in the urban construction and rural services sectors, while female wages fell mainly in urban manufacturing and rural small scale trading.

From February 1997 to February 1998, consumer prices increased by an average of 8.9 per cent. Real wages therefore fell. Average money wages rose by around 3 per cent, but real wages fell by around 6 per cent. The decline was greater in urban areas (8.3 per cent) than in rural areas (4.7 per cent). At the aggregate level, the decline in real wages was about the same for males and females, but in urban areas, it was greater for female real wages. The reverse applied in rural areas. Thus, at the aggregate level, the male-female earnings disparity remained virtually unchanged, but it increased in urban areas and declined in rural areas.

### *Children*

A serious social problem now exists in Thailand's rural areas, with many people now enduring economic hardship. The most significant long term problem will be the effects on children. Even before the crisis, rates of secondary school enrolment in Thailand were low by South East Asian standards, especially in rural areas. Secondary enrolment rates are lowest in the rural north east because secondary schools are heavily concentrated in urban areas and it is expensive for rural people to send their children away to school.

Since the crisis, many children have been taken out of school. Girls tend to be the first to be withdrawn. Past experience suggests a large proportion of these children will not return to school after the crisis abates. Thailand urgently needs to develop its human resources but the most enduring effect of the crisis may be that large numbers of rural people, especially women, will not obtain the education they need to lift themselves out of unskilled, lowly paid work.

## Impact on agriculture

Over the longer term, agriculture has declined worldwide. The sector's share in gross world product has fallen from more than 90 per cent in 1780 to 8 per cent (purchasing power parity basis) in 1998. In general, rapid growth of a country's per capita income corresponds with a rapid relative decline of its agricultural sector. By the end of the next century, the share of agriculture in gross world product may be less than 1 per cent.

Thailand shares in this worldwide experience. Its share of agriculture in GDP fell from more than 30 per cent in the early 1970s to just over 10 per cent by the mid 1990s. This long term decline has reflected partly the slow growth of demand for farm products compared to the faster growth of demand for manufactured goods and services, a result of rising incomes. It also reflects supply-side factors, especially capital accumulation, that draw resources out of labour intensive agricultural industries and into more capital intensive and skill intensive industries in manufacturing and services.

In addition to these underlying forces, Thai economic policy has contributed to the long term decline of agriculture. Government expenditure on agriculture is high by South East Asian standards; only Indonesia's is higher. However, the principal sources of economic progress lie outside the agricultural sector. Trade policies have encouraged the development of capital intensive manufacturing, giving that sector an edge when competing for domestic resources. In particular, public investment in agricultural research and extension has been modest. As a result, yield improvements in Thai agriculture have been the lowest in South East Asia.

Private capital investment in agriculture is also small, especially in crop production. Increases in the value of output resulted primarily from the shift away from rice (which had output growth under 1 per cent over the

decade prior to 1997) to higher value commodities, partly fruits and vegetables, but primarily livestock and fish.

While agricultural production did not grow as rapidly as output in the rest of the economy during periods of rapid growth, neither did it contract as severely as in other sectors during the crisis. In 1998, production fell by 7.5 per cent in the manufacturing sector, by 22 per cent in the construction sector and by 7.1 per cent in the services sector. In contrast, agricultural production rose by 2.5 per cent.

Following the onset of the economic crisis, policy interest in the agriculture increased greatly because it provided urgently needed foreign exchange without needing large capital inputs. Agriculture also absorbed large numbers of urban sector employees made redundant by business closures and slowdowns in the cities.

The devalued baht produced a major change in the pattern of domestic prices. The prices of tradeables (exportables and import substitutes) rose relative to those of non-tradeables, especially services. As a result, resources were released by the services sector and absorbed in the tradeables sector.

In the short term, output and employment in the agricultural sector can rise in response to the crisis. However, such adjustments are likely to be both limited and temporary. The devalued baht has increased the profitability of agricultural production, but it has not stimulated the expansion of agricultural production because the price responsiveness of Thai agricultural production is very low, especially for rice.

Over the medium to long term, the output of agricultural products in Thailand will increase





in response to modest growth in world demand for farm produce and Thailand's competitive advantage in meeting part of this demand. The share of the sector in GDP will continue its decline. Employment in agriculture also will fall, in absolute terms as well as a proportion of total employment.

Agricultural production has yet to respond significantly to the increased profit opportunities provided by the crisis. The area planted to the main season rice crop declined slightly from crop year 1996-97 to crop year 1997-98 and the Office of Agricultural Economics reports an increase of only 0.66 per cent in crop year 1998-99. The ending of the drought produced by *El Niño* raised rice yields by about 3 per cent. Of the other major agricultural products, only maize output increased significantly, due mainly to increased rainfall.

The very modest supply response to baht depreciation apparently results partly from low supply elasticities of agricultural commodities in Thailand, especially for rice.

It is also due to limited transmission of price increases to the farm gate, as well as reduced availability of bank lending in rural areas, which impaired farmers' ability to purchase working inputs. Moving resources into and out of rice production will be difficult in the short term and large increases in rice production in response to baht depreciation should not be expected.

### *El Niño*

The *El Niño* disruption of weather patterns occurred at much the same time as the economic crisis. The two were independent events, but the overall effect of *El Niño* on agricultural production was small. It had no observable impact on irrigated agriculture but in the north east, production of rainfed rice and maize was reduced significantly. With the ending of the *El Niño* effect in 1999, maize production should increase significantly and maize exports should increase.

## Impact on rural development

The economic crisis caused a significant movement of unemployed people from urban to rural areas. A large proportion of these migrants had left rural areas during the economic boom of the preceding decade to find more lucrative employment in urban areas. Only a small proportion of the returnees found work on farms. Most obtained non-agricultural employment or became part of the rural underemployed or unemployed.

During Thailand's long economic boom, rural people received significant remittances from family members who had moved to urban areas to improve their income earning possibilities in the boom. For rural families close to the poverty line, this source of income was very important, especially in the north east. The crisis has meant that remittances are no longer available for many rural families. Further, some rural families now make remittances to unemployed family members in urban areas.

In Bangkok, the construction industry was most severely affected by the crisis. This industry employed large numbers of unskilled and semi-skilled workers, both male and female, from the north east. The laid-off workers have returned to the north east in large numbers, but a high proportion failed to find work. They now impose a heavy burden on their rural families. The savings and assets of many extended rural families now are being drawn down. If the crisis is more protracted than expected, these assets will become exhausted and produce more severe economic hardship.

Because the share of farm products in total demand falls as per capita incomes rise, and those who remain on the farms want to share in the national increase in per capita income, employment on farms in Thailand should continue to decline. The long term economic future for Thailand's rural areas depends increasingly on non-farm activities. The factors which caused non-farm economic activity to concentrate in Bangkok must therefore be a central focus for future policy reform.

Lack of public infrastructure constrains non-farm rural development in Thailand. Roads in most rural areas including the north east are reasonably good; however, electricity supply, telephone lines and clean water need to be improved. Basic public institutions such as schools and hospitals also are in short supply. The national stock of these facilities is heavily concentrated in Bangkok and its surrounding provinces.

A more severe problem is highly centralised government administration. Firms wishing to set up businesses in rural areas require licenses and approvals that often can only be obtained in Bangkok. This makes doing business in rural areas costly.

The crisis threatens to delay the implementation of policy measures that address these problems. The Government's budget is under such pressure that additional spending which might improve public infrastructure in rural areas is impossible. Thus the crisis will delay the implementation of policy measures required to reduce the urban/rural imbalance that has characterised Thailand's past development.

## Impact on agricultural institutions

### *Policy response of the Thai Government*

The Thai Government re-directed its rural development activities to moderate the social effects of the crisis. The stimulus package developed by the Ministry of Agriculture and Cooperatives (MOAC) focuses on supplying

subsidised credit through the cooperatives. The package reflects a combination of objectives, including stimulating rural economic activity, strengthening the cooperatives as local institutions, and directing credit to selected forms of agricultural production.

The capacity of the cooperatives to recover these loans is doubtful. Furthermore, the package appears to undermine the role of existing rural credit institutions, including the Bank for Agriculture and Agricultural Cooperatives, which have reduced lending due to shortage of funds. The package also provides credit to cooperatives, to encourage their entry into rice marketing. This aspect of the program is open to question. First, subsidising credit to producers involved in a particular activity generally is not effective in promoting that activity. Recipients of the subsidised credit can use it to finance any business expenditure, not just that for which the subsidy is intended. Second, the rationale for this aspect of the scheme is the assumed monopoly element in rice exporting. However, cooperatives market at the local level where the market is highly competitive and are not directly involved in the export market.

Much of the subsidised credit probably will be diverted into business activities other than rice marketing. This unintended outcome may not be a serious problem because it will get purchasing power into the hands of the rural community.

The Government, assisted by external aid donors, has developed social safety net schemes. These schemes mainly develop and maintain rural infrastructure such as roads and irrigation channels. Some international donors suggested welfare-state safety net measures should be introduced. The Thai Government has resisted these suggestions, ensuring that its crisis-induced safety-net schemes are temporary and not entitlements that will burden the Government once the crisis is over. For this reason, compensation to those working on the projects is set just below market wage rates, ensuring that the recipients are self-selected

and payment is made only in return for work actually performed. The safety-net scheme is not an unemployment benefit.

### *Rural credit availability*

Rural credit became scarce following the mid 1997 exchange rate crisis because of the combined effects of the crisis and the control of the interest rate that the principal supplier of rural credit, the government-owned Bank for Agriculture and Agricultural Cooperatives (BAAC), could charge. The Government regulates the interest rates the BAAC can charge, but the bank also must make a profit or at least break even. It is not permitted to make a loss. The crisis increased commercial interest rates in Thailand because the capital outflow that accompanied the crisis led to a severe liquidity shortage. However, the interest rates that BAAC could legally charge were not increased. Thus, if the BAAC were to borrow commercially and on-lend to farmers at the regulated interest rates, it would make a loss. BAAC therefore was unable to raise funds for on-lending to farmers and its loans were limited to the funds repaid by farmers on existing loans.

Compared with the same period a year earlier, new loans in the third quarter of 1997 were down by 30 per cent. In the succeeding two quarters they were lower by 21 per cent and 15 per cent.

### *Transmission of the depreciation to agricultural prices and subsidisation of credit*

By late 1998, Thailand's 40 per cent currency devaluation had stabilised. Since most of Thailand's agricultural products are either exports or close substitutes for imports, agricultural prices were expected to increase by 40 per cent above their pre-devaluation values, subject to delays in transmission and the effects of transport costs and exchange rate uncertainty. An issue of great policy concern within the Thai government was that the prices

received by farmers apparently had not increased to the extent expected, especially in the case of rice.

This perception was important because, if correct, it meant that agricultural producers probably would not increase their production of export commodities to the extent required to cope with Thailand's balance of payments problem. It also meant that the income benefits that would be expected to accrue to low income producers of agricultural exports were being reaped elsewhere.

It was also important because the character of MOAC's response to the crisis was significantly influenced by this perception of insufficient transmission of the effects of depreciation to the farm-gate price of rice. This policy response included provision of subsidised credit to agricultural cooperatives to improve competition in rice marketing.

There has been a delay in the transmission of the higher export price of rice to the farm level. The apparent source of the problem is not monopoly in rice marketing but poor price information available to small scale rice producers. While there is scope for public policy to address this informational deficiency, it is expected that the 'transmission problem' will be temporary.

## Donor strategies

Thailand negotiated a relief package with the IMF requiring severe government budget cutbacks across the board. Government agencies are thus unable to fulfil all the requirements for counterpart financing agreed upon with aid donors before the crisis. As a result, budgets for existing aid projects in Thailand have needed revision. Imported materials and services performed by foreigners, which projects require for successful completion, are now more costly in baht terms.

New projects are being designed by donors in response to the crisis and with post-crisis

constraints in mind. Their viability is unlikely to be adversely affected by counterpart funding deficiencies.

Thailand's crisis should be short term. Therefore the assistance strategy to Thailand should not be dominated by crisis-response thinking. Most of Thailand's poor people are in rural areas, where agriculture is the main economic activity. Because farm labour productivity is low, farmers are poor. The growth rate of labour productivity in Thai agriculture is low and paddy yields are amongst the lowest in Asia.

Farm labour productivity must be increased to reduce the incidence of poverty in Thailand. The amount of land used in agriculture is unlikely to increase significantly, so increased productivity could be achieved by increasing land productivity, reducing the amount of labour on the land or, most appropriately, combining the two.

The future for rural economic development in Thailand will lie increasingly in non-agricultural activities. In the past, rural industrialisation has been unsuccessful in Thailand, compared with other Asian countries such as China and Korea. The infrastructure problems and administrative problems, which have impeded this development, should be a focus for both Thai government and donor attention.



# Agriculture in Indonesia

Peter Warr

The expectation of a large devaluation triggered Indonesia's 1997 currency crisis. This expectation resulted from a loss of confidence in the capacity of the central bank, the Bank of Indonesia, to maintain the prevailing fixed exchange rate regime. The situation was due partly to Thailand's earlier currency crisis, which forced the Bank of Thailand to float the baht on 2 July 1997.

Indonesia's own macroeconomic circumstances before the Thai crisis significantly undermined investor confidence. Large capital inflows from abroad fuelled the economic boom that preceded the crisis, but the same inflows also caused Indonesia to become more vulnerable to a loss of confidence. The reasons included the build-up of volatile short term capital, the fall in the real exchange rate and the increased exposure of the domestic banking system to overseas borrowing by major customers.

## Macro effects

### *Economic*

In 1996, Indonesia's GDP growth rate was 8 per cent, but the rate fell to 4.6 per cent in 1997. By 1998, GDP fell by 15 per cent. A further fall of 0.6 per cent is projected for 1999.

Towards the end of 1998, inflation was 70 per cent (annualised rate), but by January 1999, was under 50 per cent. Food prices rose more rapidly than non-food prices, increasing concerns about food security. Nominal wages did not increase nearly as rapidly as consumer prices, so real wages fell sharply. The exchange rate fell from Rupiah 2 500:US\$1 before the crisis to Rupiah 8 500:US\$1 in January 1999.

The economic consequences of the crisis are still unfolding. Large numbers of people, both rich and poor, were adversely affected. The effects on the poor operated through contracted demand for labour and reduced transfers from wealthier family members, on the one hand, and through increased commodity prices, especially for internationally traded goods, on the other. These problems were more severe in Indonesia than anywhere else. Not all poor people in Indonesia, however, were adversely affected. Some smallholder agricultural exporters benefited substantially from the devalued rupiah.

### *Social*

Recent studies indicate that the East Asian economic crisis affected:

- urban areas more severely than rural areas. The crisis was initially an urban phenomenon. Effects on rural areas were a secondary consequence of these urban effects. On the other hand, the *El Niño* effects were more severe in rural areas and urban effects were a secondary consequence there. Failure to take into account the effects of *El Niño* has led many observers



to conclude, incorrectly, that the effects of the economic crisis were more severe in rural areas

- widely varying areas. Both urban and rural areas in Java were badly affected, reflecting the high degree of integration between rural and urban areas in Java, as high rates of labour mobility indicate. On other islands, the effects vary widely. Minimal impacts were reported in large areas of Sumatra, Sulawesi and Maluku. Other areas experienced more severe effects, including East Timor, Nusa Tenggara Timur and Nusa Tenggara Barat. However, these areas also were affected badly by drought. East Kalimantan also was badly affected, but the effect was combined with the effect of fires, and again it was not possible to separate the effects of the fires from those of the crisis. Urban East Kalimantan was the most severely affected part of Indonesia
- areas not correlated with initial levels of poverty. However, this is also true of drought and fire affected areas. Badly affected areas include both areas initially better off and poorer ones, while areas not badly affected include both types. This

means targeting crisis impact and targeting poverty are not the same. Relief agencies need to distinguish between these two objectives to direct their aid appropriately

- adjacent areas most. Severely affected urban areas tended to be adjacent to severely affected rural areas and vice versa. This reflects the occurrence of economic integration between urban and rural areas within a province rather than among urban areas of different provinces or among rural areas of different provinces.

The effect on real incomes in rural and urban areas has differed dramatically. Average per capita household expenditure in rural areas increased over the year ending late 1998. In urban areas, it fell by 40 per cent. Ownership of durables in rural areas increased over the same year, reinforcing the view that urban areas generally were affected more severely.



Primary school enrolment increased in both urban and rural areas for both males and females. Drop out rates remain unchanged. Some locations, however, are exceptional. In urban Central Java, urban Maluku and Jakarta, enrolment significantly declined at the junior secondary level; whereas, in rural South Sulawesi, junior secondary enrolments increased by 8 per cent.

Real per capita household expenditure fell significantly, by an average of 24 per cent. In urban areas, the average fall was 34 per cent, but in rural areas the average was 13 per cent. The decline in expenditure was proportionately much larger among high income households than among low income households. Also, the decline in expenditure was much lower among low income households than the decline in real

wages. Therefore low income households, especially women and young people, increased their labour participation rates in an effort to maintain incomes. Nevertheless, real incomes still fell much more than did real expenditures. This meant many people ran down their assets. Asset sales indicate the crisis was worse in urban areas, particularly Java and eastern Indonesia.

Households also reduced their savings. Because falling average incomes offered limited scope for large numbers of people to sell assets to maintain expenditures, the income to purchase these assets was not present in the system. Attempts to dispose of assets mainly depressed prices. Dissaving was therefore significant. This household strategy maintains expenditures, but only in the short term.

Many basic consumer items cost significantly more following the economic crisis.

#### *Effects on poverty incidence*

In Indonesia, as in most Asian countries, poverty is concentrated in rural areas. The effects of the economic crisis were more severe in urban than rural areas. Nevertheless, a high proportion of poor people, including many agricultural producers, especially net purchasers of food, seem harmed. Food prices thus attract special concern in the policy response to the crisis.

*El Niño* reduced rainfall in both 1997 and 1998, but the effects were concentrated in rural areas, particularly in eastern Indonesia, where poverty is especially severe.

The effects of the economic crisis and *El Niño* on poverty incidence in Indonesia are highly controversial. Early estimates indicated up to 100 million more people had fallen below the poverty line. This would mean that poverty incidence had risen from 10 per cent to 50 per cent of the population, pushing Indonesia back to the level of poverty incidence that existed in the mid to late 1970s.

However, these estimates rest on a highly questionable calculation. First, the cost of living in current rupiah terms is assumed to have

increased in the same proportion as the currency depreciation. Second, the currency depreciation is assumed to have not affected incomes in current rupiah terms. Neither of these assumptions is valid.

The basket of goods and services used to calculate the cost of living index includes internationally traded goods. Their domestic rupiah prices would rise roughly by the amount of the currency depreciation. However, the basket also includes domestically produced goods and services. Their domestic prices did not rise in proportion to the depreciation. Thus the calculation overstates the increased cost of living.

Similarly, it cannot be assumed the crisis did not affect incomes. Some incomes remained static in rupiah terms and some fell, when unemployment is taken into account. However, many Indonesians have enjoyed increased incomes as a result of the devalued currency, including some with incomes that were previously close to or just below the poverty line.

In the past, Indonesia has significantly reduced poverty incidence. As in other countries, these reductions correlate with the rate of economic growth. If the past statistical relationship between economic growth and changes in poverty incidence is projected to the post-crisis period, using the growth rates of real GDP for 1997 (4.6 per cent) and 1998 (-15 per cent), 3.6 per cent of the population or 7 million people would fall below the poverty line in 1999.

The incidence of poverty in Indonesia has increased seriously, but this is much less than was earlier feared.

These estimates do not account for changes in poverty incidence at a regional level and among different social groups. The impact of the crisis does not correlate with the initial incidence of poverty. Some areas not initially poor have been hit so hard by the crisis that they now may be poorer than other areas

previously identified as poor. Areas of West Java are examples of this phenomenon. Nevertheless, the greater Jakarta area, which was well off before the crisis and was badly affected by it, has not reached the level of poverty of traditionally poor areas.

#### Examples of differential impact of crisis

	Relatively well off pre-crisis	Relatively poor pre-crisis
Hard hit	Jabotabek, West Java	Nusa Tenggara Timur, East Kalimantan
Not hard hit	Central Sulawesi, Bali	Maluku, Jambi

#### *Effects on employment*

Early reports on the impact of the crisis suggested large increases in unemployment. Subsequent data on actual unemployment do not support these statements. Unemployment has risen by only a small amount, but so too has employment. Labour force participation has increased, mainly through the employment of women and children.

The most significant effect of the crisis on the labour market was not on levels of unemployment or on labour force participation, but on real wages, which fell very significantly. This reflects the flexibility of Indonesia's labour markets. A collapse in the demand for labour was expressed primarily in a fall in its price, rather than a fall in the level of employment.

Employment moved from contracting sectors of the economy, including construction and services, to expanding sectors, notably agriculture. Despite the sectoral changes in employment, unemployment increased from about 5 per cent pre-crisis to 7 per cent in mid 1998. Unemployment was confined largely to educated people in urban areas. However,





employment of people aged 10 and above increased from 56.3 per cent in February 1997 to 57.4 per cent in February 1998. This increase in labour force participation was most pronounced in urban areas.

Significantly, those employed worked longer hours. Average hours increased for both males and females, but both the absolute increases in hours worked and the proportionate increase was significantly larger for females.

Workforce participation increased considerably for younger people (aged 14 to 24 years) but, for males aged 35 and above and for females aged 55 and above, participation actually declined. Young people are forgoing further education to replace incomes lost through the loss of jobs of older family members. Thus employment data mask a significant reallocation of employment from older to younger people.

Workers have moved from urban to rural areas and from formal to informal sector jobs. Employment in agriculture rose while employment in finance, industry, construction and transport fell. Finally, employment fell in the 'employee' category and rose in the 'self-employed' category, while 'family' workers expanded in rural areas, indicating a significant movement of people from the formal to the informal sector.

Both agricultural output and agricultural employment increased following the economic crisis, but the proportional increase in employment was larger. Increased employment was at the cost of a decline in agricultural productivity; this led to falling living standards for rural people. While this is preferable to unemployment of the people newly absorbed into agricultural production, falling agricultural productivity will remain a problem for some time.

#### *Effects on wages*

Real wages in rural areas fell substantially. Nominal wages increased, but at the same time as the national consumer price index rose by

81 per cent. The effect in rural areas was:

- reduced demand for labour and falling wages, leading to increased participation in the workforce, especially among the young, and to increased hours of work
- reduced incomes, with families maintaining expenditure on essentials by selling assets and reducing savings. Where the crisis is protracted, this adjustment mechanism must break down, leading to considerable hardship.

#### *Effects on children*

Of particular concern have been the effects of the crisis on school enrolments. Drop out rates were low, and urban areas were affected more severely than rural areas.

Nevertheless, substantial increases in drop out rates did occur in some rural areas. Rural areas have much higher proportions of people close to the poverty margin than urban areas, and are more vulnerable to income falls. Thus an equal proportional fall in incomes will cause a larger fall in enrolments in rural areas than urban areas. The impact has particularly been on enrolment at the secondary school level because children in high schools have greater economic value in the labour force and so the opportunity cost of their remaining in school is higher. Primary school enrolments do not appear to have been greatly affected by the crisis.

## Impact on Agriculture

The crisis and *El Niño* effects are very difficult to separate because they occurred at roughly the same time. A major difficulty in drawing lessons on the post-crisis situation in rural Indonesia is that the effects of the crisis are compounded with those of the drought. In Java, the economic crisis was the more important event, but in some areas, the drought seems to have been more significant. Eastern Indonesia is clearly in this category, but the economic

crisis also had an effect there. Overall, separating economic and climatic effects may not be especially useful. The two combined are what occurred, and this total effect is relevant for formulating appropriate responses.

During Indonesia's boom period, crop output rose steadily, but not as rapidly as production in the forestry, fisheries and, especially, manufacturing industries. The economic crisis and *El Niño* weather reduced the growth rates of all these industries, but agriculture fell less than manufacturing. In 1998, crop output was still increasing despite the crisis; whereas, manufacturing activity was contracting severely.

Thus Indonesia's agricultural sector provided a form of economic ballast during hard times. People returned to agriculture when other industries contracted. Crop composition also responded to changed conditions. Rice production fell, although not as much as cassava and sugar cane production. Maize production, a staple in eastern Indonesia, was not affected as much as other crops.

In Java and Bali, the principal crop is rice. Estate crops are important for Sumatra, Kalimantan and Sulawesi; there the story is substantially different. This is one reason why the effect of the crisis on Indonesian agriculture is so diverse, especially among regions. Oil palm production has increased significantly in recent years, and producers gained substantially from the devalued rupiah. The poorest areas of Indonesia, most notably in eastern Indonesia, generally have not been among these large gainers.

### *Effects on rice production*

The effects on rice production dominate discussions of the agricultural impact of both

the economic crisis and *El Niño*. Indonesia is a net importer of rice, but the Government aspires to self-sufficiency in staple foods. Rice production fell in 1997, and the 1998 crop fell short of the official target of 52 million tons. The official yield projection was considered optimistic because of shortages of fertiliser supplies and the high cost of pesticides in some important rice growing areas. The latter led to some greater than normal crop losses. Production of 49 million to 50 million tons in 1998 seemed likely. This would be similar to 1995 and 1997, but would fall below the 51.1 million tons produced in 1996. It would not fully meet domestic requirements. However, the volume of imports needed in 1999 should be less than 3 million tons, compared with 6 million tons in 1998.

The remaining problem for rice producers is the uncertain availability of inputs of appropriate quality. The difficulties relate to both the cost of imports, given the rupiah devaluation, and the financing of domestic production. Uncertainty about input pricing policy also is a problem.

Prospects are excellent for the 1999 crop. Rains have been good and the Bureau of Meteorology predicts adequate falls throughout the rainy season. The area planted exceeded that of the preceding two years, but input supplies remain a problem and this affects yields. In the lead up to the abandonment of the fertiliser subsidy in early December 1998, traders were very apprehensive and the resulting lack of supplies disrupted fertiliser application at a critical stage of the growing season.

The combined impact of the economic crisis and *El Niño* can be approximated by comparing past trends with actual rice production in 1997 and 1998. The extrapolated production of unhusked rice for 1997 was 53.4 million tons and for 1998 was 54.8 million tons. Actual production in 1997 was 49.4 million tons. The estimated shortfall in that year was thus 4 million tons. Production for 1998 remains uncertain but production of 46.5 million tons



would imply a shortfall of 8.3 million tons. The more probable output of 49.5 million tons implies a shortfall of 5.3 million tons, about 10 per cent less than what output might have been in the absence of the combined crisis/*El Niño* effects.

Other impacts of the crisis and drought on rural livelihoods have not yet been adequately quantified. An example is the effect of the drought on the livelihood of people residing in forest areas or adjacent to them. The drought and fires substantially reduced the productivity of forests, with clear, but as yet unmeasured effects on rural people.

### *Effects on regional rice production*

Changes in rice production vary significantly. Declines in rice production were really significant only in Java. Some regions, including North Sumatra and West Nusa Tenggara, actually experienced large increases in 1997 and 1998 compared with 1996. In East Nusa Tenggara, the 1998 decline was small. Indonesia is highly diverse and the regional effects of the crisis have been highly diverse as well.

### *Food security and rice stocks*

Indonesia's rice stocks appear to be adequate, due to large imports during 1998. The National Logistics Planning Agency (BULOG) built up its stocks because production was predicted to fall due to *El Niño*. The increases in 1997 and 1998 relied almost entirely on imported rice, in marked contrast to the pattern of procurement over the preceding two decades, when BULOG acquired most of its rice from the domestic market.

The regional distribution of rice stocks also seems appropriate. In any case, BULOG can move large quantities of rice around the country relatively quickly. Food shortages arising from lack of supplies therefore seem remote. Shortages arising from lack of purchasing power in particular social groups are far more likely and have been carefully monitored.

By relying on imports to increase stocks, the Government reduced the political pressure that might have resulted from inadequate rice supplies. Imported rice was sold at subsidised prices, implying a substantial budgetary cost.

The policy of procuring rice abroad and selling it at a loss clearly depressed domestic prices below what they otherwise would have been. This was, of course, the intended effect. The approach benefited domestic consumers at the expense of domestic farmers, and acted to discourage domestic rice production.

Subsequent policy statements suggest a reversal of this policy stance. Rice imports will be subject to a 30 per cent tariff; BULOG's monopoly on rice imports will be abolished; and BULOG's access to foreign exchange at subsidised rates will be removed. The change is significant, but the overall effect may not be as great as appears. An important issue is whether BULOG is to be subject to the tariff or not. If so, and BULOG is to cover its costs, then so long as rice remains a net import, the domestic price will move with the international price, but will exceed it by the 30 per cent tariff margin.

Domestic prices no longer would be stable. They would move in tandem with international prices, adjusted by the exchange rate. The overall effect of the policy would be to raise domestic prices above international prices, favouring domestic producers relative to consumers.

On the other hand, if BULOG is to be exempt from the tariff, the new policy will create a 30 per cent margin within which BULOG can manipulate the domestic price. This is the margin between the CIF price (at which BULOG could import and be exempt from the tariff) and





the tariff inclusive price (at which private importers would enter the market). If exports remain prohibited, then the domestic price can be suppressed below the CIF price.

BULOG is likely to be exempt from the tariff, given the past policy of favouring the interests of domestic consumers over producers, and BULOG's drastically diminished role if it had to compete on an equal footing with private traders.

If the large crop expected for 1999 eventuates, BULOG could face the opposite of a food security problem – a glut. Since its stocks are already large, a heavy crop in 1999 could leave BULOG unable to purchase and store sufficient rice from the domestic market to prevent a decline in the price of domestically produced rice. If the price were to fall significantly below the international price, as seems possible, smuggling to neighbouring countries such as Malaysia could become significant.

The above discussion assumes domestic and imported rice are perfect substitutes. If they were not, the proportionate increase in the domestic price would be smaller than the proportional increase in the (tariff-inclusive) price of the imported rice. Nevertheless, market participants report that imported and domestic supplies are near-perfect substitutes.

### *Fertiliser use*

Until December 1998, food crop fertiliser was heavily subsidised. The subsidised fertiliser was diverted to non-food crops, which were not legally eligible for the subsidy. Some was reportedly exported to more lucrative destinations, again illegally. Consequently, subsidised fertiliser became increasingly scarce as the crop season progressed and rice farmers experienced difficulty obtaining supplies. In October and November, increasing numbers of farmers complained that supplies were unavailable. It was by then apparent that the existing policy was unsustainable.

In December 1998, the subsidy was abolished. Official fertiliser prices roughly doubled. The Government attempted to ensure supplies by opening up imports to private traders. However, traders were slow to respond, due to problems of financing and arranging domestic marketing channels. The Government subsequently agreed to guarantee private letters of credit for fertiliser imports. It also directed the state fertiliser company, PT Pusri, to purchase imported fertiliser at the port and market it directly.

### *Credit*

To reduce the impact on farmers of the abolition of fertiliser subsidies, the Government expanded the existing program of subsidising credit. The interest rate fell from 14 per cent to 10.5 per cent. Beginning in December 1998, the per hectare ceiling on loans was raised to Rupiah 2 million and the annual aggregate maximum value of subsidised loans was set at Rupiah 6.9 trillion.

As of late December, Rupiah 0.9 trillion had been disbursed during the planting season. This was well in excess of monthly disbursements for December in previous years, but below the target volume. Applications for an additional Rupiah 1.1 trillion of loans were still pending. Because the main rice crop already was largely planted by late December and inputs requiring cash outlays already had occurred, this expanded credit came too late to affect the early 1999 main crop, except for pesticides used late in the growing season.

### *Effects on farm prices*

The price of rice increased proportionately more in Java than elsewhere in Indonesia. On the other hand, farm costs in Java also may have risen proportionately more than elsewhere. The prices both received and paid by farmers give a better picture of the profitability of agricultural production. In Central Java and South Sulawesi, the prices paid by farmers fell

during 1998 but recovered partially in the second half of the year, suggesting the crisis caused a small fall in agricultural profitability in these two regions. North Sulawesi and North Sumatra were similarly affected. In West Nusa Tenggara, profitability increased slightly due to increased maize prices, but farm costs also increased significantly. Thus, agriculture has not boomed as a result of increased profitability from the devalued rupiah.

## Impact on rural development — Eastern Indonesia

The effects of the economic crisis on rural development are considerably less than urban impacts. Rural impacts are very heterogeneous but do not correlate with pre-crisis levels of poverty incidence.

Eastern Indonesia is an exception. Both the *El Niño* drought and the crisis severely affected this region. Since eastern Indonesia was already the poorest region of the country, the effect on eastern Indonesia was to worsen already serious long term rural poverty.

## Impact on agricultural institutions

For decades, governments have intervened in rice matters because rice is the staple food of Indonesia. BULOG has been charged with regulating food markets, especially for rice, and has enjoyed a monopoly in rice imports. BULOG's interventions in the rice market have stabilised domestic rice prices relative to international prices. BULOG also ensured adequate supplies to consumers, suppressing domestic prices below international prices. Without BULOG's interventions, domestic rice prices would have been more variable and their average level would have been somewhat higher.

Since the crisis, the largely devalued rupiah has raised food prices, outstripping increases in money wages for those Indonesians

fortunate enough to retain their jobs. Affordable food for the poorest people thus was a special policy concern.

Special measures targeted the poorest households with additional food subsidies, especially for rice. In these special market operations, rice sold at half the market price, which was significantly below the international price. As the depreciation of the rupiah continued following the crisis, these subsidies grew in importance. The gap between international prices and domestic rice prices increased, and rice imports rose substantially. The Government also provided large subsidies for fertilisers.

Under the special market operations, BULOG sold about 350 000 tons of rice at a price subsidised by around 60 per cent from July 1998 to the end of 1998. This was a small proportion (about 2 per cent) of total rice consumption. The monthly amounts of subsidised sales increased steadily over the period, to just over 100 000 tons in December. At CIF prices, the sales were worth around US\$110 million and the subsidy was worth around US\$66 million. The quantity of rice a household could purchase at the subsidised price was initially limited to 10 kilograms per month, but was subsequently increased to 20 kilograms per month.

A package of deregulation agreed with the World Bank and announced on 1 December 1998, included:

- liberalising the rice market by allowing market forces to determine prices and general importers to import rice



- targeting special market operations for rice at subsidised prices, so rice goes to insecure people, defined as those with incomes below the official poverty line
- reducing the rates of rice subsidies, perhaps to no more than 20 per cent
- eliminating all food subsidies for commodities other than rice
- eliminating fertiliser subsidies and allowing the market to determine the price.

These provisions began on 1 April 1999.

Clearly, they represent substantial policy changes. They do not rule out the use of border interventions such as tariffs or import subsidies, but they do greatly reduce the scope of BULOG's role. According to the scheme, the rice subsidies are to remain, but at reduced rates.

## Effects on activities of donors

Because of the crisis, budgets for existing aid projects in Indonesia have needed to be revised. First, imported materials as well as services foreigners perform to successfully complete projects now cost much more in rupiah terms. Second, and even more seriously, the relief package Indonesia negotiated with the IMF requires severe cutbacks in government budgetary appropriations across the board. Government agencies thus often cannot meet counterpart-financing obligations.

Counterpart funding is not always a problem. The volume of aid funding now flowing into Indonesia is such that many government agencies are flush with funds. This applies to Jakarta, but not necessarily to the provinces where the project is located and where the counterpart funding is required.

Because the Indonesian Government has been pre-occupied with crisis response to the detriment of long term development, the international aid community must not make the same mistake. Long term development programs cannot be shut down and restarted at short notice.

The importance of crisis relief cannot be denied. Nevertheless, the most serious effect of the crisis on the international assistance community may be that it has excessively redirected attention away from the priorities of long term development and towards short term issues whose importance has been exaggerated.

The impact of the crisis is not correlated with the initial levels of poverty. This has important implications for international and domestic assistance. It complicates the design of crisis response and poverty reduction programs because targeting absolute poverty and crisis impact are not the same thing.

A tension is therefore present between long term development programs, aimed at raising productivity in remote and rural areas and bringing these areas into the market economy, on the one hand, and crisis and emergency relief programs, on the other. The latter will necessarily be directed in many cases towards rural and urban areas that were relatively well off prior to the crisis and may still be better off than poorer remote areas not badly affected by the crisis. It is vital, therefore, that crisis-relief not be the principal focus of international assistance programs to Indonesia.

Employment generation programs have been a major component of the international community's response to the crisis. The data from Indonesia reveal that 'unemployment' is not the major problem. Open unemployment has indeed increased, but not nearly as much as was feared. Employment has actually increased also because labour participation rates have risen as a means of coping with the loss of incomes resulting from the crisis.

Reduced wages across the board constitutes the principle means by which the crisis is affecting poor people. Employment generation

programs should not be targeted to areas where measured unemployment is highest, because the data relating to this concept are highly unreliable. They should instead be targeted to areas where poverty remains highest, taking the effect of the crisis into account.

Agricultural production is the chief form of economic activity for the vast majority of Indonesia's poor. Lifting these people out of poverty requires that their productivity be raised. Reducing rural poverty is central to reducing poverty at the national level and raising the productivity of agricultural labour is the key to reducing rural poverty. This involves increasing the productivity of land.

Historically it has also involved, and in the future must continue to involve, increasing the amount of land that each person farms. Since there is little scope for increasing the amount of arable land, it may mean facilitating the movement of labour from farm to non-farm activities including non-farm rural manufacturing and service activities. This could involve support of education and training projects in rural areas as well as rural infrastructure projects aimed at strengthening non-rural economic activities such as food processing and tourism.

In recent years, agriculture has not received its due attention from aid donors. The reasons relate partly to the failure of a particular approach to agricultural development, 'Integrated Rural Development', in the 1980s. The wrong conclusion was drawn from this failure. Assistance was directed away from agriculture instead of finding alternative appropriate means of raising productivity in agriculture.

Indonesia's crisis has been very serious, but has not been as catastrophic as many observers anticipated. Absolute poverty has not increased by anything like the magnitudes that were predicted. Neither has unemployment. The crisis has changed the structure of poverty in Indonesia, but in many respects, the high priority areas remain as they were. Eastern Indonesia is still the poorest region. Although Java was more severely affected by the crisis than elsewhere, it remains better off than eastern Indonesia.

The crisis is a temporary phenomenon. It has changed the structure of poverty in Indonesia, but not as much as was earlier thought. The issues of long term poverty reduction will remain when the crisis is over. The long term strategic objective to reduce poverty should remain the focus of international assistance to Indonesia.



# Agriculture in Vietnam

Adam Fforde and Caroline Brassard

The East Asian economic crisis affected Vietnam both directly and indirectly. However, Vietnam managed to avoid some of the dislocations that affected Thailand and Indonesia, so it has not felt the direct effects as much as these countries. Vietnam had to adjust to large shifts in foreign investment and changes to its export markets. It did this quite successfully. Balance of payments problems have eased, helped by changes in the regional distribution of exports, higher prices for rice that offset the sharp falls in prices for most other commodity exports, an administratively driven steep reduction in imports growth and a large rise in foreign aid.

The indirect effects are the most significant, as they have led to shifts in policy and economic direction. To appreciate the significance of these shifts, some understanding of the situation and direction of the economy in 1996-97 is needed.

## Background

During the early and mid 1990s, Vietnam's real GDP grew at an average annual rate of about 8 per cent. Prices were relatively stable and real incomes increased in both urban and rural areas. Nutritional status improved markedly and poverty indicators fell.

This was in stark contrast to the 1980s, when the urban population experienced food rationing and periods of hyperinflation as Vietnam made the transition from a planned to a market economy. Economic success in the 1990s replaced a chronic scarcity of goods with a relative abundance.

Nevertheless, the economy showed signs of systemic problems in 1996 and early 1997. Employment rose slowly, the benefits of growth were not spreading quickly enough to the rural areas, urban expansion was too rapid, and corruption and inefficiency undermined the Government's legitimacy and power. These developments were linked to investment patterns.

From 1997, foreign analysts focused upon two main issues:

- import policy. Vietnam appeared to be following an import-substitution policy. Tariff and other structures were providing growing protection for domestic producers and the state sector was increasing its share of GDP
- commitment to reform. There were concerns that the Government was not strongly committed to reforming the economy, including opening it up to the private sector.

Consequently, Vietnam's experience of the crisis differed from that of Thailand and Indonesia.

Specifically, it did not experience:

- currency speculation and a large outflow of capital leading to disruptions in the foreign exchange markets and abnormally large exchange rate shifts (and/or a move from a fixed exchange rate system to a floating rate system)



- abrupt and major shifts in the values of financial assets, especially stocks, leading to disruptions and dislocations in the capitalisation of businesses, and the finance of domestic and foreign trade
- increased inability to repay or service debt
- major political upheaval and tensions associated with the allocation of blame for problems and the search for solutions to them
- major effects on the real economy such as unemployment and sharply increased foreign trade profitability, resulting in abrupt resource reallocations.

Therefore it is more useful to analyse the effects of the crisis in terms of how it changed Vietnam's external environment. Vietnam was affected through:

- (further) reductions in foreign direct investment from regional investors
- steep falls in some export goods prices
- disruption and changes to the financing of foreign businesses as a result of their problems elsewhere
- re-examination of the position of Vietnam in the global investment strategies of these businesses.

## Macro effects

### *Economic*

The economic impact of the crisis on Vietnam contrasts significantly with its effects on other countries in the region. The most striking differences are:

- the lack of economic 'trauma' in Vietnam. The macro-economy has remained basically stable, with no major shifts in relative asset prices. Confidence in the value of the currency has been maintained. Informal credit markets have operated without any major discontinuity; credit has tended to be readily available, with spot shortages not qualitatively different from what has been

long seen as normal due to the politicisation of the role of the banks

- economic growth has remained positive. The short-run behaviour of major aggregates has been typical of a cyclical recession in the context of severe international economic dislocations, accentuated by major problems with the long term development strategy
- social and political stability have been retained, with various short term policy and other political changes being addressed, albeit far from completely.

Consequently, Vietnam did not experience major 'parameter shifts' in response to severe market dislocations.





### *Aggregate economic performance*

The overall macro-economic performance in 1998 was reportedly quite good, with estimates showing GDP growing at 5 to 6 per cent. Electricity production and industrial production both rose by 12 per cent while agricultural output increased by 2 to 4 per cent and services grew by 5 per cent.

However, GDP growth was not matched by increases in demand, suggesting a large build up of stocks. Foreign trade slightly stimulated demand, with exports up by 0.8 per cent and imports down by 3 per cent. Consumer demand declined, affected by fears of unemployment. By January 1999, government spending showed a 7.7 per cent rise for the year. Capital outlays almost tripled, while current spending was down 0.5 per cent. There were signs that private investment was rising, although not as fast as government spending.

On a year-to-year basis, government revenues rose by 10 per cent in the first ten months of 1998, with prices increasing more slowly, especially if food is left out. Domestic tax revenues were up by only 7.4 per cent, compared with 10 per cent for foreign trade taxes and a faster rate still for non-tax revenues. Taxes from foreign-invested companies were well down. Through 1998, the consumer price index rose by 8 to 9 per cent.

In Ho Chi Minh City, which produces 40 to 50 per cent of national industrial output, investment increased sharply in 1998. This investment was associated with re-structuring in response to the changed external environment.

### *Balance of payments and foreign trade*

In 1998, the trade deficit narrowed. Exports rose to about US\$9 billion compared with US\$8.9 billion in 1997. This was caused by two main factors:

- major reorientation of sales away from regional countries that had severely cut back demand. The products freed from these markets were sufficiently price competitive

to find new outlets. This success was facilitated by a range of government measures, support from local trading companies and foreign investors well linked into world markets, and the coming on-stream through 1998 of investments designed to make Vietnamese goods more attractive in international markets

- a rise in the price of rice which, supported by a fall in fertiliser costs, helped offset the effect on farm incomes of declining commodity prices.

Before the regional crisis, around two-thirds of Vietnam's exports were sold to regional trading partners. Sales to these countries fell sharply in 1998, reflecting a decline in their total import volume of 11 per cent. However, sales to the rest of the world (mainly the United States and European Union) grew very rapidly, and Vietnam was able to increase its share of those markets.

Imports fell by 3 per cent in 1998. This was due partly to reduced foreign direct investment, which previously was matched by imports of investment goods, materials and other inputs to stocks. It also reflected tighter administrative restrictions on imports. Total imports for 1998 were about US\$10 billion.

The trade deficit therefore fell. In 1997, interest payments were the only significant non-trade debit item on the current account. Foreign direct investment fell from US\$2.6 billion in the first nine months of 1997 to US\$1.3 billion in the same period of 1998. Foreign direct investment in 1998 probably was US\$800 million lower than in 1997.

The structure of foreign direct investment changed significantly. In the first nine months of 1998, the value of signings was US\$1.6 billion, down 46 per cent on the same period of the previous year. However, by the end of 1998, the total was up to US\$4 billion. On top of this were existing projects worth US\$800 million. This upturn included US\$1.3 billion for the Dung Quat Oil Refinery.

Investment remained heavily oriented toward tourism and hotels (US\$810 million), although US\$200 million was in light industry. Foreign companies produce around 9 per cent of Vietnam's GDP. They are relatively capital intensive and small employers. However, they employed an additional 20 000 workers in 1998, making a total of about 270 000. Exports of these businesses grew by 28 per cent in 1998, to US\$2 billion.

Official development assistance disbursements rose by US\$400 million in 1998, to US\$1.4 billion.

While foreign direct investment fell in 1998, this was partly offset by the increased inflows of official development assistance. Lower world interest rates and measures to reduce commercial borrowing lowered interest costs. Remittances from overseas are significant; however, no accurate data were available at time of writing on how these remittances varied in 1998.

Against this background, the overall stability of Vietnamese foreign exchange markets is not surprising. The exchange rate declined slowly, from about Dong 11 000:US\$1 in mid 1996 to Dong 11 700:US\$1 in 1997 (a fall of 6 per cent) and Dong 13 200:US\$1 in 1998 (a decline of 13 per cent). There also has been effective government intervention in the foreign exchange market. The economic implications of the crisis appear to have been carefully considered at an early stage, particularly by the State Bank of Vietnam.

Attitudes to export promotion were highly pragmatic. Press reports in early 1998 predicted imminent declines in existing export markets, and argued for measures to foster the development of new outlets. These included support of risk-takers (such as prevails in Singapore, where banks are willing to underwrite trade to Russia). The Vietnamese press in 1998 showed an initial sense of foreboding, which was replaced by a realisation that, with appropriate efforts, restructuring was both possible and profitable. The increasing

optimism was aided by the lack of economic trauma and the integration of Vietnamese trade into global structures through international, often regional, trading companies.

The energy sector has attracted several billion dollars in investment and official development assistance. Rural electrification is a major component of developing rural infrastructure and brings many social and economic benefits to the rural sector. One of the Government's investment priorities is to develop small-scale hydroelectric plants to serve the mountainous areas. Currently, the rural sector's share of nationwide commercial power is less than 20 per cent.

### *Outlook*

Vietnam's economic outlook is promising. Regional trade is recovering and, if the United States and European Union continue to provide markets for Vietnamese products, supported by marginal but profitable destinations such as Russia and the Middle East, trade volumes should continue to rise. The balance of payments situation is likely to remain satisfactory and economic growth continue to be positive.



The main difficulty is prices. Light manufactures are growing fast, but are too small to offset adverse price movements in the commodities sector. The rational response is to invest and restructure to enhance volumes and increase quality.

### *Social*

It is hard to identify any particularly adverse effects of the crisis on Vietnamese society. A decline in annual growth of GDP from 8-9 per cent to 5-6 per cent is not very serious.

The main impact of the crisis is through indirect channels. The composition of investment and ensuing pattern of growth perpetuated the traditional gender division of labour, and exacerbated the formation of links between the rural areas and the wider world, both domestically and internationally. This makes certain groups more vulnerable to being left on the margin of dominant development processes and society at large. Generally, they have to cope with adverse developments on their own.

Almost 20 per cent of the rural population belong to vulnerable groups. Vulnerability is linked primarily with under-education; secondarily with illness, invalidity and old age; and finally with orphans who have no capacity to work. However, the level of income per capita of households, including vulnerable groups, is higher than the level of income per capita used in standard definitions of poverty. Therefore, vulnerability cannot be a direct cause of poverty, as might have been expected.

The crisis could have decreased the flow of private income transfers from wage earners to dependents. However, no reliable data exist on this subject. So far as can be observed, the effects are not large.

Since 90 per cent of the poor live in rural areas, the strongest impact of the crisis on poverty was likely to be felt in reduced rural employment opportunities and lower rural incomes. Landless households in rural areas, which house the poorest of the poor, also were most at risk due to the crisis. The crisis appears to have affected women more than men due to structural factors including the bias of investment against rural development and labour intensive light manufacturing. Also, since mid 1998, reduced exports of Vietnamese industrial products, such as shoes and textiles, have adversely affected the largely female labour force in these industries.

Policies have shifted sectorally, but not institutionally. Management of what is now a largely open economy is more pragmatic and market oriented. The Government has adopted a 'get behind and push' approach to the export sector; however, state-owned enterprises still dominate.

Main policy changes in the period since the crisis have not been radical and move in directions that seek to increase economic efficiency. The overall policy stance for 1999 remains deeply conservative, including continued support for the state-owned enterprises, faith in the 'guiding role', and support for the so-called new-style cooperatives.

The main sectoral reorientation is the increase in emphasis placed on rural development, which includes the statement that 30 per cent of national investment should go to the rural areas, compared with the current rate of 8 per cent. This initiative is a response to difficulties that were perceived before the crisis and may have been strengthened by it.

With GDP growth still strong and job losses limited, popular welfare has not been badly hit by the economic slowdown. The stance taken by the mass media, however, combined with

graphic portrayals of events in Indonesia, appear to have had a strong effect upon mass sentiment. As in earlier periods of economic difficulty, this quickly resulted in pressures for stability.

The combination of caution and concern is slightly different from many overseas perceptions. The latter have sought to link the regional crisis and Vietnam's economic situation, pushing hard for further reforms. However, this is not consistent with domestic political realities.

### *Migration*

In the absence of any major economic dislocation, social tension has eased. Migration is a good example. Migration in Vietnam is largely driven by opportunities to improve economic circumstances rather than by rural dislocation. Movement from the rural areas to the city is lowered in Vietnam because land access rights are widespread and land loss is limited.

Individuals likely to migrate are mainly young, healthy males who tend to use their own capital. Rural migration is influenced chiefly by international investments in projects such as highways, hydroelectric dams and industrial zones. This directly affects migration flows in areas where foreign direct investment has declined. Increasingly, the trend is toward circular migration, where rural unskilled and semi-skilled labour migrates both ways between rural and urban areas. In addition, urban-to-urban migration is rising.

### *Social safety nets*

Vietnam has a somewhat welfarist attitude toward social safety nets. The Government allocates large sums of money to certain vulnerable groups, especially the old and war veterans. However, the budget has not been severely strained, and these outlays have not been cut back. This sector probably will undergo efficiency-oriented reforms, reinforced by the fiscal problems associated with the slowdown and the crisis.

The most important social safety net in Vietnam remains the widespread and rather flat

land distribution. The Vietnamese Communist Party strongly supports this arrangement, and limits land concentrations that threaten both social stability and the local power base of the regime. While the result may be inefficient, it also serves to reduce risks. Further, the flat land distribution has a pervasive effect on social relations, such as the emerging urban labour regimes, where the option of returning to the village remains an important support to workers in their negotiations with employers. Added to this, the Government values relative social security, as its non-tolerance of violence towards and mistreatment of workers by foreign firms demonstrates.

### *Ethnic minorities*

Vietnam comprises 50 ethnic groups. About 13 per cent of the population are from ethnic minorities. Except for the Chinese, the incidence of poverty among these minorities ranges from 66 per cent to 100 per cent, which is much higher than the national average of 51 per cent.

The vulnerability of ethnic groups stems from their location in ecologically fragile and remote areas. Ethnic minorities are concentrated mainly in the northern uplands and central highlands. The level of education of ethnic minorities is much lower than the average in rural areas and contributes to their vulnerability. A pressing need is to improve infrastructure in their areas to increase access to markets, schools and health services.

The crisis is unlikely to have significantly affected the living standards of ethnic minority groups. The only indirect impact would have come from cuts to social services or government programs but there is no evidence that this has occurred.





## Impact on agriculture

### *Prices and costs*

Vietnamese farmers have high levels of equity in their enterprises. They also have diversified production systems, due to the instability of the markets they serve. The latter reflects not only volatile world markets but also the behaviour of state-owned enterprises which, with little equity of their own and often extremely uneconomic investment criteria, tend to enter and exit agricultural commodity markets far too easily.

The growth of agricultural production in 1998 was partly because of favourable movements in prices and costs:

- the price/cost ratio for rice improved significantly, as rice prices rose and fertiliser prices fell. Domestic retail rice prices rose by 22 per cent in 1998 compared with a fall of 7 per cent in 1997. Fertiliser prices fell by 13 per cent in 1997 and 19 per cent in 1998; this reflected a 32 per cent reduction in the international price, compared with an 18 per cent depreciation of the dong
- fertiliser imports became extremely profitable. By the second half of 1998, the domestic price of urea was

US\$155 per tonne, compared with the world price of about US\$75 per tonne

- the Government provided continued, and in some cases enhanced, support for investment in processing and marketing, both directly and through attempts to channel foreign direct investment into these sectors. This remains limited, however, and is offset by inefficiency in investment selection.

However, the prices of many agricultural commodities, including rubber, coffee, cashews and marine products, fell significantly. In 1994, the Government had promoted an expansion of rubber and coffee plantations and the increased supply offset partly the effect on incomes of declining prices. Many cashew growers, including state-owned enterprises, responded to falling prices with the crisis by destroying their gardens and planting other, mainly short life, crops.

The crisis provided the Government with an opportunity to close down insolvent or inefficient state-owned enterprises. However, it did not take advantage of this opportunity, partly because of the general desire for stability in an uncertain regional environment and partly to minimise job losses. Rather, it





increased investment in state-owned enterprises in sectors threatened by the crisis. In the longer term, this will increase the need for protection and reduce the competitiveness of farmers in international markets.

## Impact on the environment

In the absence of major economic and social dislocations, the regional crisis has had little direct impact upon the Vietnamese environment. Adverse weather patterns associated with *El Niño* and *La Niña* had much more severe effects.

The central highlands and the central coastal regions of Vietnam were most severely hit with two severe droughts since late 1997. The impact of the droughts was magnified by deforestation as well as by poorly managed irrigation systems. *El Niño* produced a shorter rainy season in 1997 causing less rainfall and higher average temperatures. *La Niña*, whose origin lay in lower temperatures in the Pacific Ocean, produced heavy monsoon rains and typhoons. In central Vietnam, floods and storms killed or injured about 420 people in 1998, and caused economic loss of more than Dong 1.6 billion. Erosion caused most damage and affected water resources and transport facilities. *La Niña* also hit Vietnam in 1971, 1984-85, 1988-89 and 1996.

## Impact on rural development

The direct effects of the crisis on rural development were small, with lower prices for most export crops offset by significantly improved terms of trade for rice farmers. Despite the crisis, the macro-economy remained stable, agricultural production continued to grow and overall social stability was maintained.

The Government's various 'conjectural' measures assisted important areas such as restructuring exports. The agricultural sector demonstrated its capacity to generate exports and help preserve the value of the dong.

The main indirect impact was to aggravate the already distorted pattern of capital investment.

Rural unrest in 1997 pre-dated the crisis, but televised images from Indonesia accentuated worries about instability felt throughout the society.

The main difficulties in obtaining credit for poor households in the formal sector is the excessive and confusing bureaucracy, the distances to travel to loan offices, the need to pay service charges and make other non-official payments, and strict collateral requirements. There are no available data with which to evaluate the impact of the crisis on rural finance due to the reliance on informal credit in rural areas. The crisis probably did not have much influence on rural finance, and is even less relevant to poorer households faced with extreme barriers when attempting to access credit.

## Impact on agricultural institutions

The economic crisis had little direct effect on Vietnam's agricultural institutions. However, the drive to maintain exports led to the Government's stronger support for state-owned enterprises and exports of agricultural products. This has included minor moves to reduce monopoly power in core areas such as rice exports and fertiliser imports. State-owned enterprises retain their privileged position, with their 'guiding role' in the national economy deeply enshrined in policy statements.

Policy driven institutional change, triggered in part by the East Asian economic crisis, involves:

- continued attempts to experiment with new style cooperatives, but with little real commitment due to popular opposition



- more state resources devoted to rural development, stressing local value-adding and state-owned enterprises acting as the natural partner of the family farm sector
- various measures to encourage foreign and local private investors to pay greater attention to the rural areas. This may not be overly successful as, so far, foreign direct investment has not been significantly reoriented so far as is known
- a significant push to use foreign aid in rural development. Donors are well aware of this and, in general, support it. However, the policy change dates from perhaps 1996-97, and as yet, donors have no popular models to ensure acceptable developmental outcomes. The dialogue is likely to continue as long as the Vietnamese authorities remain committed to state-owned enterprises and reform of local planning processes is slow.

These trends are only indirectly linked to the regional crisis. However, the trend in the 1990s towards greater pragmatism and questioning the costs and benefits of state-owned enterprises were significantly strengthened by the concerns and worries brought on by the crisis. The relative success in maintaining economic growth also will have muted these concerns, given that this was attained without a fundamental change in the approach. However, reforms remain greatly needed.

## Effects on activities of donors

Although some donors and international organisations predicted considerable difficulties, these have not generally ensued. Clearly, it is too soon to attempt a thorough quantitative analysis of the impact of the crisis, due to lag effects not reflected in currently available data. As yet, reliable data on rural incomes, rural savings, rural debt levels, land prices or ethno-specific socio-economic data are not available. However, the

wide range of data sources on socio-economic indicators available in Vietnam enables donors to follow the effects as they unfold.

The effects of the regional crisis through 1999 are unlikely to be much, if any, worse than in 1998. In this case, the medium and long term effects on aid donors should include encouraging a more pragmatic approach to institutional change in Vietnam. Nevertheless, the existing system, with its focus on state-owned enterprises, has achieved a relatively successful economic outcome, although this may have been in spite of, rather than because of, the system.





# Agriculture in the Philippines

Barry Shaw

In 1998, the value of agricultural production in the Philippines fell 6.6 per cent from the previous year. The Government claimed it was the worst shock the sector had experienced for 30 years.

The decline may have resulted more from the combined *El Niño* and *La Niña* climatic phenomena than the East Asian economic crisis. Significant financial, economic and structural reforms were in place before the crisis. The Government responded effectively and quickly, so the impact was not dramatic and attracted little international media attention, especially as social unrest was not obvious.

## Background

Poor performance of agriculture in the Philippines since the 1980s and resulting high levels of rural poverty have reflected more than a decade of low levels of public and private rural investment. Rural infrastructure suffered: roads, irrigation, agricultural research, agricultural extension and training, school and health buildings, electricity and communications were neglected. The share of public expenditure allocated to agriculture, forestry, fisheries, livestock, research, extension,

price support and subsidies and agrarian reform fell from about 11 per cent between 1976 and 1983 to 6 per cent between 1992 and 1995.

Agricultural taxes exceeded public agricultural expenditure. Capital flowed out of the sector and sector credit declined by 58 per cent in real terms during 1981 to 1992. Rural asset distribution worsened. A long term decline in the international prices of major export crops exacerbated problems. Forestry incomes fell because of export controls, followed by a ban on log exports.

Rural health and education also suffered. The Philippines had been a world leader in rural social service delivery, with participation rates in rural primary and tertiary education close to those in high income countries, and those with high life expectancy. However, rural health and education made little progress and probably declined. Rural population growth remains among the highest in Asia.

From 1987 to 1995, agricultural production grew at an average annual rate of only 1.8 per cent in real terms, which was less than the rural labour force growth of 3 per cent per year. The agricultural production rate increased to 3.8 per cent in 1996 and appeared sustainable. Further growth could have occurred, given government plans to redress the severe structural problems in the agricultural sector. Pro-industrial government policies and high levels of protection had continued to work against agriculture and the Marcos legacy of neglect remained. The crisis and *El Niño* worsened already low levels of rural productivity and pervasive rural poverty.

### *Rural poverty*

Rural poverty incidence averaged 54 per cent before the crisis and remains among the highest in Asia. In upland areas of the south, rural poverty reaches 68 per cent. The Philippines had 17.6 million poor in 1995, using the World Bank's poverty line of US\$1 per head per day (purchasing power parity adjusted). If the Philippines had reduced poverty on the scale that Indonesia managed, only 3.9 million Filipinos would have been poor in 1995.

The Philippines is probably the only Asian country where the number of poor is increasing and real per capita GDP is falling. The unsteady political period while Filipinos focused on managing political change and restoring democracy left agricultural and rural poverty policy largely in abeyance until late in the Ramos administration. The present Estrada government now seeks to address these problems.

Over half the population is rural, with 64 per cent involved in agriculture. Agriculture and natural resources account for about 25 per cent of GDP, 50 per cent of the employed labour force, and 20 per cent of total exports. Most of the poor are in rural areas.

### *Slow growth in agricultural production*

Agricultural production has grown more slowly than in major ASEAN countries (just over 2 per cent per year between 1980 and 1994) and, with the rural labour force increasing by about 3 per cent per year, rural poverty has declined little. In some areas, it has increased. Poor rural infrastructure exacerbates rural poverty, as do:

- inadequate rural infrastructure
- increased prices of domestically produced agricultural inputs relative to prices of agricultural outputs
- a policy framework that works against agriculture (especially rice, corn, bananas and sugar) and creates tax biases against agri-processing, supported by powerful

agricultural lobby groups that do not want lowered protection and urban groups that want to maintain controls on rice

- worsening distribution of rural assets and incomes and slow implementation of the Comprehensive Agrarian Reform Program, started in 1987
- weak and poorly focused agricultural research
- declines in the quality of agricultural extension
- severe resource depletion problems in village coastal fisheries and competition with commercial fishing
- declining management and responsiveness of irrigation systems, and increasing conflict with domestic water use as 80 per cent of water is used for irrigation
- an agricultural credit system weakened by lack of demand from a non-growing agriculture sector
- farmers who have experienced decades of go-stop market and government policies and incentives
- technical limits to further rice productivity increases through green revolution improvements
- the devolution of responsibilities to local government units, and unclear roles and responsibilities between national and local agencies
- an archipelagic geography with many small, poorly integrated domestic markets exacerbated by poor transport and communications, and with weak links between agriculture and industrial demand.



Lowland irrigated agriculture dominates Philippine farming, and here productivity has improved. However, productivity remains very low in upland agriculture, which poor minority groups dominate. These minority groups need ongoing assistance, especially since many only recently received recognition for their claims to land on which they have lived for generations. Agricultural production has not diversified as much as elsewhere in Asia. Weak rural infrastructure and extension and research systems make the processing and marketing of new products difficult. Agricultural exports totalled only US\$2.1 billion in 1998, with coconut oil, copra cake, sugar, canned pineapple, bananas, fish, rubber and seaweed comprising 80 per cent of agricultural exports.

Parts of the southern Philippines have faced many years of civil strife and now are in an uneasy peace with the government. For over two decades, much of Mindanao has been without government agricultural services, forced to develop its own community-based support and extension system. The area remains economically depressed and poverty is widespread.

Poverty also is severe and resource depletion high in many fishing communities. Recent developments in fisheries policy widen the scope to improve coastal fishing, but a weak transport infrastructure causes these communities to remain poor and isolated.

### *El Niño and the Philippines climate*

The Philippines is highly susceptible to damage from *El Niño* events and tropical cyclones. It is an archipelago and offers little opportunity for cyclones to reduce in intensity. Eight *El Niño*-

related droughts occurred in the Philippines in the 40 years before the most recent one. The 1982-83 drought was the worst in recent history. Over the same period, an average of 20 tropical cyclones occurred each year, many devastating agricultural crops.

*La Niña*, which often occurs in non-*El Niño* periods, produces tropical cyclones, heavy rains, and floods. Since October 1998, a series of devastating cyclones has reduced food supplies and increased food prices. Philippine agriculture will continue to suffer from *El Niño* and cyclones, both made worse by the removal of upland forests. Climatic variability will remain a severe constraint to Philippine agriculture.

## Macro effects

Well-implemented structural reforms in the financial sector, together with well managed external debt enabled the Philippines to avoid the level of bankruptcies that occurred with the economic crisis in Thailand and Indonesia.

Nevertheless, capital outflows were massive and, on 11 July 1997, the Central Bank allowed the peso a lightly managed float. The currency fell from Peso 26.40:US\$1 to Peso 40.00:US\$1. In July 1999, the rate was Peso 38.60:US\$1, an effective devaluation of more than 40 per cent from the pre-crisis value.

The World Bank estimates that 21 per cent of firms in the Philippines went into a loss situation because of the crisis, but many will recover. By comparison, 47 per cent of listed corporations in Thailand are technically bankrupt, 71 per cent in Korea and 78 per cent in Indonesia.

Inflation, at 9.0 per cent for 1998, was lower than forecast (9.25 to 9.75 per cent). However, *La Niña* events in late 1998 pushed food prices up, so that in January 1999, the consumer price index rose 11.4 per cent (annualised rate). The Central Bank stated that food price changes were influenced more by the weather than the economic crisis. For 1999, the forecast rate of inflation is 8.9 per cent.



### *Impact on government income and expenditure*

Fiscal expansion and increasing confidence in the economy and its growth preceded the crisis. The 1997 Ramos budget increased expenditure to address long term social and rural problems, based on economic growth of 7 per cent. Congress added further expenditure to the budget before passing it. Thus the 1998 budget, formulated before the crisis began, was overly ambitious.

The external economic crisis quickly became a fiscal crisis for the Government. Tax and duty receipts fell and interest payments on external official debt rose. The Government slowed down payments and brought forward dividends from government corporations to hide the immediate impact. The Government's cash crisis only surfaced in early 1998 when newly elected President Estrada proclaimed, 'We're broke.' At June 1998, unpaid government obligations (mainly to domestic creditors) totalled Peso 109 billion.

In response, the Government cut all departmental allocations by 15 per cent early in 1998. Since salaries were fixed, the effective cut to non-personnel appropriations was 38 per cent. The Government also resorted to cash rationing.

Social expenditure, especially in health and education, has since been largely restored. 1998 appropriations for agriculture remained at reduced levels and many public investment and maintenance programs were delayed, including expenditure on rural infrastructure. In the 1999 budget, agriculture and land reform expenditure increased, with more than half coming from development assistance projects. A new expenditure planning system was introduced, prioritising rural infrastructure expenditure from public, private, overseas and development assistance sources.





The net result of the crisis is that planned expenditure on agriculture, especially rural infrastructure, has been delayed by two years, making agricultural problems more intractable. The danger is that ongoing fiscal stress will aggravate delays, which will then require even greater efforts to rejuvenate the agricultural sector.

### *Economic effects*

Compared to *El Niño* and *La Niña*, the economic effects of the financial crisis on agriculture were less than expected. Widespread business failures, especially of financial institutions, have not occurred, although building and construction substantially contracted, and the property market weakened severely. Consumer demand was stronger than expected, and price increases, especially for food, resulted more from the weather than the economic crisis.

Formal employment has fallen less than expected, despite a million more unemployed due to *El Niño* effects. However, informal and casual employment has certainly fallen and financial stress is extreme among the previously marginally employed in urban, peri-urban and rural areas. While previously employed workers may have returned to rural areas, this is not as pronounced as in Thailand.

In 1998, industrial production fell by only 1.7 per cent; however, services grew by 3.5 per cent. Building and construction slowed, and stopped on some large projects. Tourist arrivals increased, probably diverted from more costly destinations.

Exports were only slightly affected, but private investment inflows declined to almost nil. However, investment inflows have since recovered well, and new approvals for foreign

projects show substantial increases. Since the crisis, international rating organisations have twice upgraded the Philippines' overseas borrowing rating.

In hindsight, the major economic effects were the contraction caused by:

- the fall in rural production caused by *El Niño* and *La Niña*
- the negative accelerator effects of sudden reductions in building and construction
- the monetary contraction caused when foreign capital inflows stopped
- sharply contracted government expenditure.

Foreign investment inflows now have resumed at lower levels and several US advisers are pointing out that the Philippines is a more stable, open and democratic country for industrial investment than some other regional countries. However, sustained growth is essential if the Government's fiscal squeeze is to diminish. Even then, it will face severe problems from inefficiencies in revenue collection. For rural development, the Government's fiscal problems will be the most lasting impact of the events of 1997.

### *Social effects*

The greatest social problem will be the even greater marginalisation of the large numbers of already vulnerable people in the Philippines. With 18 million people living in poverty, and probably as many again in very poor economic circumstances, welfare will decline even further.

Offsetting this is the strength of the socially based informal support mechanisms that operate from the family and village level through, in some cases, to local government administrative areas. This network of social and economic support encompasses community, religious and business-based organisations. In many poor areas, they impact more on people's lives than government agencies by providing health care, agricultural extension, credit and, often, education. They also augment the education system. From their anti-government stance in the Marcos period, these private

development organisations now act as development partners receiving government support. No other Asian country has so many local development organisations. Although their effectiveness varies, many are more successful at local development than government agencies. Cooperation with civil society is now central in Philippine development policy.

The weak integration of poorer areas with the national economy and its markets has considerably cushioned these areas from the economic crisis, but not from *El Niño* and *La Niña*. The proportion of home and farm produced food that families in rural areas consume is very high, much higher than in Indonesia and Thailand. Thus, subsistence farming supports rural families, albeit at lower levels.

Nevertheless, coupled with local welfare mechanisms, subsistence farming does mean survival for many people. Thus, in a perverse way, the backwardness of Philippine agriculture has proved a strength during the crises.

Rural people without access to land or social support systems will suffer most. Whether from the East Asian economic crisis or *El Niño* and *La Niña*, the greatest social and economic impact on rural people will be severely reduced employment and incomes of the previously employed or partly employed and, especially, the marginally employed. Although official figures point to about one million unemployed because of *El Niño*, the total impact is likely to be far greater. Impacts also include reduced wages, working hours and working conditions.

Women are more severely affected as they are dismissed from employment before men, more involved in home piecework and other forms of unprotected employment, and are

abused more in times of financial stress. Therefore, the unsupported newly unemployed, rather than farmers and fisher folk, will suffer most.

While the Philippines rates highly in many aspects of gender equality and human development, many underlying problems remain. In Plan 21, the Philippine Government identified ongoing and often severe problems of the rural and urban poor, indigenous groups, remote communities, disadvantaged children and exploited sex workers. Some of these groups already were bearing a high cost as the economy adjusted through structural reforms.

The substantial fall in rural and urban non-farm employment may cause a rise in illegal activities from prostitution through robbery to kidnapping, piracy and possibly drug production. More unprotected outworkers (mainly women) now work in the textile and footwear industries and in informal sector activity.

Large numbers of Filipinos work abroad, temporarily or permanently, and more Filipino workers than from any other country work in commercial shipping. Over one million temporary overseas Filipino workers, and at least an equal number permanently abroad, provide some support to families at home. Overseas Filipino workers sent back about Peso 140 billion in 1996, about half going to rural areas. Following the currency devaluation, similar remittances would provide about Peso 200 billion, which is a very positive benefit for rural areas. Overseas Filipino workers generally work in countries or activities little affected by the crisis – women mainly as domestics in Hong Kong and Singapore, men in the Middle East. A similar amount of remittances may come from Filipinos permanently abroad, especially in the United States.

Over five million rural Filipinos benefit from family remittances. One third or more of overseas Filipino workers come from rural areas, including Mindanao, where links with Muslim countries are strong. Over 4 per cent of

Mindanao households received remittances from workers abroad. Clearly, overseas workers substantially contribute to rural welfare; the continued demand for overseas workers and their continued remittances have softened the impact of the East Asian crisis and *El Niño*.

Lack of peace and order remains a concern in parts of the southern Philippines. The Government finds it difficult to fulfil promises of development projects made in peace negotiations and, partly for this reason, continuing negotiations are not smooth. In the longer term, the Government's weak budgetary situation rather than drought and crisis may affect the area most. Several UN agencies and the World Bank projects focus on the area but, due to sporadic violence, the area remains difficult for foreign assistance workers.

## Impact on agriculture

In 1998, agricultural production fell by 6.6 per cent in real terms. Industrial production fell by 1.7 per cent while output in the services sector rose by 3.5 per cent.

Change in Value of Production (Constant Prices) of Major Agricultural Products 1997-98

Product	Percentage change in value of production, 1997-98
Fisheries	+3.4
Livestock	+3.4
Poultry	+1.2
Sugarcane	-2.4
Banana	-3.5
Other crops	-5.8
Coconuts	-11.0
Corn	-16.9
Rice (paddy)	-27.0

Rice and corn production were mainly affected by the *El Niño* drought and the *La Niña* typhoons, Emang and Gading. The drought reduced production per hectare in one season, while publicity about the coming *La Niña* reduced planting in the next. Many



farmers went into a subsistence mode, planting rice and vegetables only for family consumption. For many, this proved wise since, in 1998 and early 1999, Luzon and the southern Philippines experienced serious floods.

Rice and corn prices rose slightly, but not enough to cause severe hardship to consumers. Prices moderately increased for products, such as livestock, poultry and fish, that Filipinos with higher incomes demand, so those of even moderate means did not experience strong income falls.

Peso devaluation should have stimulated agricultural exports. But, unlike Indonesia and Thailand, the Philippines has very few high value-for-weight agricultural commodities in high demand in the international market, such as the spices, fish from aquaculture and other products that received a considerable boost from the devalued rupiah in Indonesia. One bright area is commercial fishing, where production and exports increased, suggesting a substantial turnaround in what has been a moribund industry.

Imported agricultural input prices have risen, especially for oil and fertiliser. Given the substantially reduced planting of rice and the retreat to subsistence for many rice farmers in

1998, the impact of input price increases on farm incomes was not so apparent and, in 1999, considerable agricultural production increases are expected.

The major impact of the economic crisis on agriculture has been, and will continue to be, the fiscal squeeze on public sector expenditure on rural infrastructure investment and rural roads.

The Philippine system of protection through a mixture of tariffs and import controls is very complex. In spite of tariff reductions, quantitative forms of protection for major import-competing agricultural products have risen sharply in recent years. In 1995, domestic prices of corn and sugar were about double international prices. Devaluation brought domestic prices closer to international prices for major crops, but reduced production in 1998 then generated substantial price rises.

The import quota system on rice, corn and sugar effectively isolates the Philippines from changes in international prices. For example, annual sugar production fell from over 2 million tonnes to 1.5 million tonnes because of climatic influences. Retail prices reached an all-time high of Peso 800 per 50 kilograms at a time when world sugar prices were falling: in early 1999, the comparable landed price of imported sugar was Peso 300 per 50 kilograms. Similarly, rice prices in 1998 and early 1999 rose sharply compared to international prices.

Protecting domestic production and exports frustrates the objective of increasing agricultural productivity. Over 90 per cent of agricultural land is devoted to low productivity agriculture, and artificially high domestic prices reduce incentives to improve productivity or diversify to other crops. Further, they reduce

the demand for research and extension (where the focus remains on rice and corn), reduce investment in agriculture and rural infrastructure, and increase the price of land, which further reduces incentives to move to export crops and penalises those domestic industries which use agricultural inputs.

This is especially true of sugar, a major food processing input that accounts for 40 per cent of manufacturing employment and 20 per cent of manufacturing value added. Sugar farmers export about 25 per cent of their production but, with little incentive to increase sugar milling, quality or productivity, investment in the industry is low.

For rice, costly and inefficient delivery of irrigation water is a serious constraint. Artificially high rice prices reduce the pressure to invest in irrigation and improve delivery efficiency.

While the peso devaluation should have assisted agricultural exports, climatic influences reduced production and, with the higher domestic prices (in relation to international prices, which have generally fallen), reduced incentives to export. As the incentive to diversify into other export crops is small, agricultural exports are static and may even fall in 1999.

The Department of Agriculture and the Government realise high levels of protection create distortions. However, reducing protection is highly contentious. Protection is believed to favour small growers and make the Philippines more self-sufficient.





## Impact on rural development

The political constraints to agriculture policy reform are considerable and will slow the process, especially in the post-crisis period. The crisis has delayed, possibly for many years, the Government's ability to raise expenditure on rural services in health, education, and rural income generation to levels comparable with most other Asian countries.

The crisis also appears likely to slow the Mindanao peace process. This would have profound welfare and rural development implications for several million people who have been deprived, through civil war, of basic development assistance.

Falling rural employment will also have profound effects. Although earlier *El Niño* droughts have had a similar impact, this does not deny the immense social cost of the contraction in agricultural output and employment.

Agricultural lending institutions were unaffected by the crisis, except that those lending through cooperatives and village

institutions may have experienced increased demand for emergency loans. The Land Bank of the Philippines has a well-developed system of agricultural lending through village cooperatives. However, the demand problem is ongoing, since few farmers have profitable new activities for which loans are justified. A supply problem is also ongoing as lenders such as the Land Bank become more risk averse and lose much of their small farmer/cooperative expertise.

Microcredit programs operate in many areas and are expanding. Additional assistance to the national organisation would better assist the many microcredit organisations in rural areas.

## Impact on agricultural institutions

Local government units now play a key role in agricultural and rural development. The process of devolution, the uncertainties it has created, and the need for local governments to become local leaders for agricultural development have had a far more wide-ranging and profound

impact than the crisis. Agricultural institutions in the Philippines are in flux because local government is responsible for agricultural support services.

The major problem for rural local government units is to identify and assist those in greatest need in their areas, especially the poorest farmers and the rural unemployed. Several multilateral and bilateral agencies have initiated programs to assist local governments.

Local extension and appropriate research in agriculture are most pressing institutional needs, since these institutions and systems are seriously demoralised. Irrigation management is also in crisis and may compromise the livelihood of a very large proportion of lowland farmers.

Government policy documents contain reasonable solutions to these problems but remain to be implemented.

## Effects on activities of development assistance agencies

The international development banks, as well as most bilateral development assistance agencies have responded to the crisis through poverty reduction measures or regional technical assistance of various types, such as policy formulation. Agencies, across their differing sectors of focus, have reviewed and adjusted their programs. A major concern of international agencies is the effect of the Government's current fiscal problems on counterpart funding and loan repayments.

Ongoing implementation problems in assistance programs continue to frustrate bilateral and multilateral donors. According to the World Bank, donors continue to experience:

- lack of a clear and well functioning mechanism to implement aid, especially between the National Economic Development Authority and Department of Finance
- lack of well prepared projects and programs

- slow implementation, especially through procurement delays and delays in counterpart fund allocations from the budget
- lack of qualified government staff to implement projects.

Projects with strong local involvement generally are more successful, as are smaller, quick response programs. In the Philippines, larger projects fail frequently or perform poorly. Reducing poverty and improving efficiency in government and private sector development activities through emphasising governance and mainstreaming gender into programs and projects will be key donor aims.

The Estrada government represents an important turning point with its 'pro-poor, pro-market' approach and its avowed intention to





improve the implementation of good programs and projects, and scrap weak ones. Support for the current government's initiatives in the areas of rural development and agriculture, so that the delays in implementing rural and agricultural policies can be overcome, would be useful.

Donors now need to respond to the long term problems of agriculture, fisheries, and rural resource use, rather than to short term problems created by the weather and financial crisis. A shift away from larger, complex projects to straightforward and practical assistance is required, with great attention being paid to the competence of organisations to be supported. In many other countries, especially in South and Latin America, demand-driven development assistance programs for medium to small projects that avoid many of the high costs associated with small projects, have been successful.

Policy reforms are clearly essential to improve agricultural sector growth and would need to be accompanied by carefully targeted assistance to assist those who are poor and further disadvantaged by the adjustment process, especially the rural landless unemployed. However, the crisis has made agricultural policy reforms in the Philippines even more difficult to implement. Protectionist lobby groups have influenced Congress and the Government to maintain or even increase agricultural protection on the incorrect grounds that 'if protection is reduced, poor farmers will be even more harmed'.

Scope for short term assistance in agricultural policy formulation and implementation is considerable. Rural needs require donors to consider:

- taking a rural development approach (focusing on rural welfare and incomes) rather than a sectoral approach (agriculture, health and education)
- recognising the competence, strengths and weaknesses of Philippine communities and institutions, and generating greater

participation and involvement, including by local consultants, especially in rural community development

- assisting the long term development of agriculture, fishing and natural resources through policy analysis, policy implementation, economic and administrative reform, better management and improved efficiency in those institutions that show capacity and willingness
- assisting areas of special need such as upland farmers, especially minorities
- identifying and assisting areas of particular weakness in agriculture, such as agricultural training, where there is potential for effective response and, particularly in agricultural research, supporting local research institutions that could provide local, viable solutions to the problem of increasing rural incomes
- assisting the Philippines' program to improve rural infrastructure
- assisting the collection, management and analysis of rural statistics, not just in agriculture but in all areas which provide reliable indicators of rural well-being
- strongly supporting the development of rural administration in local government units, especially in agriculture, environment and rural infrastructure; including the continued development of robust democratic systems at a local level which enable farmers' and fisher folks' voices to be heard locally and nationally
- recognising the existing important role of women in agricultural production and resource management by ensuring that gender analysis in project design is thorough and that gender aspects are mainstreamed into rural projects and programs
- considering support to coastal village fisheries, including resource planning and guardianship, and possibly also to commercial fishing where it complements village activities





- identifying ways of supporting indigenous groups involved in upland agriculture (which has specific problems not found in lowland agriculture, predominates in the Philippines and has higher poverty)
- supporting agricultural and rural activities in the southern Philippines, especially Mindanao, where the peace process requires effective support through good development programs, but, recognising the security problems of some areas, identifying and supporting existing and new government programs
- coordinating with each other through well organised consultations, such as those sponsored by the World Bank, and through close consultation with the Asian Development Bank, which plays the lead multilateral role in agriculture
- becoming involved in policy dialogue and other discussions on rural development.

Assistance to environmental improvement is important. The Philippines now has environmental policies, regulations, and an appropriate framework in place yet remains slow in implementation and enforcement. A crisis exists in irrigation management and in controlling the deforestation that has increased siltation and floods, and reduced river and marine fisheries.

While the crisis for many of the previously marginally employed in the Philippines is economic, the crisis for agriculture is fiscal and climatic. Donors also need to be aware of the needs of the poor, the marginalised, and the dispossessed in a country with so much poverty. Should further short term responses to the financial crisis be considered, they should be through targeted programs. In the long term, however, broad rural development with a focus on agriculture will be the main way of reducing poverty.

# Agriculture in South East Asia

Gus Hooke

The East Asian economic crisis began in mid 1997, embracing a number of countries including Thailand, Indonesia, Vietnam and the Philippines. In Thailand and Indonesia, the economic dislocation was due mainly to an excessive reliance on short term borrowing to fund large current account deficits associated with high rates of economic growth. The effects, in much milder form, flowed through to Vietnam and the Philippines, largely through lower demand for their exports, reduced private capital inflow and changed expectations of government, business and consumers resulting from media coverage of the crisis in other countries.

In all four countries, the adverse effects appear to have been less severe and protracted than many observers initially feared. This is due partly to poor estimates and projections, including official ones, as well as difficulties in separating the effects of weather and other external changes from those of the economic crisis. It also reflects the effective operation of adjustment mechanisms in the four economies and coping mechanisms among their households.

The distributional impact of the crisis was not as serious as expected. The adverse effects appear not to have been correlated with initial levels of poverty, nor were they concentrated in the rural areas where most of the poor live.

## Origins

The economic crisis emerged first in Thailand. Over the decade ended 1996-97, the average annual growth of the country's gross domestic product (GDP) had been about 10 per cent. Domestic savings could not cover such a high rate of investment and Thailand ran a current account deficit (of around 8 per cent of GDP).

Countries achieving high economic growth often run large current account deficits. However, Thailand used short term borrowing to cover the deficit while maintaining a fixed exchange rate between the local currency, the baht, and the US dollar. The fixed rate system was threatened when short term external liabilities rose above foreign exchange reserves, and the more these liabilities rose, the more vulnerable the system became. By early 1997, the liabilities were more than double foreign exchange reserves.

A slowdown in Thailand's exports triggered the crisis. Following annual increases of about 20 per cent in the early 1990s, exports fell in 1996. This setback generated concern, then panic among investors, who began to withdraw their capital from the country. With reserves falling rapidly, the Bank of Thailand was forced to float the baht on 2 July 1997. The exchange

rate fell from Baht 25:US\$1 before the float to Baht 55:US\$1 by January 1998. The value of financial assets plummeted and interest rates rose above 20 per cent.

The crisis in Thailand triggered similar changes in Indonesia. However, Indonesia may have experienced a financial and economic crisis independently of developments in Thailand. Indonesia also had maintained a fixed exchange rate with the US dollar. Like Thailand, it ran a large current account deficit, using the additional investment resources from this to achieve high and long term economic growth. It also relied heavily on short term borrowing to fund the deficit and while, in contrast to the situation in Thailand, bank customers undertook the borrowing rather than the banks themselves, the implications for the viability of the fixed exchange rate were the same. The events in Thailand probably brought forward, rather than caused, the crisis in Indonesia.

Vietnam avoided the traumatic aspects of the crisis: the huge outflow of short term capital, large currency depreciations and major changes in relative asset prices. Like Thailand and Indonesia, it also enjoyed high economic growth in the early and mid 1990s and ran a sizeable current account deficit. However, it did not rely heavily on short term capital to fund this deficit. Nor did it have a fixed exchange rate to defend. Accordingly, it was less vulnerable to changes in investor sentiment, and these adjustments and other changes could be made as they occurred, rather than being allowed to build up behind the wall of the fixed rate.

The crisis, if it can be termed that in Vietnam, affected the country through the demand for its exports, the inflow of foreign private investment and unsettling media reports. In 1996, two-thirds of Vietnam's exports were sold to regional countries. When economic growth in the region slowed as the crisis spread, demand for Vietnam's exports fell. As well, managers of foreign enterprises re-evaluated their global strategies in light of the crisis and reduced their immediate

disbursements to Vietnam. The growth of consumer demand apparently fell, as workers feared they would lose their jobs and small retailers anticipated a fall in their incomes.

The effects of the crisis spread quickly to the Philippines. In response to massive capital outflows, the Central Bank introduced a lightly managed float of the peso on 11 July 1997, a little more than one week after Thailand floated the baht. The Philippines avoided some of the more severe aspects of the crisis, particularly the widespread bankruptcies that occurred in Thailand, partly because of structural reforms implemented in the financial sector and better management of external debt. Economic growth declined and agricultural production fell sharply. However, the major cause appeared to be adverse weather conditions associated with *El Niño* and *La Niña*, rather than the East Asian economic crisis.

## Economic effects

The economic effects were most severe in Thailand and Indonesia. In Thailand, annual GDP growth fell to -0.4 per cent in 1997 and -7.5 per cent in 1998. In Indonesia, growth was 6 per cent in 1996, but fell to 4.6 per cent in 1997 and -15 per cent in 1998. In both countries, the falls were concentrated in urban areas, particularly in construction and financial services.

Unemployment increased in both countries, although not by as much as some observers had feared. In Thailand, the rate increased from 2.2 per cent in February 1997 to 4.6 per cent in February 1998. In Indonesia, despite official reports in October 1998 that 20 per cent of the





workforce was unemployed, the rate was about 7 per cent, an increase of only 2 percentage points since the crisis began.

Flexible labour markets moderated the adverse employment effects in both Thailand and Indonesia. Reduced demand for labour produced a fall in the real wage, which moderated the effect on employment. While unemployment did increase during the crisis, employment rose about twice as rapidly. The implied expansion of the workforce was due to a higher participation rate, especially among younger workers.

In Vietnam, economic growth declined, but not substantially. After increasing by 8 per cent in the early and mid 1990s and 8 to 9 per cent in 1997, real GDP grew by 5 to 6 per cent in 1998. The fall in regional export markets was more than offset by increased penetration of

other markets, especially the European Union and the United States. With the external sector making a slightly positive contribution to growth, and both private investment and government outlays increasing strongly, the modest slowdown was due to the apparently media-induced fall in consumer expenditure.

Following onset of the crisis, the Philippines experienced a large contraction in building and construction and a rise in unemployment. In 1998, industrial production fell by about 2 per cent. However, services increased by about 3 per cent and the growth of gross domestic product appeared to remain positive. Exports were only slightly affected. Private investment flows dried up completely, but have recovered strongly in 1999. The country's overseas borrowing rating has been upgraded several times since the crisis.

## Social effects

### Poverty

The crisis increased poverty in three of the four countries, although not by as much as initially feared.

In Thailand, the incidence of poverty rose from 11.2 per cent of the population in the first half of 1996 to 12.7 per cent in the same half of 1998. However, this rate is less than the corresponding figure in 1994, and is 20 percentage points below the level in the mid 1980s.

In Indonesia, the Social Services Minister suggested in December 1998 that the incidence of poverty had increased from about 10 per cent (20 million people) before the crisis to 50 per cent (100 million people). However, the real increase was likely to be below 4 percentage points and it offset less than a tenth of the reduction that had been achieved in the preceding two decades.

The incidence of poverty in Vietnam is several times higher than in Thailand or Indonesia, but the crisis has not increased the rate. Unemployment remains steady and the Government's social expenditure programs are unaffected. Incomes in the rural areas, where around 90 per cent of Vietnam's poor live, were not adversely affected. In fact, real per capita income for the country as a whole grew by 3 to 4 per cent in 1998, so the incidence of poverty continued to decline during the crisis. At the worst, the crisis may have slowed down the rapid progress that the country was making in this area.

Social conditions are relatively poor in the Philippines. Poverty is high. Almost 18 million people, most living in rural areas, had incomes below the World Bank's poverty line of US\$1 (purchasing power parity basis) per day in 1995. Their situation has deteriorated since 1995, associated with about 1 million workers becoming unemployed. However, most of the

job losses can be attributed to *El Niño*. To some extent, the poor in the Philippines have been protected from the effects of the crisis by the weak integration of rural and urban areas. The slowdown in urban areas has had an adverse effect on government revenues and this has curtailed expenditure on poverty programs.

### Inequality

Inequality increased slightly in Thailand. The share of income accruing to the richest one fifth of the population increased from 55.3 per cent in 1996 to 56.2 per cent in 1998, with the corresponding reduction in shares being spread across the rest of the population. Over the same period, the average real income of those in the richest quintile rose by 1 per cent while that of people in the poorest quintile fell by 2 per cent. Since Thailand was only slightly affected by adverse weather and other external disturbances, these effects are due mainly to the crisis.

In Indonesia, a study conducted by the World Bank and the Ford Foundation found no significant correlation between the combined impacts of the crisis, the *El Niño/La Niña* weather phenomena and fires, on the one hand, and initial poverty incidence, on the other. Since the crisis mainly affected urban areas initially and the other, nature-based phenomena mainly affected rural areas where poverty is much greater, the major impact of the crisis was not on the very poor.

In Vietnam, the main impact of the crisis has been through indirect channels. Since 90 per cent of the poor live in rural areas, the strongest impact of the crisis on inequality is likely to be felt in reduced rural employment opportunities and lower rural incomes. Landless households in rural areas, which are home to the poorest of the poor, may have been most at risk due to the crisis.

The crisis may not have worsened inequality in the Philippines, since the major impact was in urban areas and these are only loosely linked to rural areas. There appears to have been little



movement of unemployed urban workers to rural areas, as occurred in Thailand. Nevertheless, the rural poor have been adversely affected by crisis-induced cutbacks in government rural expenditures.

## Effects on the rural sector

### *Agricultural production*

The crisis generally has had a positive, but probably not very large, effect on agricultural production. It lowered the exchange rate in all four countries, increasing the prices of tradeable relative to non-tradeable goods and services. It also raised the cost of imported inputs and credit. However, for most farmers these were smaller effects.

In Thailand, the baht depreciated by about 40 per cent. Most of Thailand's agricultural production consists of tradeable goods, and farm production increased by 2.5 per cent in 1998. However, only a small part of this is due to the devalued baht, first because the transmission of the price effects to farmers was slow and, second, because price elasticities of supply in Thai agriculture are very low.

The crisis, adverse weather and fires combined to reduce rice production in Indonesia in 1997 and 1998 by around 10 per cent. Most of the decline was in Java, one of the richer areas of the country.

In Vietnam, agricultural production increased by 2 to 4 per cent in 1998, despite a drought caused by *El Niño*, as well as storms and floods brought by *La Niña* which killed 420 people in the central part of the country. Prices of most agricultural commodities fell. However, the retail price of rice rose by 22 per cent, due mainly to the devalued dong. Combined with a significant fall in the price of fertiliser, terms of trade for rice farmers improved significantly.

In the Philippines, agricultural production fell by 6.6 per cent in 1998. Output increased in the high value fisheries, livestock and poultry

industries but declined for most crops. The fall was 27 per cent for paddy rice and 17 per cent for corn. However, the crisis was not responsible for this poor performance. While the effect of the devalued peso on the overall terms of trade of farmers was probably small, because only a small part of Philippine agriculture is exposed to foreign trade, it made production more profitable for some industries, such as commercial fishing.

Rather, the decline in Philippine agricultural production was due to the anticipation then arrival of adverse weather conditions. The drought in 1997, and publicity given to coming *La Niña* storms, meant fewer areas were planted with rice and corn as farmers went into survival/subsistence mode.

## Rural development

The crisis had a mixed effect on rural development. On the one hand, the large currency depreciations made the production of tradeable goods, including many agricultural products, more profitable. The higher incomes and expenditures of these farmers will boost rural activity generally, broaden local tax bases and foster locally funded development expenditures. On the other hand, the crisis has tightened central government budgets.

For example, in early 1998, the Philippine Government reduced departmental allocations by 15 per cent. Since wages had to be paid, non-personnel expenditures were effectively scaled back by 38 per cent. The budgetary difficulties caused the Philippine Government to delay plans to implement improved rural



services in health and education, and increased support for activities to enhance the income-generating capacities of rural areas.

However, the crisis has assisted the process of rural development in Vietnam. Unlike the other three countries, the fiscal impact was modest, and planned rural expenditures were not scaled back. Further, the increased importance of farm products following the devalued dong caused the Government to increase the budgetary allocation for rural development in 1999 and provide for increased investment in rural processing and marketing activities.

### *Rural households*

Farm incomes probably rose in Vietnam and Thailand after the crisis began as a result of both increases in farm production and exchange rate-induced rises in the relative prices of many farm products. In Vietnam, the price of rice rose by 22 per cent in 1998 while the price of fertiliser fell by 19 per cent, a result of a large fall in its international price. In Thailand, the price effects of the baht's depreciation have not been fully passed on to farmers because of slow transmission of information from exporters to growers.

The incomes of farmers fell in Indonesia and the Philippines because of large reductions in production, price interventions that discriminated against farmers in Indonesia and a high proportion of farm products being in the non-tradeables sector in the Philippines. Falling production also reduced employment and profits in the industries processing and distributing farm products, and the consequent fall in incomes slowed the business of those providing rural services. However, the prime cause - the fall in production - was not the crisis but *El Niño* and *La Niña* weather conditions and, in Indonesia, serious fires.

Before the crisis, many rural households received remittances from family members who worked in urban areas, especially the construction industry. This industry was

severely hit by the crisis. The resulting increase in urban unemployment and underemployment and, more importantly, the fall in real wages of those who remained employed, reduced the flow of remittances. In addition, the return of unemployed urban workers to rural areas increased the demands on the incomes of rural households.

### *Rural institutions*

The crisis affected rural institutions in the four countries. Some effects are beneficial and should contribute to the longer term development of the economies and reductions in poverty. Others may have less favourable effects.

In Thailand, the Government introduced a stimulus package, including providing subsidised credit to rural cooperatives. One aim of this measure was to strengthen the role of the cooperatives in local communities. However, it has also undermined the role of existing financial institutions such as the Bank of Agriculture and Agricultural Cooperatives, which is required to lend on concessional rates while meeting stringent commercial criteria. The Bank of Agriculture and Agricultural Cooperatives experienced considerable difficulties in attracting funds when interest rates increased following the large exodus of short term capital. Its disbursement of new loans to rural clients fell sharply in 1998.

The crisis also had what might be a favourable longer term effect on the institutional structure of Indonesia's rice market. Rice has long been the country's staple food. Recognising its importance, the Government has made the National Logistics Planning Agency (BULOG) responsible for regulating food markets, especially for rice. Since the crisis began, BULOG has made significant quantities of rice available at subsidised prices. To moderate the impact of relatively low domestic prices on farmers, it also subsidised fertiliser inputs. In response to the growing budgetary cost and increasing

resource misallocation associated with these activities, the Government agreed to implement from 1 April 1999 a deregulation package with the World Bank. Under the new arrangements, market forces will determine rice prices; commercial firms can import rice; food subsidies other than for rice will be abolished; and the fertiliser subsidy will be removed.

The impact of the crisis in Vietnam was not sufficiently severe or protracted to produce similar changes. The urgent need to strengthen the balance of payments following the slowdown in regional export markets led to some efforts to reduce the monopoly power of state-owned enterprises in rice exports and fertiliser imports. However, these and other efforts to free up the economy were muted by the economy's success in expanding exports and maintaining the reasonably high growth of output during the crisis.

The environment within which agricultural institutions operate in the Philippines is changing rapidly because of the devolution of agricultural support services to local government. Local government units now play a key role in agricultural and rural development. The process of delegation and the uncertainties that this has created have had a far greater impact on agricultural institutions than has the crisis.

## Effects on activities of donors

The views in this report about future directions for aid are both specific and strategic. The specific views relate mainly to the need to review the counterpart provisions of ongoing and planned programs and, where necessary, to revise them. The strategic views concern the desirability of new programs to address the effects of the crisis, some of the targets implied by this objective, and the approaches that should be taken toward achieving these targets. There should be continuous monitoring of all projects and adjustments made where necessary to take account of unforeseen developments.

The crisis affected the activities of donors, increasing the difficulties recipient country partners face in providing counterpart resources for some ongoing programs, and causing donors to reassess the provisions of some programs. It also led to demands for more assistance, to which donors quickly and generously responded. However, some cases indicated an over-reaction, with donors giving too much attention to ameliorating the perceived effects of the crisis at the expense of longer term programs aimed at sustainable reductions in poverty.

While the deterioration in economic performance in the four countries has been considerable, it has been much less than was earlier feared, has not been concentrated in rural areas and has not been especially focussed on the very poor. Also, there are signs that the adverse effects are diminishing and may soon disappear.

Further, not all the effects have been adverse. The move to floating exchange rate systems and the subsequent large currency depreciations have diminished and possibly removed the underpricing of tradeable relative to non-tradeable goods and services that had emerged and increased under the fixed exchange rate regimes. External borrowing policies have been improved and ownership and management of some important enterprises have been put on a more commercially appropriate and publicly acceptable basis.

The international community responded generously to the needs of countries seriously affected by the crisis. In Thailand, it put together an IMF-led US\$17.2 billion assistance package. An Asian Development Bank component of this package addresses one potentially very serious long term effect of the crisis: the large and possibly permanent drop out from secondary schools of boys and, especially, girls from rural areas. The package includes a scholarship scheme valued at US\$29 million and aimed at low income, rural families.

A common feature of the crisis in all countries was that it affected the ability of governments to provide counterpart funding for projects. Budgetary difficulties caused governments to freeze the hiring of staff. The crisis has thus both increased the need for the projects and reduced the capacity of governments to provide the counterpart resources needed for their satisfactory completion. Since the crisis, these inputs are unlikely to be provided unless the terms and conditions of projects are modified.

In Indonesia, counterpart funding requirements have risen, but donors have increased substantially their loans and many recipient bodies in Java do have abundant funds. However, agencies in other parts of Indonesia, particularly eastern Indonesia, may experience difficulties in meeting program requirements for counterpart inputs.

The moderateness of the effects of the crisis in Vietnam has not made such difficulties substantial. Projects of international organisations do not appear to have been seriously affected. However, these organisations are concerned that present policies and regulations, increasing pressures for more protection and a possible regional shortage of investment resources will impede Vietnam's future economic growth and threaten recent gains in poverty reduction.

In the Philippines, aid programs tend to be more a response to longer term problems, such

as lack of integration of projects and limited community and participant involvement, than a reaction to the economic crisis. Following the onset of the crisis, the development banks reviewed their operations and reassessed loans, including counterpart-funding requirements and have explored solutions to this problem.

### *Poverty reduction*

The one clear and overriding objective of all aid programs should be the reduction of poverty. It should not matter whether the cause of the poverty is an economic crisis, adverse weather, low land productivity, overcrowding on the land, inadequate infrastructure or whatever, although these will generally affect the selection of projects aimed at alleviating the poverty.

Poverty reduction is primarily a long term objective. Per capita incomes of the very poor need to be increased; the increases should be quite rapid and, most importantly, they should be on a sustainable basis.

The great majority of the very poor live in rural areas. A poverty focus requires effort on rural development and sectoral programs should be adopted only when and because they provide the best means of promoting rural development. The range of rural development opportunities that fit easily into bilateral aid programs is not wide. It is therefore important that adequate resources are devoted to identifying and planning such activities. One way to simplify the process is to support activities that form part of the recipient government's own rural development strategy.

Much if not all of the data needed to assess these programs are already available and, if





implementation has commenced, aid funds can have an immediate, beneficial effect. The projects also tend to have strong local support.

The major source of income in rural areas, particularly the external income that provides the base for a region's total income, is farming. An important target group of poverty reduction programs should therefore be farmers. The aim should be to provide aid that increases the labour productivity of farmers, since this is the overwhelming determinant of their income over the medium and longer terms. Since there is little unused farming land in the four countries, these programs will normally have two strands, one directed at raising the productivity of land, the other aimed at increasing the amount of land each person farms.

With respect to land productivity, the focus should be on the value of output per unit of

land. Value productivity can sometimes best be achieved by increasing volume productivity. There is, however, limited scope for reducing poverty by increasing the volume productivity of many existing crops. As per capita income rises throughout the world, there will be little increase in the near term, and possibly a decline over the medium term, in the consumption of low value products, particularly starches such as rice and wheat.

There will be, for several decades, quite rapid increases in the demand for high value farm products such as the sweeteners and proteins. Over the past decade, the per capita consumption of beef, pork and chicken has doubled and the growth rate seems to be increasing. Efforts to increase the value productivity of land should take into account this more rapid growth in demand for higher value farm products.

At high levels of income, the income elasticity of demand for sweeteners and proteins also drops sharply. On a purchasing power parity basis and measured at the farm gate, the per capita consumption of farm products appears to hit a ceiling of about US\$750 when per capita income reaches US\$15 000. There is clearly a measurable limit to the world's demand for farm products at any point in time. This limit constrains the number of people who can both work on farms and receive an income comparable with those earned in the rest of the economy.

Poverty reduction programs should therefore also facilitate the movement of labour into non-farm activities. They can do this by fostering the growth of higher productivity activities in the urban and non-farm rural sectors as well as by equipping farmers and their children to take advantage of new opportunities in these sectors. Programs that help local institutions develop modalities and systems that will enable them to facilitate and manage change can also assist the process, especially in Vietnam. Even smaller donors can increase their contribution by coordinating activities closely, not only with the existing

programs of recipient countries, but also with those of other, larger donors. By acting as a catalyst they can avoid many of the costs associated with project identification, design and management, and increase the effectiveness and efficiency of its aid disbursements.

These programs should recognise that recurring short term difficulties, whether due to shortcomings in domestic policies, adverse economic developments abroad or unfavourable weather, are an integral part of the longer term outlook for aid-recipient countries, as they are for other countries. They will normally have serious effects on the very poor and they can easily undermine important aspects of longer term poverty-reduction programs. It might therefore be appropriate for aid efforts to include the development of quick response mechanisms which, when coordinated, can ameliorate some of the short term adverse effects. Such mechanisms depend for their effectiveness on the availability of accurate and up-to-date information on people within or near the poverty boundary. Part of the aid effort could be directed toward improving the data collection and processing programs of key recipient countries.

Overall, East Asia has experienced two major financial crises in the latter half of the twentieth century. The first, in the mid 1970s, was shared with most of the world's countries. The crisis beginning in July 1997 was limited to a small number of countries but, for these, was equally severe.

A characteristic of both crises was that they produced a strong momentum among both aid donors and recipients for changes to aid policies and programs. A second characteristic was that they turned out to be less severe and protracted than initially feared. As a consequence, much of the momentum for reform had dissipated by the time the reform proposals had been drafted.

Nevertheless, both the need and the opportunities for reform remain. Perhaps the most important lesson from the recent crisis is that the groundwork for reform should be undertaken when the economies are performing smoothly, so that changes can be implemented quickly when difficult circumstances provide a more receptive climate.

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## Agriculture in times of crisis

### Impacts in South East Asia of the economic crisis

The East Asian economic crisis has posed a significant challenge to further economic development in the region. The crisis has placed further stress on the region's poor and rural communities. For decades, most regional countries achieved remarkable rates of economic growth and succeeded in reducing poverty. Since the mid 1970s, the East Asian miracle had produced annual regional gross domestic product growth rates averaging 7 per cent.

However, in 1997 the economic crisis abruptly interrupted the miracle. As a result, Indonesia, Thailand, the Philippines and, to a lesser extent, Vietnam, have grappled with economic stagnation, major budget deficits, unemployment, inflation, food shortages and political and social unrest. These impacts, although declining now, are likely to be felt for years. They are compounded by the climatic events of the *El Niño* phenomenon, where the impacts are most severe in Indonesia and Thailand.

The major threat the crisis posed was whether large numbers of people brought above the poverty line in recent decades would begin to fall below it. As this study shows, the major impacts have been on urban areas. The effects on rural areas and agriculture have not been as great as initially feared. The effects are considerable, but they vary widely from country to country, region to region and crop to crop. Indeed, some areas have even reaped benefits.

This study reports on the impact of the East Asian economic crisis on agriculture, rural development and agricultural institutions in Thailand, Indonesia, Vietnam and the Philippines.

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