



# Reaching the Rural Poor in the East Asia and Pacific Region



Rural Development and Natural Resources Sector Unit

**EAST ASIA AND PACIFIC REGION**



# Reaching the Rural Poor in the East Asia and Pacific Region



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## FOREWORD

The developing countries of East Asia are remarkably diverse. They range from the world's most populous (China) to one of the most sparsely populated (Mongolia). Some have notably homogenous cultures; others have a large number of ethnic and geographic subcultures. But there are also similarities. Their rural sectors are not growing as rapidly as other sectors and most are striving to come to terms with democratic reforms after centuries of hierarchical tradition.

Rural East Asia has undergone considerable transformation in recent decades. But while there have been dramatic improvements in food security, rural poverty, and incomes, many challenges remain. The vast majority still depend on agriculture, forestry, or fishing for their livelihood and these activities do not generate family income equivalent to jobs in urban areas. Further, these activities place tremendous pressure on already scarce natural resources.

In addition, overall economic growth has not been matched by improved services, such as health, education, and physical infrastructure in rural areas, or by a significant increase in nonagricultural rural jobs that could absorb the growing rural work force. As a result, while more rapid economic growth has improved the lives of people in the urban areas, virtually all of the "poorest of the poor" are now found in rural areas — more than 600 million people in rural Asia subsist on incomes of \$2 a day or less.

It is in this context that the East Asia and Pacific Rural Sector Unit (EASRD) of the World Bank set out to revisit its approach to rural development and rural poverty reduction as part of a Bank-wide effort to redefine the rural action agenda. This document is the outcome of that effort.

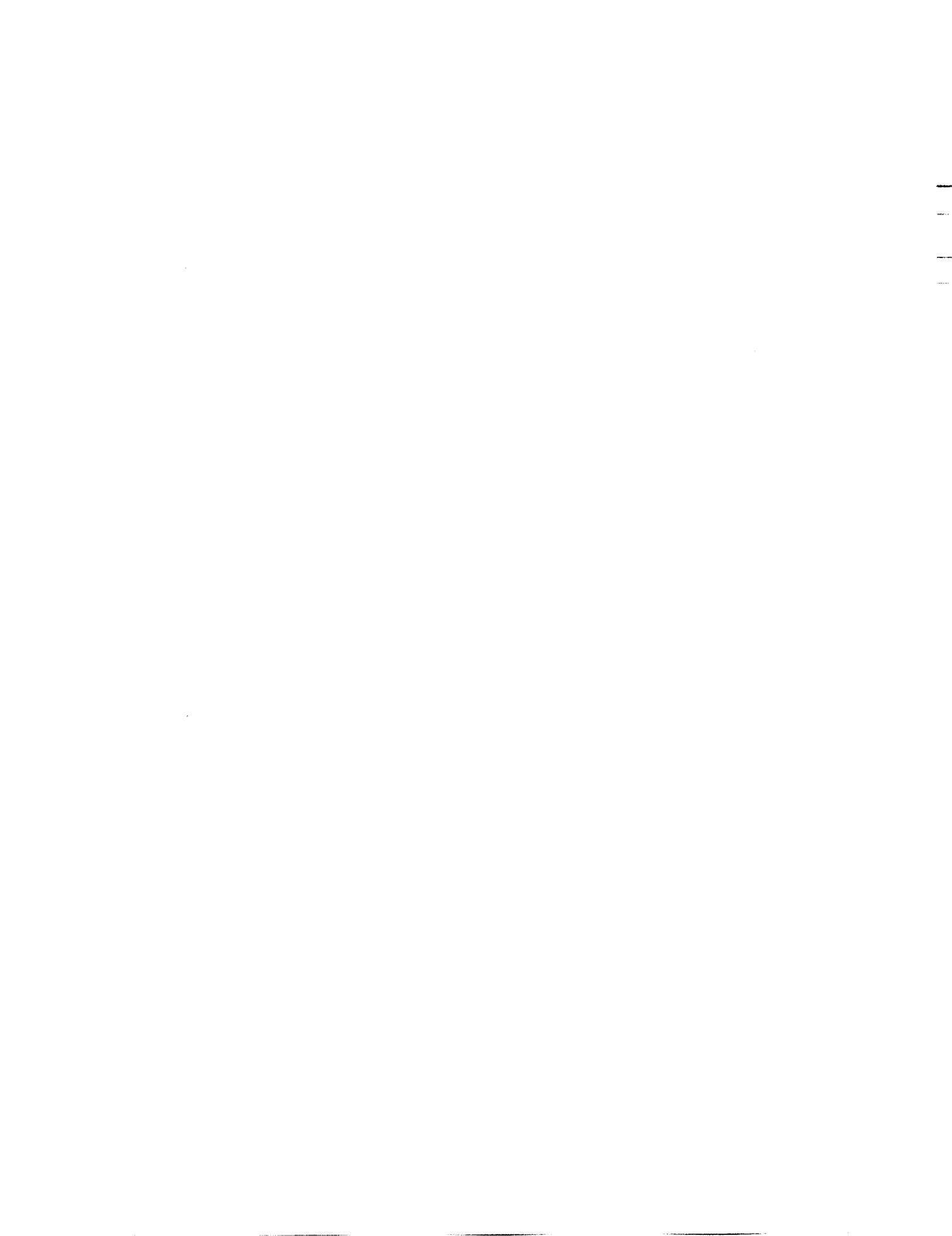
The overarching goal of the work is to strengthen the rural sector of all of the region's member countries through a holistic approach that takes into account the economic, social, and political aspects of rural life. The strategic objectives relevant to a rural renaissance in East Asia focus on reducing rural poverty; stimulating rural economic growth; providing food security; and supporting natural resources management. Each country has made more progress toward some of these objectives than toward others, and the type and degree of assistance that the Bank will offer will depend on the country's specific circumstances. Further, the strategies are far from uniform since the region represents a heterogeneous mix ranging from poor, centrally planned economies, to middle-income, market-driven economies, and with varying degrees of policy framework and institutional development.

Strengthening the entire rural sector requires more intensive work with government ministries that have been much more preoccupied with urban problems as well as other stakeholders. Rural development and rural poverty reduction are slow processes that have no single solution. The solutions require a broad menu of actions, projects, and programs across a comprehensive front, tailored to the specific needs of each country.

It is our hope that through this publication, the Bank will be able to share valuable lessons in reaching the rural poor and will stimulate a renaissance in interest and action in rural space among donors.

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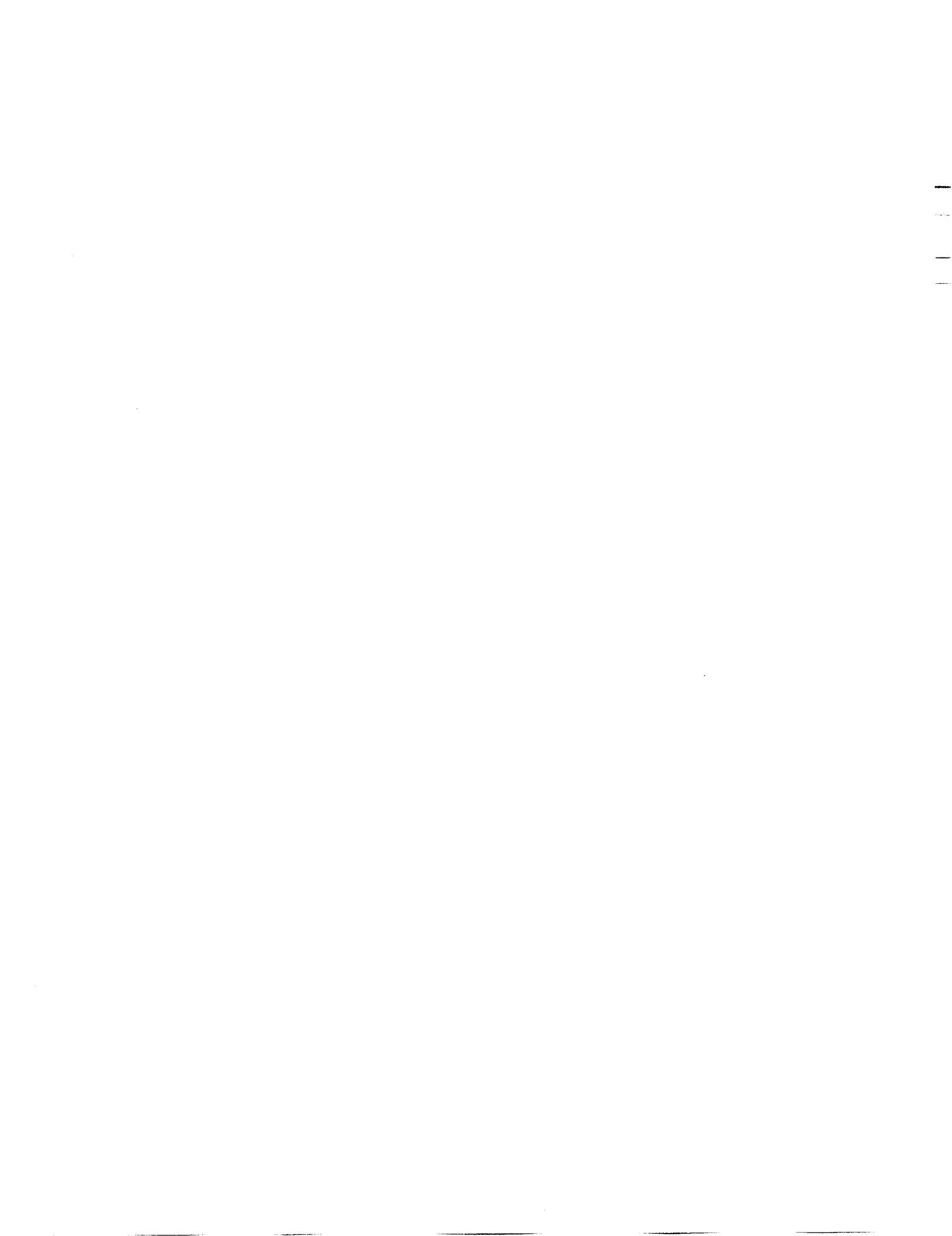


## **PREFACE**

This report has been prepared by a team led by Malcolm Bale, Sector Manager, Strategy and Policy, Rural Development and Natural Resources Sector Unit, East Asia and Pacific Region, The World Bank. Angela Chen served as a full time member and individual country contributions were made by Richard Anson, Christina Malmberg Calvo, Dely Gapasin, Christopher Gibbs, Robin Mearns, Stephen Mink, Rahul Raturi, Christopher Redfern, Jock Anderson, Douglas Olson, Louise Scura, Sari Söderström, and Juergen Voegele. The report benefited from comments and suggestions several World Bank reviewers and Steven Tabor (external reviewer). Funding that made the work and consultations possible was provided by the Ministry of Foreign Affairs of the Netherlands through the Bank-Netherlands Partnership Program. The manuscript was typed by Cynthia Dharmajaya and Cecilia B. Tan and edited by Phillip Sawicki. The typesetting and production was managed by the Agribusiness Department, University of Asia and the Pacific, Manila.

Many sources of information were used and a wide range of consultations with various stakeholders were undertaken in forming this report. In particular, two large consultation meetings with government, academic, NGO, and business stakeholders of the countries of East Asia and the Pacific were held in March, 2001, in Beijing, China, and Cebu, Philippines. The objective was to gather feedback from the regional stakeholders on the Bank's draft corporate and regional rural action plans. The consultation also sought reactions on the strengths and weaknesses of the Bank's support programs and on how the Bank might improve the effectiveness of its services.

This document mirrors the results of the consultation process. It also represents the Bank's response to recent developments in the global environment, its client countries and to our stated goal of reducing rural poverty through technological change, and the biological revolution; government reforms, including decentralization, and an enlarged role for the private sector; new lending instruments; and improved rural portfolio performance. Our challenge now is to work with all our partners and stakeholders to make sure that actions are well implemented and that rural development occurs.





# CONTENTS

## FOREWORD

## PREFACE

|              |   |
|--------------|---|
| Introduction | 1 |
|--------------|---|

## PART I: EAP RURAL STRATEGY

|   |    |
|---|----|
| CHAPTER 1                                     |    |
| The Rural Economy and the Critical Challenges | 3  |
| The Rural Economy                             | 3  |
| Rural/Urban Disparities                       | 4  |
| Trends in Agriculture                         | 4  |
| Public Expenditures on Agriculture Sector     | 6  |
| Rural Access to Social Services               | 6  |
| Gender Inequality                             | 6  |
| The Non-Agricultural Rural Economy            | 7  |
| Rural Poverty and Governance                  | 7  |
| Human Resource Development                    | 8  |
| Natural Resource Management                   | 8  |
| The Rural Infrastructure                      | 9  |
| Agricultural Research and Extension           | 9  |
| Emergence of Livestock Development            | 10 |
| Globalization and Agricultural trade          | 11 |
| CHAPTER 2                                     |    |
| The Current Rural Development Program         | 12 |
| Recent Trends in Bank Lending in Rural Areas  | 12 |

|   |    |
|---|----|
| CHAPTER 3   |    |
| Revitalizing Rural Asia: The Region's Strategic Objectives and Directions | 14 |
| The Rural Development Agenda  | 14 |
| Reducing Rural Poverty  | 14 |
| Stimulating Rural Growth  | 15 |
| Changing the Role of Government   | 16 |
| Integrating Rural Credit  | 16 |
| Encouraging Free Trade  | 17 |
| Removing the Anti-Rural Bias  | 17 |
| Designing Projects to Stimulate Rural Growth                              | 17 |
| Providing Food Security   | 17 |
| Supporting Resource Management  | 18 |
| Better Land Use   | 19 |
| Sustainable Forest Management   | 19 |
| Improved Water Management   | 19 |
| Sustainable Aquaculture Development and Fisheries Management              | 20 |

|   |    |
|---|----|
| INTRODUCTION  |    |
| Implementation of Action Plans  | 21 |
| Closing Comment   | 22 |
| <hr/>   |    |
| CHINA   |    |
| Rural Poverty Map   | 24 |
| Areas of Strategic Emphasis   | 25 |
| The Strategic Emphasis of Other Donors                                | 25 |
| Bank Operations in Support of China's Rural Development Strategies    | 25 |
| Rural Poverty Reduction   | 25 |
| Bank Instruments  | 26 |
| Expected Outcomes (Indicators)  | 26 |
| <hr/>   |    |
| INDONESIA   |    |
| Rural Poverty Map   | 28 |
| Strategic Emphasis of Bank Assistance                                 | 29 |
| Sustaining Economic Recovery and Quality Growth                       | 29 |
| Sustainable Natural Resources Management and Environmental Protection | 30 |
| Delivering Better Public Services to the Poor                         | 31 |
| Building Accountable National Institutions                            | 31 |
| Areas of Strategic Emphasis for Other Donors                          | 31 |
| <hr/>   |    |
| THE PHILIPPINES   |    |
| Rural Poverty Map   | 35 |
| Areas of Strategic Emphasis   | 36 |
| Deepening of Structural/Policy Reforms                                | 36 |
| Grain Sector Reform   | 36 |
| Land Reform   | 36 |
| Rural Finance Reform  | 36 |
| Budgetary Reforms   | 36 |
| Natural Resource Management Reforms                                   | 36 |
| Expanding Access of the Rural Poor to Productive Assets               | 37 |
| Agrarian Reform   | 37 |
| Land Administration and Management                                    | 37 |
| Rural Finance   | 37 |
| Promotion of Targeted and Community-Driven Programs                   | 37 |
| Expanded Rural Infrastructure   | 37 |
| Enhanced Smallholder Productivity                                     | 37 |
| Enhanced Natural Resource Management                                  | 37 |
| Strengthening Institutional Arrangements and Capacities               | 37 |
| Performance Indicator System  | 37 |
| Capacity Building   | 37 |
| Institutional Roles   | 37 |
| Areas of Emphasis of Other Donors                                     | 38 |
| Lessons Learned   | 38 |
| Internal Operational Issues   | 38 |
| <hr/>   |    |
| MONGOLIA  |    |
| Rural Poverty Map   | 43 |
| Rural Resurgence in the 1990s   | 44 |
| Rising Vulnerability to Risk  | 45 |
| Rising Poverty  | 45 |
| Areas of Strategic Emphasis for the Bank                              | 45 |
| Specific Actions  | 45 |
| Bank Instruments to be Used for Delivering Support                    | 45 |
| Expected Outcomes   | 46 |
| Performance Indicators  | 46 |

|   |    |
|---|----|
| LAO PEOPLES DEMOCRATIC REPUBLIC   |    |
| Rural Poverty Map   | 47 |
| Strategic Issues  | 48 |
| Strategic Role of the Bank  | 48 |
| <hr/>   |    |
| CAMBODIA  |    |
| Rural Poverty Map   | 50 |
| Bank Programs   | 51 |
| <hr/>   |    |
| PAPUA NEW GUINEA  |    |
| Rural Poverty Map   | 53 |
| Governance in Rural Areas   | 54 |
| Implementation of Interventions   | 54 |
| <hr/>   |    |
| VIETNAM   |    |
| Rural Poverty Map   | 57 |
| Current Areas of Strategic Emphasis   | 58 |
| The CDF Approach  | 58 |
| Poverty Reduction Focus   | 59 |
| Delivering the Strategy   | 59 |
| Links to Bank Operations  | 59 |
| Matrix of Strategic Actions   | 59 |
| <hr/>   |    |
| THAILAND  |    |
| Rural Poverty Map   | 61 |
| Key Rural Challenges  | 62 |
| <hr/>   |    |
| PART II: SPECIAL TOPICS   | 68 |
| Initiatives for Irrigation Reform   | 68 |
| China   | 68 |
| Indonesia   | 69 |
| Philippines   | 69 |
| Thailand  | 69 |
| Vietnam   | 69 |
| Initiatives Watershed Management  | 70 |
| <hr/>   |    |
| PART III: APPENDIX  |    |
| Annex 1a: Rural and Urban Population Growth (annual %)                              | 74 |
| Annex 1b: Agriculture Growth, Annual %  | 74 |
| Annex 2: Social Indicators in East Asia   | 75 |
| Annex 3a: Rice Production Growth, Asia 1967-1997                                    | 75 |
| Annex 3b: Maize Production Growth, Asia 1967-1997                                   | 76 |
| Annex 3c: Per Capita Cereal Consumption (kg/cap), Asia 1967-97                      | 76 |
| Annex 3d: Per Capita Cereal Production and Annual Growth Compared with Other Region | 76 |
| Annex 3e: Net Cereal Trade (million mt), 1967-1997                                  | 77 |
| Annex 3f: Cereal Demand Growth (%/year) Various Cereals, 1967-97                    | 77 |
| Annex 4: Food Security in East Asia   | 77 |
| Annex 5: Number of Illiterate Adults (15+) in the Asia and Pacific Region           | 78 |
| Annex 6a: Global Rural Space Portfolio  | 78 |
| Annex 6b: East Asia Rural Space Portfolio   | 79 |
| Annex 6c: Number of Projects and Lending in Rural Space by Region                   | 79 |
| Annex 6d: EAP Breakdown of Outcome Domains  | 79 |
| Annex 6e: EASRD Portfolio Analysis  | 80 |
| Annex 6f: Breakdown of Rural Sector Portfolio, by Sector, FY00                      | 80 |
| Annex 6g: Breakdown of ESRD Portfolio, by Sector FY00                               | 80 |

## LIST OF FIGURES, TABLES AND BOXES

|   |    |
|---|----|
| Figure 1: Average Annual Growth of GDP and Agriculture, 1990-1998   | 3  |
| Figure 2: Rural and Urban Poverty   | 4  |
| Figure 3: Under Nutrition Among Children Under Five in Developing Countries/Children Suffering From Under Nutrition, by Region              | 6  |
| Figure 4: Bank Rural Portfolio, by Region   | 12 |
| Figure 5: EASRD Portfolio   | 13 |
| Figure 6: EAP Rural Space Portfolio/EAP Rural Space Portfolio, FY00   | 13 |
| Table 1: Food Supply and Demand, East Asia, 1967-1997   | 5  |
| Table 2: Public Expenditure in the Agricultural Sector as a Share of Total Expenditure  | 5  |
| Table 3: Matrix of Strategic Actions to Support Rural Development in China  | 26 |
| Table 4: Rural Vision to Action Update for Indonesia — Strategic Actions to Support Rural Development                                       | 32 |
| Table 5: Progress on Key Philippines CAS Themes   | 39 |
| Table 6: Rural Vision to Action Update for the Philippines — Strategy Framework for World Bank Assistance in Rural Development              | 41 |
| Table 7: Key Indicators for Rural Mongolia  | 44 |
| Table 8: Strategic Actions to Support Rural Development in Mongolia   | 46 |
| Table 9: Matrix of Strategic Actions in Lao   | 49 |
| Table 10: World Bank — Rural Vision to Action Update, 2001 IDA's Strategy for Assisting Rural Development and Poverty Reduction in Cambodia | 52 |
| Table 11: Matrix of Strategic Actions in Papua New Guinea   | 55 |
| Table 12: Links to Bank Operations — Present and Future   | 59 |
| Table 13: Matrix of Strategic Actions to Support Rural Development  | 60 |
| Table 14: Summary of EAP Irrigation and Drainage Project Components   | 69 |
| Table 15: Major I&D Projects, by Country  | 70 |
| Table 16: Bank-Client Dialogue on Irrigation Reforms  | 70 |
| Box 1: Poverty Alleviation in China: A Collaboration  | 15 |
| Box 2: Philippines; Supporting Devolution and Broad-Based Rural Development   | 16 |
| Box 3: Food Security in China   | 18 |
| Box 4: Indonesia: Modernizing Water Resource Management   | 20 |
| Box 5: China  | 24 |
| Box 6: Indonesia  | 28 |
| Box 7: Philippines  | 35 |
| Box 8: Mongolia   | 43 |
| Box 9: Lao PDR  | 47 |
| Box 10: Cambodia  | 50 |
| Box 11: Papua New Guinea  | 53 |
| Box 12: Vietnam   | 57 |
| Box 13: Thailand  | 61 |

# *Executive Summary*

East Asia's widespread adoption of Green Revolution techniques in agriculture during the last 30 years has increased both food production and the income of many millions of farmers. Today, most of the countries in East Asia enjoy a much greater degree of food security than they have ever known before, and the consequent freeing of surplus labor from the agricultural sector to the urban sector has been one of the chief reasons for the region's vibrant economic growth.

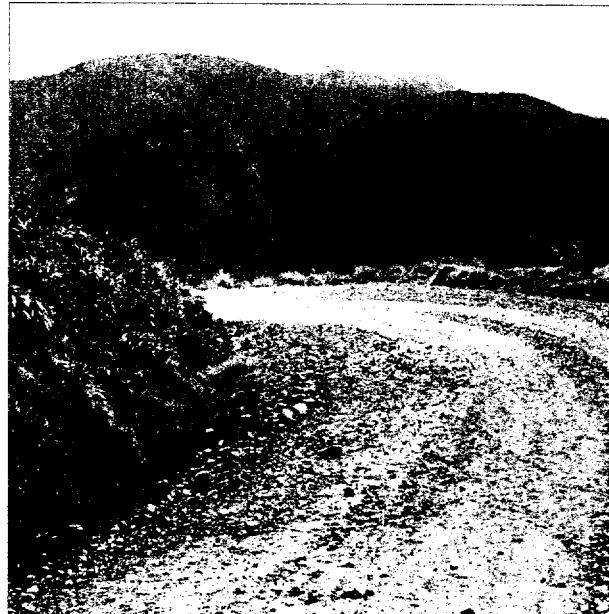
But greater efficiency in agricultural production and continued (although slower) population growth have also meant that rural regions are now the setting for most of East Asia's poverty and unemployment.

This paper describes the principal social and economic problems in rural East Asia and the rural strategies devised by the Rural Development Unit of the East Asia and Pacific region (EAP) for its work with the major countries of the region. These strategies will evolve as countries develop, and one of the purposes of this report is to encourage continued dialogue between the Bank, the countries themselves, and other donors on the best directions for that evolution.

The most recent World Development Report reminded its readers that of the world's total population of six billion, two-thirds subsist on incomes of \$2 a day or less. That includes more than 800 million people in both rural and urban Asia. This situation will not change without the combined efforts of Asian governments, the rich countries of the West, and international institutions. But all of those involved in creating strategies to alleviate poverty are gradually learning the importance of listening carefully to the poor themselves. The issues and strategies discussed here are heavily influenced by their voices.

## **The Current Situation**

Agricultural growth in the nine major countries of East Asia lagged well behind growth in gross domestic product during the 1990s (except in Mongolia). None-



*Northern mountain rural roads.*

theless, the agricultural sector still employs about 70 percent of the working populations of these countries, and 80 percent of the region's poor dwell in the countryside and the mountains.

That is not the equivalent of saying that life in rural areas is invariably isolated and bleak. Various surveys show that there have been improvements in many rural areas in terms of access to education, health care, transportation, and other public services. But it is also estimated, for instance, that as many as a billion East Asians (most of them in rural areas) are without access to safe water and sanitation. Imbalances in the provision of public services that favor urban areas are often accompanied by policy biases against agriculture, such as consumer price controls on domestic farm products and high tariffs on imported agricultural inputs.

The bias against the rural sector is also evident in

national investment figures. Between 1994 and 1998, public investment in the rural sector never exceeded 10 percent of all public investment in any of the nine major East Asian countries. In some, it is true, the percentage remained stable, but in others it drifted downward, except in Indonesia. There, agricultural investment rose from a mere 3.1 percent of all national investment in 1995 to 5.9 percent in 1997-98. The increase, of course, occurred within a context of political instability in parts of rural Indonesia.

Yet despite the policy bias, insufficient public investment, declining world prices for agricultural products, and such natural disasters as floods and drought, cereal production in East Asia (mainly rice) has almost doubled since 1970. At the same time, millions of children suffer from malnourishment, but insufficient supply is usually not the problem. The problem is low family income, a problem intensified by the shortage of nonagricultural jobs in rural areas. Even though nonfarm jobs account for about 42 percent of total rural income in East Asia, that figure is somewhat misleading. A notable portion of the nonfarm income consists of remittances from rural workers who have found either temporary or permanent work in urban areas.

The forces that produce unemployment, underemployment, and poverty are especially hard on women in rural East Asia. There, as elsewhere in the developing world, women comprise a large part of the agricultural work force. In addition to their daily work as subsistence farmers, rural women are responsible for child care, elder care, and household functioning. As a result of widespread and extreme gender inequality, however, they are often denied access to education (including advise from agricultural extension agents), healthcare, adequate nutrition, and jobs that pay more than farm work. Gender inequality's effects on women are pernicious in themselves and they also retard economic and social progress.

Poverty in rural East Asia is exacerbated by traditional hierarchical forms of government that have until recently largely resisted democratic reform while failing to provide the kind of governance that is necessary to assure social harmony. In terms of commerce and trade, what is frequently absent are such things as transparent legal and judicial systems that guarantee both property rights and the fairness and sanctity of contracts for both rich and poor. Good governance also means the absence of corruption among those in authority, whether elected representatives or government bureaucrats. Corruption has been endemic in East Asia, and public outrage against it has swept through several countries since the financial crisis of 1997-98. The millions who saw their savings wiped out at that time have expressed their anger in mass protests over news reports of the corrupt gains of high officials. It is often the rural poor who have been vic-

timized most by corruption. Many steps—legal, judicial, institutional—need to be taken in East Asia to assure honest government at every level.

With few exceptions, public authorities in East Asia have neglected to invest adequately in the development of human resources in rural areas. As a result, poverty and lack of formal education are transmitted from generation to generation. To end that cycle, East Asia's countries must invest in decent rural schools, staff them with trained teachers, and persuade parents that their children will be better off if they go to class every day rather than work in the fields. Targeted food programs should be established in rural regions where children are poorly nourished, as should a wide array of free or subsidized health care facilities that can provide infant and child healthcare along with programs to control malaria, tuberculosis, and other rampant diseases. Hunger and ill health do not prepare children for school.

After many years of deforestation, soil depletion, overfishing, and uncontrolled air and water pollution, the countries of East Asia have begun to realize the importance of balancing resource use with environmental sustainability. One way to preserve resources is to provide the rural poor with better ways to use resources. Since little new land is available for growing food, future agricultural growth in the region can only come from land use innovations, greater access to modern farming inputs, improved access to land, and better access to urban markets. Soil fertility can be improved—as it has in some places in East Asia—through support for agroforestry communities on the margins of forests. In these communities, partial clearing of the forest is followed by the planting of food crops along with fruit and coffee trees, whose output can be sold for higher prices than those obtained for subsistence crops.

Better land use in East Asia must be accompanied by reforms in water policy. Both rural and urban users have benefited from zero-pricing of water that has simply encouraged wasteful practices. Alternative, water-conserving policies are urgently needed to avert supply scarcities that may otherwise hinder agricultural production particularly production of rice. Three-fourths of the rice grown in East Asia comes from irrigated land.

Many of East Asia's remote and mountainous regions are still in dire need of better infrastructure—roads, bridges, and electric power lines in particular. Decisions about the location of such facilities can only be made sensibly if the poor themselves are given a voice in planning. They are far more knowledgeable about the needs of their community and can suggest project designs that meet a broad spectrum of needs—in the case of roads, for example, thoroughfares that are equally useful to farmers transporting goods to market, teachers and students traveling to and from

school, and mothers taking infants to the clinic.

While the government is the logical agent for improving the transportation infrastructure, private companies are likely to be a better choice for electric power and telephone lines, but rate regulation intended to keep prices down for consumers often deters private companies from engaging in such ventures. One answer may be to provide subsidies for construction of these facilities in rural areas while allowing the companies to set rates as necessary to cover the marginal costs of service.

**Agricultural Research.** The countries of East Asia have invested heavily in agricultural research over the last thirty years, but the task is far from done. Nobel laureate Norman Borlaug estimates that countries in the region will have to increase cereal output by 60 percent over 1999 levels by the year 2025 to meet the projected need. Future agricultural research will have to be oriented more toward sustainability of land use and toward developing synergies between food crops, cash crops, and livestock. More attention will have to be paid to agroforestry and aquaculture.

Genetic engineering may offer enormous possibilities for advances in agricultural production and thus is very relevant to poverty reduction, food security, and environmental conservation. As private companies push the development of practical applications of biotechnology, the interests of the rural poor must not be ignored. In other words, the advances produced by new technology must be made broadly available rather than remaining in the hands of a privileged few companies or producers. Asian governments should engage industrial countries and research firms on the issues of property rights, access to new genetic developments, and cooperative research partnerships.

**Livestock production.** Between the early 1970s and the mid-1990s, meat consumption grew far more rapidly in East Asia than it did in the industrialized world, and this growth is expected to continue. This development has had both good and bad effects on the rural poor. As demand has increased, the rural poor (especially rural women) have added the raising of livestock to their other farming activities. In addition to increased earnings from selling livestock, the rural poor themselves have benefited from increased consumption of meat, thus alleviating the protein and micronutrient deficiencies widely found in developing countries. In addition to these advantages, livestock provide draft power and manure for fertilizer, and they can also serve as collateral for loans. Increased demand, however, has also brought large operators into the market whose herds of livestock in peri-urban areas are damaging grazing land and causing water pollution from feedlot runoff. Since large suppliers are more able to meet the needs of meat processing plants, the plants have less interest in buying from small herders. Policymakers must now develop regulatory schemes to deal with the health and envi-

ronmental problems caused by the growth of livestock production while seeking to assure that small-scale producers are not squeezed out of the market.

**Trade Policy.** Most of the major East Asian countries are trading nations, and agricultural exports account for a large part of their income. About 26 percent of the region's agricultural output is exported, chiefly to the United States, Japan, and Western Europe. The official commitment to free trade remains strong, there is an undercurrent of skepticism in the region about further liberalization of agricultural trade. That skepticism can be traced to certain realities:

- Throughout the world, but especially among the industrialized countries, agricultural protectionism (and subsidies for domestic agricultural producers) remains stronger than industrial protectionism. It is not only developing countries who are lagging in implementing free trade measures agreed to during the Uruguay Round. East Asian countries have begun to wonder whether their earlier liberalizations are being reciprocated by the industrialized world. Even when they are willing to liberalize further, they face strong internal pressures to place greater emphasis on domestic issues that have little to do with trade.
- To obtain increased access to foreign markets for their agricultural products, East Asian governments will have to improve their ability to meet the sanitary and phytosanitary (SPS) standards required for such products by Western nations. That will be costly. It is estimated that the East Asian countries will have to spend the equivalent of more than half their annual development investment funds to meet SPS and intellectual property rights (IPR) obligations under World Trade Organization (WTO) rules. Promises of assistance from industrial country members of the WTO to meet these standards have not materialized.
- Governments in the region are laboring to reform their customs agencies, widely reputed to be among the most venal domestic bureaucracies. Success in customs agency reform will be necessary if the East Asian countries are to uphold their obligations under liberalized trade rules.

#### **Strategic Objectives for the World Bank in East Asia**

The developing countries of East Asia are remarkably diverse. They range from the world's most populous (China) to one of the most sparsely populated (Mongolia). They include the sprawling archipelagoes of the Philippines and Indonesia as well as such compact smaller countries as Thailand and Cambodia. Some have notably homogenous cultures, others have a large number of ethnic and geographic subcultures.

But they also have their similarities. Virtually all

of them still rely heavily on rice as the principal food-stuff, in all of them (except Mongolia) the rural sector is the lagging sector, and in all of them the natural environment is being subjected to severe stress. All of them, moreover, are striving to come to terms with the worldwide impetus toward democratic reform after centuries of hierarchical tradition.

The overarching goal of the East Asia and Pacific Rural Sector Unit (EASRD) is to strengthen the rural sectors of all of the region's countries through a holistic approach that takes into account the economic, social, and political aspects of rural life. What that means, in part, is that EASRD no longer see its sole role as providing support and impetus for agricultural growth, although that will continue to be one of its chief concerns. Strengthening the entire rural sector, and in that way helping to make serious inroads into the problem of rural poverty, means that EASRD will work much more intensively in the future with government ministries that have been much more preoccupied with urban problems—Finance, Trade, Planning, Transportation, Health—as well as the Agricultural, Forestry, and Environmental ministries. Rural development and rural poverty reduction are slow processes that have no single solution. Rather, EASRD view solutions to rural development as requiring a broad menu of actions, projects, and programs across a comprehensive front, tailored to the specific needs of each country.

This approach, EASRD believe, will help these countries deal more successfully with such events as the 1997-98 financial crisis, which severely weakened the confidence of many in East Asia in their countries' futures, particularly in light of the many years of economic growth that preceded the downturn.

EASRD has developed several strategic objectives for its work that are relevant to a rural renaissance in East Asia. This does not mean, however, that EASRD will place equal emphasis on each strategic objective in each country. Each country has made more progress toward some of these objectives than toward others, and the type and degree of assistance that EASRD offer each country will depend on its individual circumstances.

What follows are discussions of EASRD's four strategic objectives and the chief actions needed to achieve them.

### **Reducing Rural Poverty**

In East Asia as a whole, approximately 30 percent of the rural population has incomes below the poverty line, about double the percentage of poor urban dwellers. Note, however, that many of the poor in East Asia's cities are temporary or permanent migrants from rural areas with few skills that will enable them to integrate themselves into the urban workforce.

In order to reduce rural poverty, the unit is taking two approaches. One is the financing of community

development projects that directly attack poverty through targeted, productivity-enhancing investments in very poor rural. The other is the financing of projects to enhance agricultural productivity and create non-farm rural employment—water management schemes, storage and processing facilities for agribusiness, and so on. These are not state-owned enterprises but privately owned ones created with government.

### **Stimulating Rural Economic Growth**

To stimulate rural economic growth, EASRD will continue to encourage governments to engage in projects and to carry out reforms that will encourage private companies to locate in rural areas, especially those where poverty is widespread. In the broadest sense, EASRD is encouraging East Asian governments to eliminate the anti-rural bias in many ministries whose activities affect both rural and urban areas. These are the ministries responsible for establishing or improving rural schools, healthcare facilities, electric power lines, telephone lines, roads, and other facilities that are normally the government's responsibility.

Rural areas also must have a local governance framework that establishes rules for the operation of economic enterprises—land-titling and registration, honest systems of weights and measures, laws for the resolution of commercial disputes, standard regulations for permits and licenses, and so on. Instead of establishing such frameworks, many governments in East Asia continue to carry out commercial activities themselves through state-owned enterprises that provide fertilizer, seeds, agro-chemicals, and other farm supplies, and to provide financial services, including credit. Experience has shown that in most cases these goods and services can be delivered more effectively and efficiently by private firms. In most of the EAP countries, government controls on interest rates in combination with credit subsidies threaten the existence of privately operated rural financial institutions (RFIs). Instead of trying to solve the problems of the RFIs through additional credit and management assistance, EASRD now encourages national policy changes and institutional reforms to strengthen a country's entire banking sector, including RFIs.

EASRD also believes that further liberalization of agricultural trade by East Asian countries would help stimulate rural economic growth, even though some types of agricultural production might suffer and adjustment of the product-mix of agriculture would be required. Some countries in the region still have barriers that raise the cost of exporting, and most of the countries in the region still maintain barriers to agricultural imports, which are a cause of friction with trading partners. These barriers also impose opportunity costs on the countries themselves.

### **Providing Food Security**

Any country's food security depends on its overall economic health—that is, strength in both the agricultural and industrial sectors. A country need not be self-sufficient in food production as long as it has the wherewithal to buy the food it needs.

Because of their long histories with intermittent famines, many East Asian countries have been reluctant to embrace this concept and have instead opted to subsidize domestic food producers and to impose tariffs on agricultural imports that would compete with domestic products. In short, political realities intrude upon economic rationality. Given this situation, EASRD works with its countries to find a middle way between the practical demands of politics and the rational demands of economics.

But there can be times—as the recent crisis has proved—when hundreds of thousands of people can lose their livelihoods and thus lack the money they need to feed themselves and their families. In Indonesia, where the crisis has had a particularly strong impact, EASRD and East Asia Social and Sustainable Development (EASSD) helped the Indonesian government build a targeted food security program for the unemployed. In the future EASRD will discuss plans for similar social safety net programs in other East Asian nations as an affordable means of providing family food security.

### **Supporting Natural Resource Management**

In many of the client countries, immediate demands for food, fish, lumber, and other items obtained from natural resources continue to overcome the desire to protect natural resources. Nonetheless, the Unit will continue to try to convince its clients that intelligent management of land, forest, river, and ocean is essential to achieving sustainable economic growth, and EASRD have begun placing much more emphasis on devising policies and programs to protect these resources.

Some of the natural resource problems in East Asia are well-known: continuing clear-cutting of forests, the destruction of coral reefs, overexploitation of coastal and inland fisheries, and the disappearance of coastal zones and mangrove areas caused by urbanization and commercialization. Other environmental problems, such as conflict over water resources between urban, industrial, and agricultural users, are emerging and will need to be addressed.

In addition to funding traditional projects for land reclamation and flood control, EASRD has begun to promote conservation management of production forests and biodiversity conservation projects in several of its client countries. EASRD has also begun to make sustainability of natural resources a condition for approval of adjustment loans. EASRD is adopting community-based approaches to natural resource management—that is, canvassing local communities to get their views on the best approaches to conservation—

and processing a number of grants for projects to be carried out by such NGO partners of EASRD as the World Wildlife Fund, The Nature Conservancy, and the World Conservation Union.

### **The Bank's Current Rural Development Program**

The EASRD unit's continuing goal is to raise the importance of agricultural growth and rural economic development on the agendas of the countries of East Asia. In reassessing its strategy during the last three years, the Unit developed a list of the characteristics to emphasize in our work with clients. They include technical excellence, political impartiality, a long-term perspective on development issues, an emphasis on issues customarily neglected by the private sector, and a desire to bring groups with different interests together, both to leverage the Bank's influence and to achieve long-lasting solutions to the problems.

EASRD is also addressing the sensitive issue of official corruption, which appears to be widespread in East Asia at all levels of government and which has recently aroused a new round of vigorous public protests within some countries. The unit is strengthening internal financial procedures in projects, requiring increased transparency in project transactions, attempting to identify and eliminate corrupt and unprofessional practices during loan supervision, and encouraging Bank staff members to deal forthrightly with evidence of corruption even at the risk of offending client representatives and possibly even disrupting operations.

EASRD hopes that its work and vision will result in a larger rural portfolio. The Bank's rural portfolio declined from \$3.5 billion in FY98-99 to \$1.5 billion in FY99-00. This decline is difficult to reconcile with the needs of rural Asia, the number of poor in rural areas of Asia, and the Bank's mission of poverty reduction.

The reasons for the decline in rural lending in the region are varied. Some are temporary. Others are structural, such as China's graduation from the IDA. What is most important at this point is identifying the reasons for the decline and responding to them. A continuing decline may weaken our catalytic role in building consensus with other donors and with borrowers on the policies and actions needed to break the cycle of rural poverty and to halt continuing environmental degradation in East Asia.

### **Country Action Plans**

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#### **CAMBODIA**

Although Cambodia's population of about 11 million is about double the size of Lao PDR's, the country itself (with about 60,000 square miles) is a third smaller than Laos. About 80 percent of the labor force, or three million people, are involved in agriculture and forestry, and the main industries are rice milling, fishing, and production of wood products. The value of

imports vastly exceeds that of exports, as might be expected given the country's many years of internal conflict since the 1960s.

The Bank has several ongoing efforts in Cambodia, including an agricultural productivity improvement project that began in FY97 and a northwest village developing Learning and Innovation Loan (LIL) that commenced in FY99. LIL's in biodiversity (FY00) and forestry (FY00) will help to build capacity at the community level to manage natural resources. A rural development strategy report will be undertaken in 2002, which is also the scheduled year for a tourism-cultural resource management LIL that has been proposed to protect Cambodia's cultural treasures (including its world-famous temples), most of which are located in rural areas.

## CHINA

By 1988, some 42 million people in China's rural areas were classified as having income below the poverty line. Large as that figure may seem, it was a stunning reduction from the 260 million rural poor just 20 years earlier.

Further reductions are likely to occur more slowly because most of the remaining poor live in remote hinterlands and mountainous regions of the western part of the country. The natural environment there is particularly fragile, and it is there that sustainable management of natural resources is needed most. It is in this part of China that EASRD is particularly active.

One task will be to carry out a multiyear project, complete with participatory design and implementation, to raise agricultural productivity. This can be achieved by developing new production technologies more suitable for mountainous terrain and by building markets for the region's budding array of tree crops.

In 1998, China received an object lesson in the perils of excessive deforestation when severe floods occurred, with considerable loss of life, in the upper watershed of the Yangtze River. The government responded by banning logging operations in the watershed, and the Bank, along with other donors, is supporting the development of a new framework for sustainable management of forest resources.

Major strategic areas for action in China by the World Bank are: rural poverty reduction through targeted poverty programs and productivity enhancing investments in rural development and agricultural research (for example, the Quinba Mountains Poverty Reduction Project and the Loess Plateau Projects); improved water management (for example, the Yangtze Basin Water Resources Development Project); and sustainable forestry management.

## INDONESIA

More than three-fourths of Indonesia's poor live in

rural areas, and agriculture is the main occupation of the great majority of them, either on their own land or as sharecrops and farm laborers. For the typical poor rural household, however, farming accounts for only about half of annual income. Large numbers of both rural men and women earn income from nonagricultural rural endeavors or from urban employment.

In recent years there has been considerable political turmoil in Indonesia, turmoil that was exacerbated by the 1997-98 crisis, whose worst effects were felt more in urban areas than in the countryside. The government began to implement a massive decentralization of governmental authority around that time. As a consequence, Bank funding of projects in Indonesia will be on the low side, and much of the Bank's future work will be helping local and regional governments adjust to their new responsibilities. Reviews of local fiscal management will be an important activity of the Bank's country team, as will persuading local governments not to re-establish the local taxes and fees on commerce that were abolished throughout Indonesia in 1997. Those taxes and fees discourage domestic trade by raising prices, and thus they hurt the poor.

The resolution of disputes over land ownership continues to be a complex issue in much of rural Indonesia. Settling such disputes is vital to social stability, rural investment, natural resource use, and the livelihoods of indigenous peoples. The Bank has financed a land administration project as the first step in an effort to title most agricultural land, and we will continue to make land administration a priority.

Decentralization of agricultural research and extension appears necessary to provide greater responsiveness to farmers' priorities, and the Bank is supporting this planned decentralization with two current projects. Meanwhile, many regions in Indonesia are encountering deterioration of water quality and intersectoral competition for water. Developing a strengthened institutional and regulatory framework in which economic incentives are brought to bear on water quality and water allocation is the purpose of the Bank's ongoing water sector adjustment loan (WATSAL).

Finally, with the assistance of Asian Development Bank (ADB) and bilateral donors, the Bank seeks to assist Indonesia with the sustainable management and conservation of its extensive but diminishing forestry resources. This is a complex issue that requires the cooperation of many stakeholders.

## LAO PEOPLES DEMOCRATIC REPUBLIC (PDR)

The Lao PDR, with its predominantly agricultural and rural economy, is one of the poorest countries in East Asia. The poverty rate for the entire country is close to 40 percent, and more than 90 percent of the rural poor live in farming households. Social indicators (life expectancy, infant mortality, etc.) are among the lowest in the region.

Although agriculture's share of gross domestic product (GDP) has been declining, it still accounts for well over 50 percent of GDP and employs more than 80 percent of the workforce. Rice is by far the most dominant crop. Logging is also vital to the economy, contributing as much as 10 percent of GDP and about 35 percent of foreign exchange. Although forests cover 80 percent of the country, the current rate of tree consumption is unsustainable. More than half the forested area is degraded, and illegal logging across international borders is common.

The rural sector's infrastructure is poorly developed (roads and irrigation are especially lacking), key agricultural inputs are scarce, and the government lacks the institutional resources to design a comprehensive plan for strengthening agriculture.

Within the IDA's current portfolio of 10 projects in Lao PDR are three involving the rural sector: a land-titling project, an upland development and conservation project, and a forest management and conservation project that closed recently. The Bank has completed a review of forestry policy with other donors that will be used in our efforts to strengthen the country's forest management. This, together with rural poverty alleviation projects financed in part with public revenues generated from a hydroelectric scheme, represent the Bank's areas of strategic interest.

## **MONGOLIA**

By 1990, after 70 years of state socialism, Mongolia's main and traditional occupation of livestock herding appeared to be in steep decline. But the end of Soviet bloc subsidies at that time was followed by widespread unemployment in the formal sector and a revival of livestock and other agricultural production borne out of necessity. Fulltime herding households increased from 17 percent of the total population in 1989 to 34 percent in 1999.

Meanwhile, market reform spurred the health of the formal and informal sectors in Ulan Bator, which has between a third and a half of the national population of 2.4 million. But the level of risk in the livestock sector rose sharply because of the end of state support, and by 1995 about a third of the population (mostly in rural areas) had incomes below the poverty line. Since then, inequality in income and assets has intensified, and poverty has worsened.

Bank analysts are developing the groundwork for a long-term Adaptable Program Lending (APL) that will concentrate on developing a strategies for pastoral risk management, the development of rural microfinance institutions, and long-term support for community-driven planning and investment in small-scale infrastructure and social services.

## **PAPUA NEW GUINEA**

Papua New Guinea, which occupies the eastern part

of the island of New Guinea and about 600 smaller islands in the Bismarck Archipelago, is still largely tree-covered, and small-scale agriculture is the livelihood of about two-thirds of the population of 4.5 million. The chief crops include cocoa, coffee, coconuts, rubber, and oil palm.

Social welfare indicators have been falling and economic growth has been sluggish for several years, but the national government is mobilizing resources to improve the rural sector, in part by devolving authority and funding to lower levels of government. That is part of the National Program for Reconstruction and Development (NPRC). Investments in education, healthcare, infrastructure maintenance, law and order, and new income-earning opportunities in rural areas are the pillars of the country's program.

From the government's standpoint, Bank assistance should be directed at improving capacities and skills at the ward, district, and provincial levels. Microcredit is needed in rural areas, and the recent privatization of the Papua New Guinea Banking Corporation will require, among other things, definition of the rural community services that will be provided by that institution.

The government is planning to rehabilitate rural health facilities in an effort to reduce infant and maternal mortality through increased pre- and postnatal care. The 2001 national budget also has initiatives to expand women's economic opportunities, such as the Women's Textile Industry project. The budget also contains natural resources initiatives, including a large increase in funding for the forestry sector in light of a Bank Forestry and Conservation project and Ecoforestry program supported by the European Union. The Bank, along with the Asian Development and AusAID, also has a large rural roads project underway.

The Bank's future work in the rural sector in PNG is expected to be in forestry and natural resource management, and in strengthening the delivery and quality of government services to rural communities.

## **THE PHILIPPINES**

The agricultural sector of the Philippines employs about 40 percent of the country's workforce, accounts for nearly 20 percent of GDP, and generates about 10 percent of the country's exports. About two-thirds of the country's poor live in rural areas, and improved performance in the rural sector is vitally needed to reduce rural poverty.

Among the steps being taken by the government to rectify this situation are a major land reform program to enable smallholders, the landless, and other marginal groups to gain better access to land, efforts to expand rural credit (which is currently constrained by noncompliance with financial covenants in Bank-supported credit expansion projects), and develop-

ment (with Bank assistance) of a performance indicator system that will make possible a better-targeted mix of interventions for reducing rural poverty.

The country's extensive rural poverty is being perpetuated by the deterioration of natural resources. Old-growth forests once covered about 10 million ha; today, they cover less than 1 million. Low-impact shifting agriculture has severely degraded the uplands, and offshore marine resources are being seriously harmed by illegal overfishing, destruction of coral reefs, and pollution of mangrove areas.

The Bank's GEF-financed protected areas project is supporting an innovative partnership of the Department of Environment and Natural Resources (DENR), local communities, and non-governmental organizations (NGOs) to establish protected-area zones and management instruments.

Finally, targeted poverty reduction programs through community-level intervention, especially in the poor and politically troubled region of Mindanao, are focus of the Government and the Bank.

## THAILAND

Up until the 1997-98 crisis in East Asia, Thailand had made remarkable progress during the decade in reducing both rural and urban poverty. The overall incidence of poverty fell from 33 percent in 1988 to 11 percent in 1996, and the number of absolute poor dropped from 17.9 to 6.8 million people.

Like the poverty decline in urban areas, the decline in rural areas can be attributed to a well-developed infrastructure and good access to social services. Primary education is close to universal for both boys and girls in rural areas, and there has been a healthy rise in secondary enrollment. Overall, Thailand's rural sector played a large part in the country's economic success prior to the crisis even if it became clear that Thailand had moved away from being an agricultural country. By 1995, rural households were getting only 36 percent of their income from work on their own farms, even though 63 percent of the country's population still lives in rural areas. The bulk of rural income came from off-farm and often urban work.

Thailand's rural areas were the areas hardest hit by the recent crisis, and the government has shown a strong desire to revive the rural sector. The key actions of the Bank will include:

1. Enhancing local participation in government decision-making;
2. Expanding poverty reduction programs in poor rural communities through increases in public expenditures, particularly for sustainable agricultural investments, primary health facilities, and secondary-level education;
3. Creating a better environment for nonfarm rural enterprises in the private sector while

strengthening vocational training in rural schools;

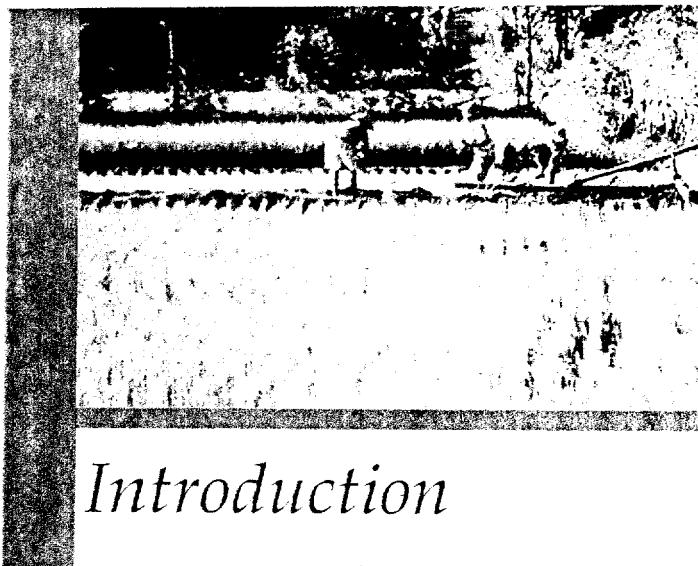
4. Expanding microfinance for small farmers and poor households while reducing the government's role in rural banking;
5. Improving agricultural productivity through land reform, better management of water resources, and greater emphasis on integrated farming systems to diversify risk while protecting the environment; and
6. Enhancing natural resources through a logging ban, rehabilitation of denuded slopes, user fees to cover costs imposed by exploitative activities, replanting of mangrove areas, and engagement of local populations in watershed protection.

## VIETNAM

The rural areas of Vietnam contain 75 percent of the country's population and 90 percent of its poor. The average farm is less than 1 ha in size and provides far less than full employment for farm households; off-farm jobs are scarce. Rice accounts for 60 percent of the cropped area.

The government has developed a strategy for the next 10 years that includes reducing the rate of malnutrition in the country as a whole from about 33 percent to between 15 and 20 percent, increasing the forest cover from 28 percent to 43 percent, doubling GDP through (a compound annual growth rate of 7 percent), and enlarging the urban population from one-quarter to one-third of the national total. The plan has some ambitious rural goals, including raising the share of the agricultural budget invested in research from 2 percent to between 6 and 10 percent and doubling the value of agricultural production per hectare from US\$1,000 to \$2,000, mainly by diversifying crop output. Meanwhile, the plan calls for agriculture's share of GDP to fall from 25 percent to 16 percent, and for rural employment as a share of total employment to fall from about two-thirds to one-half.

The plan also calls for growth in off-farm rural employment. Steps to achieve this would include macroeconomic support for banking reform, trade reform, the development of private rural enterprises, and reform of state-owned enterprises (SOEs). The Bank's goal is to restore the focus of the Ministry of Agriculture and Rural Development on the strategic initiatives mentioned above as well as targeting improvements in remote and upland rural areas, which are the home of the poorest rural people, many of them ethnic minorities. To accomplish this we intend to develop a water resources management program, undertake agricultural rehabilitation and diversification, develop rural infrastructure projects, and strengthen the program of forest and coastal protection.



## *Introduction*

Rural East Asia has undergone a technological and economic transformation in recent decades that has dramatically improved food security, reduced poverty, and raised incomes. This transformation was initiated by the application of Green Revolution methods to Asia's agricultural problems.

But serious problems remain. Despite substantial rural-to-urban migration, East Asia's rural population continues to grow, and the vast majority still depend on agriculture, forestry, or fishing for their livelihood. These activities place great stress on natural resources and result in degradation that diminishes the income-generating capacity of those resources. Meanwhile, overall economic growth has not been matched by improved services, such as health, education, and physical infrastructure in rural areas, nor to a significant increase in nonagricultural rural jobs. As a result, more rapid economic growth in urban areas most of East Asia's poor, and virtually all of the "poorest of the poor," are now found in rural areas. The irony is that while rural East Asia provides the largest share of national employment and income, it is also the area with the most unemployment, underemployment, and poverty. Excess workers remaining in rural areas number in the millions in almost all the countries of East Asia. It is conceivable that the region's urban areas will in the not-too-distant future be overwhelmed by rural migrants seeking opportunity unless rural areas

benefit to a greater extent from policies, institutions, and infrastructure that advance economic development and provide nonfarm employment.

The Rural Development Unit of the East Asia and Pacific (EAP) Region has done considerable work on country and regional strategies in the last three years. A rural strategy for each of the major countries in the region has been completed and has been incorporated in Country Assistance Strategies. These strategies are far from uniform, since the region's heterogeneous countries range from poor, centrally planned economies, such as Laos, to middle-income, market-driven economies, such as Thailand. This document is the unit's response to a number of factors:

- In the global environment - persistent rural poverty, technological change, and the biological revolution;
- In client countries - recent government reforms, decentralization, and an enlarged role for the private sector; and
- In the Bank—new lending instruments, improved rural portfolio performance, and [an increased] focus on poverty.

EASRD envision an East Asia region where rural residents enjoy a standard of living and a quality of life equivalent to those of urban residents; where vibrant, sustainable rural communities offer economic opportunities for all residents; where farmers' hard work is re-

warded by market-determined prices; where government provides adequate resources for the social and physical infrastructure; where vulnerability to famine and impoverishment is reduced; and where the sons and daughters of rural residents have the choice of building on their parents' efforts or entering city-based occupations.

The present document which consolidates and expands EASRD rural strategy for the region represents a very different approach from earlier work. Instead of only emphasizing economic growth, the strategy now gives more attention to human vulnerability and risk management. Instead of concentrating on agricultural growth objectives, the strategy gives more attention to pro-poor

and nonagricultural rural development. Instead of focusing on inputs and outputs, EASRD place emphasis on actions and outcomes. Rather than focusing on strategic ideas, the focus is on implementation and results.

In Chapter 1, the rural economy of East Asia is described and the challenges outlined. Chapter 2 discusses the Bank's current rural development program, including the general areas of strategic emphasis, and offers an analysis of the rural portfolio. Chapter 3 presents updated strategic themes, along with individual country strategies and objectives for the rural sector. Chapter 4 and the country programs described in Part 2 provide detail on implementation.



# *EAP Rural Strategy*

## *CHAPTER 1*

### *THE RURAL ECONOMY AND THE CRITICAL CHALLENGES*

This chapter describes the present rural East Asian economy and provides a baseline for measuring reductions in rural poverty. The chapter also gives the rationale for a rural development as fundamental to rural poverty alleviation.

#### **The Rural Economy**

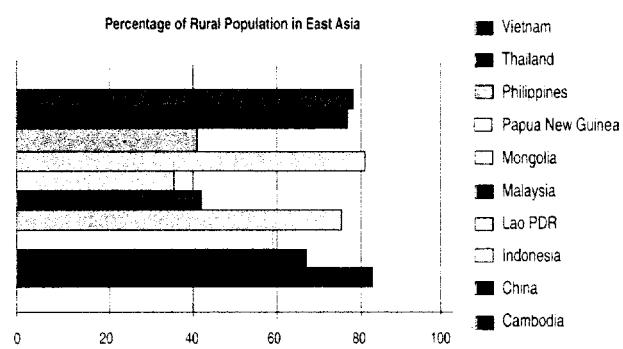
Poverty has been falling in rural East Asia, but not as rapidly as in urban areas, and today the majority of the region's poor are still found in rural areas (see Figure 1). The reduction in rural poverty has been brought about by a combination of factors. These include a slowing of population growth, rising wages and employment as a result of agricultural and national economic growth, enhanced food security, and improvements in health and education (see Annex 1a and 1b).

Figure 2 compares Gross Domestic Product (GDP) growth and agricultural growth in the nine major coun-

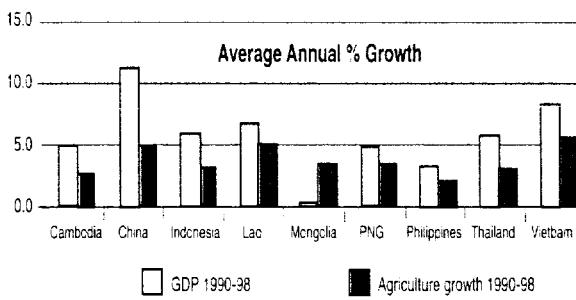
tries of East Asia. In eight of the nine (Mongolia is the exception), growth in GDP outpaced agricultural growth (sometimes by a very large margin) during the 1990s. Notable also is the fall in agriculture's share of national income. Agriculture, however, is still the lifeline of the region's poor, 80 percent of whom who live in rural areas. Moreover, agriculture still employs 70 percent of the region's working population. Consequently, new jobs and rising personal income in the rural sector will have an important direct effect on poverty (See Figure 3.).

Despite widespread rural poverty, some of the available data suggest that the standard of living of the rural population in many places has risen during over the last decade.<sup>1</sup> A 1997 survey in Vietnam, for example, found that 52 percent of the rural population thought their standard of living had risen, 31 percent saw no change, and 17 percent said it had become worse. The World Health Organization has found a steady increase in access to

**Figure 1: Rural Population % in East Asia, 1998**



**Figure 2: Average Annual Growth of GDP and Agriculture , 1990-1998**



<sup>1</sup> Recent work by the RDV and EASRD has identified the core indicators of rural well-being. This work has brought renewed attention to the problems in the availability and reliability of rural data in most developing countries. International and regional organizations provide very little technical cooperation on statistical capacity building because of the long gestation period and the need for sizeable resources. EASRD is developing ways to improve the database.

safe water and sewer facilities in rural areas throughout the region. Access to education, health services, and transportation has also improved (see Annex 2). The more relevant question is how proportionate the rise in the rural standard of living has been compared to the rise in urban areas. That question is addressed below.

### The Rural/Urban Disparity

Although the quality of life in rural East Asia has improved, the disparities in the lives of rural and urban dwellers have widened over the last twenty years. Millions of rural people still lack access to health services and schools. Extreme gender inequality persists, denying millions of women access to medical care, education, and jobs. Estimates suggest that as many as a billion East Asians lack access to safe water and sanitation. That is approximately double the entire population of Latin America. An additional complication arises as a result of basic human needs. Too often, the imperative of survival has resulted in deforestation, land degradation, and depletion of ground water resources. This, in turn, has made it increasingly difficult to generate further agricultural growth and thus reduce rural poverty.

Even though it costs more to deliver public ser-

vices to rural areas, the provision of health services, education, and public infrastructure similar to those in urban areas is an achievable goal. Such indirect intervention can go a long way to enhancing the quality of life of rural residents and improving their income-earning potential.

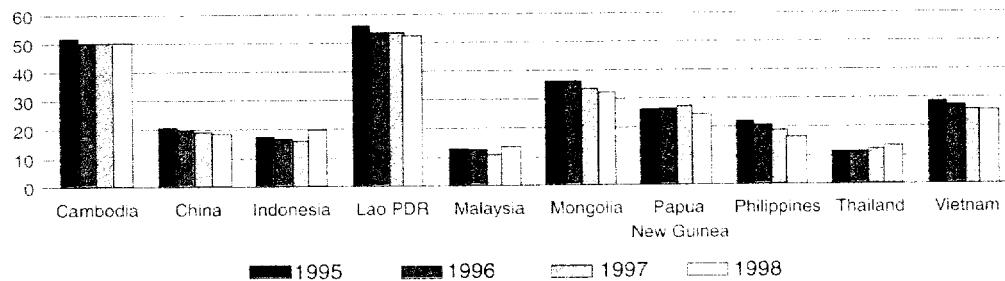
In addition to public service biases, policy biases against agriculture, such as price controls on farm products, tariffs on imported farm inputs, and inefficient state-owned monopolies involved in the marketing and production of inputs (agro-chemicals, seeds) continue to exist. These biases have long been identified in the literature<sup>2</sup> but have yet to be addressed by many East Asian countries.

### Trends in Agriculture

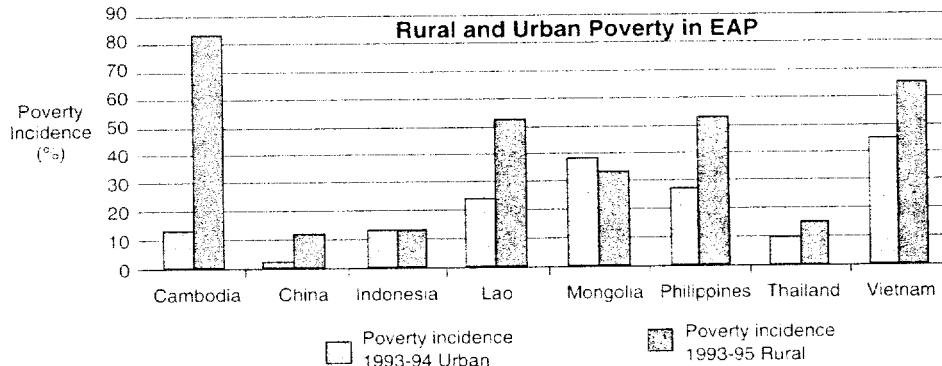
Growth in rice yields has declined steadily in East Asia, the rate falling from an average 3.1 percent between 1967 and 1982 to an average 1.2 percent between 1990 and 1997. Growth in wheat yield slowed from an annual rate of 5.5 percent between 1967 and 1982 to 3 percent thereafter. The slowdown in the growth of maize yield has been less dramatic because maize yields in Asia were not spurred by Green Revolution techniques. In fact,

**Figure 3: Share of Agriculture, % GDP**

**Agriculture, value added (% to GDP)**



**Figure 4: Rural and Urban Poverty**



<sup>2</sup> See M.D. Bale and E. Lutz, "Price Distortions in Agriculture and their Effects," Amer. J. Agr. Econ., 63 (Feb. 1981): 8-22, and A.O. Krueger, "The Political Economy of Agricultural Pricing Policy," The World Bank, 1992.

**Table 1. Food Supply and Demand, East Asia, 1967-1997**

| Countries                             | 1987  | 1982    | 1990    | 1997    |
|---------------------------------------|-------|---------|---------|---------|
| Population (million)                  | 812.2 | 1,085.6 | 1,220.8 | 1,315.8 |
| Population growth rate                | n/a   | 2.0%    | 1.5%    | 1.1%    |
| Per capita area harvested (ha/cap)    | 0.12  | 0.09    | 0.08    | 0.07    |
| Per capita area harvested growth rate | n/a   | -1.9%   | -1.3%   | -1.2%   |
| Cereal Production (million mt)        | 153.9 | 271.3   | 339.1   | 391     |
| Cereal Production growth rate         | n/a   | 3.9%    | 2.8%    | 2.1%    |
| Cereal Yield (kg/ha)                  | 1,637 | 2,887   | 3,576   | 4,157   |
| Cereal Yield growth rate              | n/a   | 3.9%    | 2.7%    | 2.2     |
| Per Capita Cereal Production (kg/cap) | 191.9 | 268.9   | 293.9   | 314     |
| Cereal Imports                        | n/a   | 10.5%   | 0.5%    | -3.2%   |

Source: IFPRI, October 2000

**Table 2: Public Expenditure in the Agricultural Sector as a Share of Total Expenditure**

| Countries             | 1994 | 1995 | 1996 | 1997 | 1998 | change |
|-----------------------|------|------|------|------|------|--------|
| Cambodia <sup>a</sup> | 1.2% | 1.3% | 2.4% | 1.0% | n/a  | ↓      |
| China                 | 7.0% | 6.0% | 6.0% | 6.0% | n/a  | ↓      |
| Indonesia             | 5.5% | 3.1% | 4.2% | 5.9% | 5.9% | ↔      |
| Lao                   | n/a  | 7.8% | 7.5% | 7.7% | 7.7% | ↓      |
| Mongolia              | 2.0% | 3.0% | 2.0% | 2.0% | 1.0% | ↓      |
| Philippines           | 6.3% | n/a  | 6.4% | 3.6% | 3.9% | ↓      |
| Thailand              | 9.0% | 9.0% | 9.0% | 9.0% | n/a  | ↔      |
| Vietnam               | 6.1% | 7.2% | n/a  | 5.2% | 6.3% | ↑      |

<sup>a</sup> Cambodia is calculated by percentage of GDP

Sources: Rural Profiles, EASRD

maize yield growth increased significantly in East Asian countries after 1990 as more farms adopted hybrid varieties (See Annex 3).

Declining world cereal prices, coupled with intensification of cereal production, caused countries in the early 1980s. A recent IFPRI report pointed out that "declining cereal prices caused a direct shift of land out of cereals into more profitable cropping alternatives and have slowed growth in input use, thus hurting yields. More importantly over the long run, declining world prices have also slowed investment in crop research and irrigation infrastructure, with consequent effects on yield growth."<sup>3</sup> Environmental and resource constraints have also contributed to the slowdown, even as the input requirements for sustaining yield gains have risen.

Another problem is that East Asia has a particularly unstable weather pattern and is a frequent victim of natural disasters, such as floods and drought. These events cause crop damage, stock spoilage, marketing disruptions, and income losses in addition to property destruction and loss of life.

Nonetheless, cereal production in all of Asia has almost doubled.<sup>4</sup> That has had a profound impact on food security. According to the Asian Development Bank (ADB), food availability (calories available per person per day) increased by 24 percent between 1970 and 1995. Annex 4 illustrates this positive trend, which occurred everywhere in East Asia except Mongolia, Cambodia, and Lao People's Democratic Republic.

Yet food needs in developing countries are expected to double over the next thirty years.

#### Public Expenditures on Agriculture

In general, public investment in agriculture in East Asia region has declined (Table 2). The Average Expenditure Bias Indicator (a comparison of the relative share of government expenditures on agriculture to the contribution of the agricultural sector to GDP) shows that public expenditures for agriculture in the Philippines, Cambodia, Lao PDR, and Thailand between 1994 and 1998 were disproportionately low and were inadequate to make a significant contribution

<sup>3</sup> "Long Term Perspectives on the Change of Major Agricultural and Resource Base Variables," Mark W. Rosegrant and Michael S. Paisner, IFPRI, 2000.

<sup>4</sup> *Rural Asia: Beyond the Green Revolution*, ADB 2000.

to poverty alleviation and resource management.

The Average Expenditure Bias Indicator demonstrates how the rural/urban disparity in government investment in East Asia has worsened over time. In the interest of equity as well as social stability, public investment policies should be brought into conformity with the goal of equitable distribution of public expenditures. This can be achieved by increased public spending on education, health care, public infrastructure, and nutrition in rural areas.

### Rural Access to Social Services

Although indicative of substantial progress, national budgetary figures tend to mask the rural-urban disparity in investments in education and health and nutrition. While it is known that rural areas are not as well served as urban ones by government investments, there are also wide differences between rural areas. Generally, peri-urban and rural coastal areas in East Asia have achieved access to basic education, health care, sanitation and safe water, whereas rural people in the sparsely populated hinterlands and mountainous areas have not.

Furthermore, social services in rural areas are more affected than those in urban settings by swings in economic activity. The 1997-98 crisis had a significant negative impact on schools in rural areas. In Indonesia, for example, the effect of reductions in public expenditures on education, increases in school fees, and declines in rural family income was a decline in elementary school enrollment in rural regions.

The Food and Agriculture Organization (FAO) recently estimated that in the 1996-98 period roughly 826 million of East Asia's population were undernourished (Figure 5). In terms of sheer numbers, there are more chronically hungry people in Asia and the Pacific than anywhere else. Generally, the problem is not inadequate agricultural production nor shortage of food. It is, instead, lack of purchasing power. Insufficient food impairs infants' cognitive development, children's performance

in school, and adult productivity, and makes all age groups more susceptible to disease.

### Gender Inequality

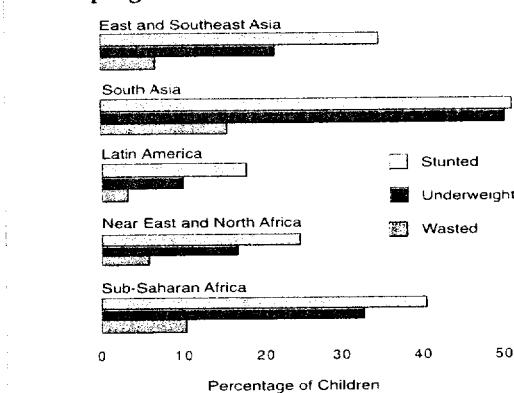
Gender is a significant factor in rural poverty in East Asia. Women (along with ethnic minorities) are the most disadvantaged members of the region's population. Although elementary education is equally available to boys and girls, school attendance by girls is significantly less. Illiterate females outnumber illiterate males in most East Asian countries by more than two to one, although the female literacy rate has improved somewhat faster than the male literacy rate over the past two decades (see Annex 5). Lack of education discourages women from moving to towns and thus makes it harder for them to escape rural poverty than men. Young children are directly disadvantaged by maternal illiteracy and lack of schooling. Lack of schooling sometimes means poor quality of childcare, which means more illness, more malnutrition, and higher child mortality.

Gender inequalities also reduce output and productivity. These losses result from inefficiencies caused by systematically excluding women from access to productive resources, public services, and employment. In addition, gender roles reinforce inequality. With women largely responsible for childcare and elder care, employers often prefer to hire men because they think women are more likely to be absent from work. Despite an increase in employment rates among women, they still constitute a substantial majority of those in the lowest income bracket.

Because gender inequalities exact high human costs while acting as obstacles to development, and because the factors that cause gender inequalities to persist are difficult for lone individuals to change, there is a strong case for public action to promote gender equality. EASRD is attempting to mainstream gender issues by:

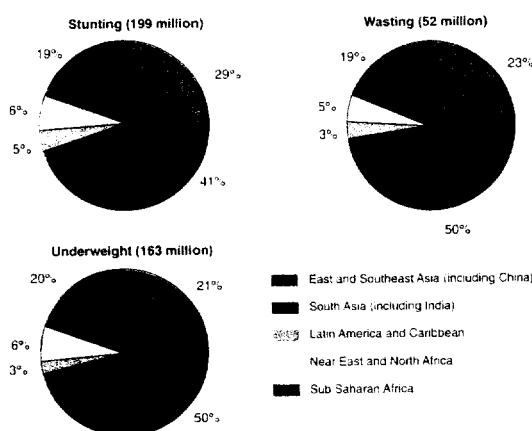
- Incorporating equal rights and equal opportunities for women and men in projects;

**Figure 5:**  
**Under nutrition among children under Five in developing countries**



Source: FAO, October 2000

### Children suffering from undernutrition, by region





*Girl and women focus group.*

- Taking active measures to redress persistent disparities in control and ownership of resources; and
- Strengthening incentives for more equal participation.

Integrating gender issues into agricultural programs can have significant rewards in terms of efficiency, sustainability, and equity. Efficiency is increased when interventions are equally tailored to women and men. Women constitute more than half the agricultural labor force, but they are frequently underutilized because of lack of access to research, extension, markets, and land. Given their key roles and sheer numbers, rural women should be viewed as major stakeholders and a key constituency in policy dialogue and sector programs.

#### **The Non-Agricultural Rural Economy**

The growth of rural nonfarm employment opportunities in East Asia is not keeping pace with the growth of the rural population. Nonetheless, nonfarm sources account for 42 percent of total rural income. Excess rural labor migrates to urban or peri-urban areas, or remains in low-productivity, intermittent, or seasonal employment. No country has escaped the shedding of labor from rural areas as economic development has progressed, but some have managed the transition better than others. Given the increasing social and economic costs of urban agglomeration, it has become clear that a valuable tool in restraining the rural-to-urban migration is the creation of that many more nonfarm employment opportunities in rural communities.

Economic policies in most of East Asia, however, continue to be biased against the nonfarm rural sector. Subsidies for agricultural credit draw funding away from nonfarm activities, and subsidies for new rural enterprises are often captured by large urban firms. A shortage of rural savings institutions hampers the pooling of local resources, and minimum wage laws sometimes distort the cost of rural labor.

There are several approaches to these problems. Governments are encouraging private banks to open more rural branch offices and to invest more extensively in rural areas. Rural credit for medium, small, and microenterprises is being expanded. But the regulatory framework still needs



*Rice production still dominates agriculture, but future increases in rural income must come from agricultural diversification and off-farm employment.*

improvement, including passage of basic laws for SMEs. Government microfinance initiatives may benefit from being consolidated under one umbrella and expanded, while local institutions for savings mobilization should be strengthened. Technical assistance and government funding for NGO financial projects could be provided while the rural financial system is being improved.

#### **Rural Poverty and Governance**

For many reasons, it has been difficult for rural people to exert pressure on their governments. The recent crisis, however, has created opportunities to strengthen democratic mechanisms and political governance in rural areas. Lower levels of government are demanding increased autonomy and are encouraging increased participation in public matters by local communities.

Concerted efforts by central government are needed to extend important services to rural areas. These should include a legal and judicial system that guarantees the fairness and sanctity of contracts; an enforceable commercial code, a public registry where assets (including land), can be easily registered and transferred, an honest system of weights and measures, a transparent mechanism for conflict resolution, and enforceable property rights. These are all part of the normal fabric of business, but they are frequently absent in East Asia's rural areas.

Another powerful trend sweeping East Asia that is influencing the way the Bank works (and which the Bank has influenced) is the demand for increased transparency in government processes and finances. Corruption—the abuse of public office for private gain—is a major concern of the poor, since they are the main victims. Anecdotal evidence suggests that corruption is as prevalent in rural areas as it is in the cities, although its magnitude may be less.

Any program to combat corruption must limit the opportunities of public officeholders to abuse their positions. Although we do not know enough yet to identify the best kinds of anti-corruption intervention, a number of measures can be identified, including performance-

based and transparent government budgets; competitive base pay and transparent and nonarbitrary awards to civil servants; severe sanctions for corruption, including sanctions against bribe-payers; arms-length, transparent, and nondiscretionary government rules and procedures; independent external audits; and citizen review and oversight. These and other measures more specific to rural areas will be part of the design of poverty projects.

EAP recently made two loans within codicils designed to strengthen governance and to reduce opportunities for corruption. The Indonesia Social Safety Net Adjustment Loan, which will provide financing for public assistance to the poor during a crisis, includes conditions to ensure transparent governance of the program. The Economic Management Assistance Project in Thailand seeks to introduce modern administrative processes and procedures, strengthen budget processes, and reform state-owned enterprises.

### **Human Resource Development**

One of the keys to successful rural development and poverty alleviation is human development. A large number of studies show that education and health are the most important determinants of the earnings of rural inhabitants, and that access to education and health facilities has a greater impact on nonfarm activities than it does on agriculture.

In East Asia, however, underinvestment in human resources in rural areas is typical. Rural schools are usually inferior to urban schools, and educational expenditure per rural child is considerably less than for urban children. Furthermore, the need to mobilize family labor to earn income often causes the rural poor to refrain from sending their children to school. Nor does it matter how good an educational system is if children are limited in their ability to take advantage of it because of hunger or infectious disease. Rural health clinics in East Asia, however, often have poorly qualified staff and inadequate medical supplies.

The result of low investment in human capital is the transmission of poverty across successive generations of the poor and thence to urban areas through the migration of rural people unprepared to enter urban labor markets. Hence, investing in rural education and health care is vitally important to help rural youth escape poverty, either in their home setting or when they migrate, as many will.

Many East Asia governments realize that investing in human resource development in rural areas is good social policy, but they have not created programs to ensure the delivery of quality social services in rural areas. Programs that create incentives, such as cash transfers to poor rural parents in exchange for keeping their children in school, is one new idea. Municipalities that have the ability to determine local expenditures can reallocate resources to improve education. Local control under a central policy umbrella is often the most effective approach.

If children are to learn and adults are to be produc-

tive, they must have adequate nutrition and reasonably good health. Hungry or ill children do not learn well (and may suffer stunted growth), and hungry or ill adults cannot work at sustained levels of activity. Ensuring the availability of food and the income to purchase it is a vital first step. Where purchasing power is insufficient, targeted food programs are needed. Public financing of public health facilities, including clean water and adequate sanitation systems, has been shown to produce a high return and is strongly pro-poor. Illness, on the other hand, can push rural people into poverty because they lose working time and must spend their limited earnings on health care.

The public sector in East Asia has failed to deliver human resource-enhancing services to millions of rural poor. Improved education in rural areas is needed to promote employment in nonfarm occupations and the orderly migration of rural young people to urban areas. Since the rural poor are typically the least-educated, education programs targeting them are pro-poor. Complementary investments, including subsidized or free delivery of cost-effective health interventions, referral systems for emergency health care, programs for tuberculosis and malaria control, and projects to improve household sanitation, air quality, and water quality are also needed. Otherwise, expenditures on education will be partly wasted. Insurance to reduce the burden of emergency or catastrophic illness is also needed.

### **Natural Resource Management**

Environmental degradation and poverty go hand-in-hand, and it is primarily the rural poor of East Asia who suffer the consequences of soil depletion, deforestation, overfishing, and polluted water. The poor are more often victims of environmental degradation than agents of it.

Although continued agricultural growth is a necessity for most countries in East Asia, this growth must not jeopardize the natural resource base nor impose costly externalities. These three goals - agricultural growth, poverty alleviation, and environmental sustainability - are not necessarily complementary, and success in achieving all three cannot be taken for granted. The new priority of environmental sustainability does not negate the need for rural development; it is just that rural development must now be achieved in ways that do not degrade the environment.

Since new land frontiers no longer exist, agricultural growth must come from intensified use of existing farmland, which arouses concern about depletion of natural resources. Experience shows, however, that agricultural intensification accompanied by land use innovations, farmer control of land, access to urban markets, and access to modern inputs can result in improved fertility and land use. It is rural poverty, exacerbated by greater population density and antiquated production methods, that is responsible for the degradation of land and forests.

Agroforestry is often seen as a way of maintaining

or improving soil fertility. The complex agroforests of Sumatra, for example, are indigenous systems created by people living on forest margins. After original trees are partially cleared, the land, food crops are planted, along with fruit and coffee trees. The new trees eventually produce high-value fruit, coffee, and valuable lumber species. Studies show that these agroforest communities have higher incomes than communities that grow only subsistence crops.

Other environmental bright spots are found in the Philippines and in Thailand, where conservation farming (including water management) is spreading, and in Vietnam, where the incentive for farm-improving investments has been enhanced by strengthened land rights. Recognizing the superiority of community-based natural resource management is a valuable step for policymakers wishing to deliver improved opportunities to smallholders while ensuring sustainable management of resources. Finding applications of these methods in other countries in the region is the next step.

Reforms in water policy are underway in East Asia, but more reforms are urgently needed to avert severe national, regional, and local scarcities that will depress agricultural production, worsen water-related health problems, and slow the reduction of rural poverty. The challenge to make need for more efficient use of water in agriculture, urban areas, and industry. Irrigated areas account for three-quarters of rice production in East Asia, so growth in irrigated output is essential to maintain agricultural growth while allowing allocation of water to urban uses. Massive subsidies for users of both urban and rural water in much of the region have sent the wrong signals and have resulted in wasteful practices.

The precise nature of comprehensive water reform will vary from country to country, but it should include the following elements everywhere:

- secure water rights, vested in individual users or groups, that are tradable;
- rules making water users more responsible for water management — cost recovery, operation, and maintenance;
- elimination of consumer subsidies and privatization of urban water services;
- introduction of modern water-saving technology;
- better protection of water sources through both regulatory and market mechanisms; and
- greater cooperation on water management where water basins, such as the Mekong River delta, transcend national boundaries.

### **The Rural Infrastructure**

There is a difference between access to, and provision of, infrastructure. This difference has important implications for the Bank and for the selection of infrastructure investments. "Best practice" in this case means that the Bank should focus on providing an environment that

allows the poor access infrastructure rather than on the provision of infrastructure itself. But it also means that the poor must have an explicit role in the selection and design of infrastructure. Rural roads, for example, are public goods. Rates of return can be high in rural regions that have access to urban markets or that produce exportable products. Thus, construction or upgrading of rural roads often brings about a positive change in the array of agricultural products. Field crops are partly replaced by high-value perishable crops, such as flowers, fruits, and vegetables, that must be moved to market quickly.

Road construction also provides other benefits. The effectiveness of education improves as better access to schools produces increases in school attendance and teacher absenteeism declines. Likewise, the number of visits to health clinics increases, the rate of immunization goes up, and the quality of healthcare is enhanced by steadier supplies of medicines. These benefits, however, are often not taken into account when decisions on building rural roads are made.

Other types of infrastructure, such as electric and telephone systems, can be delivered privately, but underinvestment in such services is common because outmoded regulatory frameworks weaken the return on investment. To overcome this problem, targeted subsidies can be offered to private suppliers of infrastructure facilities in regions with high densities of rural poor. These subsidies can help pay fixed costs while leaving marginal costs unaffected in order to preserve incentives to achieve optimum levels of use. Reliable electricity is needed to operate home-based and other rural businesses, and for modern farming. Rural telecommunications are fundamental for obtaining market information for diversifying into nonagricultural sources of income and for long-distance learning.

### **Agricultural Research and Extension**

Although agricultural research has produced a phenomenal increase in agricultural productivity over the last thirty years, much remains to be done. Nobel laureate Norman Borlaug estimates that to meet projected food needs by 2025, cereal yields must increase by 60 percent from the 1999 average. This formidable task will require intensive agricultural research as well as an enabling regulatory environment, fair trade rules, and responsive institutions. The countries of East Asia have invested heavily in agriculture research in the past, and that forms a strong platform from which to deal with future challenges.

In addition to investing in improved research on individual crops, countries in the EAP region are promoting the integration of crop-specific research into a broader system that includes sound management of natural resources and synergies between food and cash crops and livestock, agroforestry, aquaculture, and integrated pest management. A major policy issue being discussed in the region is the establishment of a better interface between public and private research, and publicly-financed

but privately-provided research.

A second, and controversial, aspect of agricultural research is the role of genetic engineering. The possibilities of genetic manipulation of plants and animals have attracted billions of dollars of investment. Although genetic engineering is very relevant to rural problems, it raises questions of ethics, intellectual property rights, and biosafety.

The Bank's role is to ensure that the interests of the rural poor in East Asia are not ignored in the private sector's rush to capitalize on this new technology. The debate on genetic engineering must be based on good science and economics rather than on emotion and misinformation. The Bank can help to shift the debate from confrontations between commercializers and critics to how to help developing countries design institutions to produce genetically modified crops that live up to their anti-poverty potential.

Other steps are also necessary to strengthen research and extension. Some of these steps, considered to be best practices, are already being implemented in East Asia, as in the Indonesia Decentralized Agriculture and Forestry Extension Project. Important features of new research and extension projects include:

- strengthening the responsiveness of research and extension institutions to the needs of farmers through the creation of mechanisms for farmer input;
- recognizing that the public sector should not be the sole provider of research and extension services, even if it is necessary to finance private companies to provide such services; and
- balancing decentralized (regional) control over research and extension with research done on the basis of agroecological zones, and subject matter specialists for extension.

### The Emergence of Livestock Development

Population growth, urbanization, and income growth in East Asia are driving a dramatic increase in demand for animal products. Some have called it "the next food revolution."<sup>5</sup> Governments, donors, and the private sector must prepare for this change with policies and investments that satisfy consumer demand, improve nutrition, channel income growth opportunities to those who need them most, and alleviate pressures on the environment and public health.

From the early 1970s to the mid-1990s, meat consumption in East Asian countries grew by nearly 6 percent in East Asia as a whole and more than 8 percent in China. That was more than three times as much as in the developed countries. Meanwhile, production of animal food products in East Asia grew at more than five times the rate in developed countries. These trends are projected to continue.

One implication of increased livestock production is

that consumption of cereals as animal feed will rise. Despite the increases in demand, cereal and meat prices are not expected to rise because increases in production will accommodate increased consumption. The key issue is not availability but the effect of livestock production and consumption on the poor, the environment, and human health. It is these concerns that have aroused criticisms from certain NGOs regarding livestock projects in the region.

Increased consumption of animal products can help increase the purchasing power of the poor. There is evidence that the rural poor and landless, especially women, get a higher share of their income from livestock sales than better-off rural people. Furthermore, livestock provide the poor with fertilizer and draft power, along with the opportunity to exploit common grazing areas, build collateral and savings, and diversify income. Livestock production, in other words, is a means of alleviating poverty, but policymakers need to be sure that credit subsidies and other policies that favor industrial meat production do not crowd out this mechanism of income and asset generation for the poor.

Consumption of livestock products also benefit the poor by alleviating the protein and micronutrient deficiencies. Increased consumption of even small additional amounts of meat and milk can provide the same level of nutrients, protein, and calories as larger amounts of vegetables and cereals.

The impact of livestock on the environment is a potential concern. In mixed farming systems, livestock typically contribute to environmental sustainability providing manure and draft power to sustain crop production. But concentrations of animals in peri-urban areas to meet growing urban meat and milk demand have led to the degradation of grazing areas and to pollution problems. These effects need to be fully reflected in producer and consumer costs.

With the assistance of the Bank and other donors, policymakers in East Asia are working to resolve four key issues with respect to livestock projects:

- how to link small-scale animal producers with processors and marketers. The poor find it difficult to gain access to processing facilities and to animal health information. Integrating small-scale livestock producers with larger-scale processors would meet these shortcomings;
- how to remove policy distortions that artificially favor large-scale production over production by smallholders;
- how to develop regulatory mechanisms for dealing with the health and environmental problems arising from livestock production, including technologies that address environmental and public health dangers supported by enforcement; and
- how to disseminate to small-scale producers the opportunity presented by the growing demand for livestock products so that the industry develops

<sup>5</sup> International Food Policy Research Institute, "Livestock to 2020: The Next Food Revolution", Discussion Paper 28, 1999.

in the most favorable way for growth, poverty alleviation, and sustainability.

### Globalization and Agricultural Trade

International trade, and open world markets are vital for long-term growth in East Asian economies. Although the regional commitment to an open trade policy remains strong, the recent financial crisis in East Asia raised serious questions in the region about the role of globalization and open markets in promoting sustainable economic growth. While international organization continue to make the case for trade liberalization, East Asian countries are more equivocal about free trade than they were prior to the crisis.

About 26 percent of the region's agricultural output is exported; Thailand and Malaysia account for 65 percent of the region's agricultural exports, while Indonesia third. Agricultural exports are almost matched by agricultural imports. Korea and Malaysia are the biggest importers. Products exports include natural rubber, palm oil, rice, and fruits and vegetables (mainly to the United States, Europe, and Japan); the chief imports are cereals, dairy products, and fiber (mainly from the United States and Europe). Given the importance of agricultural trade to the economies of these countries, and the key role of the rural sector as a source of employment, East Asia has a significant stake in the new round of negotiations on trade barriers.

- Since the economies of the East Asia countries (with the exception of Indonesia and China) are small, they have an interest in a rules-based system of international trade and in freer trade for agricultural products, , their major export. A rules-based system can provide small trading countries with leverage in disputes with a large countries. Furthermore, East Asian countries have an interest in ensuring that the commitments undertaken in the Uruguay Round by industrial countries with respect to agriculture are implemented. It is not only developing countries that are behind on implementation, but some developed countries as well.

- East Asian countries want credit for the unilateral steps they have taken to liberalize their markets. World Bank staff often run into resistance to trade reforms among their trade counterparts in East Asian countries. They argue that if a country liberalizes unilaterally now, it will be asked to do even more at the multilateral trade round. Advising them that unilateral liberalization is in their own interest, regardless of what others do, is not always persuasive. A means to provide credit for liberalizing is needed.

- High tariffs and restrictions on market access are important issues to East Asian exporters. Around the world, agricultural protection remains considerably higher than industrial protection. East Asian exporters are interested in further cuts in tariffs, tighter controls on export subsidies, stron-

ger commitments on changing domestic policies, and strengthening the protocols on sanitary and phytosanitary arrangements.

- East Asian governments have a long reform agenda but only limited capacity to design and implement trade reforms. Urgent domestic reforms crowd out attention to trade reforms other than those undertaken as part of macroeconomic or sectoral reforms. Governments need technical assistance from organizations like the Bank to design and implement trade reforms.
- Governments in the region need to address the issue of corruption. The most corrupt agency, according to surveys, is Customs. Awareness of this issue has been heightened in the region, and many countries are putting anti-corruption strategies in place. If a tariff schedule is not published, if there is no codified valuation system, if customs posts lack telephones, then "official" tariffs have no meaning. Corrupt customs officers can impose any "tariff" they wish, with little fear of sanctions.
- Governments in the region need financial assistance to install the infrastructure needed to meet sanitary and phytosanitary (SPS) standards so that they can obtain better access for their high-value rural products. To gain acceptance of its meat, vegetable, and fruit exports in industrial country markets, Argentina has spent more than US\$80 million to implement higher sanitation standards. The cost to developing countries of implementing SPS and Intellectual Property Rights (IPR) obligations has been estimated as equivalent to more than half of their annual development costs.

China is a special case with respect to international trade. Its application for entry into the World Trade Organization (WTO) presents a large challenge to its rural policymakers because admission to the WTO would require China open its borders to agricultural trade. That will force considerable adjustment of production and hardship on farmers who produce wheat, corn, and rice.

Like most developing countries, those of East Asia are at a disadvantage in the WTO negotiations. First, they frequently do not have the technical expertise to analyze proposals and suggest alternatives. Second, they are absorbed with domestic reforms in the wake of the Asian crisis. And third, they cannot afford the high cost of participating in a trade round spread out over many years. Moreover, many East Asian countries feel that the benefits from the last round were more illusory than real and that, with the maturing of Asia Pacific Economic Cooperation (APEC), they now have a viable alternative. As a result, East Asian countries are approaching the present round of WTO negotiations with a certain amount of skepticism. If the industrial countries are to draw East Asian countries fully into the structure of world trade, they must make an effort to understand the legitimate concerns of these countries and respond to them.



## CHAPTER 2

# THE BANK'S CURRENT RURAL DEVELOPMENT PROGRAM

In light of the 1997-98 Asian crisis, strengthening the rural sector so that it can perform well in bad times as well good has become an urgent priority. This requires an examination of the bank's portfolio.

### Recent Trends in Bank Lending in Rural Areas

No country in East Asia can expect to see continued economic growth without paying greater attention to poverty in the rural areas. But the decline in the size of the Bank's rural portfolio declined from \$3.5 billion in FY98-99 to \$1.5 billion in FY99-00 has made this task difficult. The decline in rural lending was particular pronounced in South Asia, East Asia, and Latin America. The increase in lending for the rural sector promised in *From Vision to Action* was not achieved.

The reasons for the decline in rural lending are varied. Some are incidental, such as the temporary suspension of preparatory activities because of unsettled domestic politics. Some are purely of an administrative nature. However, significant structural issues are also affecting the Bank's lending. Some of these are exogenous factors, such as the graduation of China from the IDA, which has caused the Chinese government to give higher priority to investments with a high financial return rather than investments with greater social or environmental benefits.

More important, however, are the internal reasons that have reduced Bank lending to rural areas. Funding for economic sector work (ESW) is also low and has been decreasing, making it more difficult to explain the rationale for rural lending. The East Asia

region has the largest rural portfolio in terms of financial commitment but not in terms of number of projects (see Figure 6 and Annex 6).

About 80 percent of EASRD projects were problem-free in July 1999. Annex 6c provides a summary of the projects. China dominates the East Asia portfolio, with a 44 percent share, while Indonesia and the Philippines are second and third, with 19 percent and 11 percent, respectively. (see Figure 7).

The unit considers itself to have a catalytic role in building consensus with Bank borrowers and the donor community on the policies and actions necessary to break the cycle of rural poverty and environmental degradation.

This analysis includes projects that affect East Asia that are not managed by EASRD (see Annex 6).

"Rural" is thus defined to be:

"Agricultural +3" PLUS "Rural beyond Agriculture +3" PLUS General rural project<sup>b</sup>

Figure 8 illustrates how 'agriculture +3' as a share of rural funding declined between FY99 and FY00

### Some general observations:

- Between FY99 to FY00, "Agriculture +3" commitments in East Asia fell 13%, "Rural beyond Agriculture +3" increased 13% and total loans for rural space fell 33%;
- Compared to other regions, East Asia's "Rural beyond Ag. + 3" shrunk while globally, it increased

<sup>a</sup> "Agriculture +3" are loans for agriculture and natural resource management plus rural roads, rural water supply, and rural sanitation.  
<sup>b</sup> "Rural beyond Agriculture +3" are with high/medium accuracy of estimation. "General rural" projects are national projects with pro rata

Figure 6: Bank Rural Portfolio, by Region

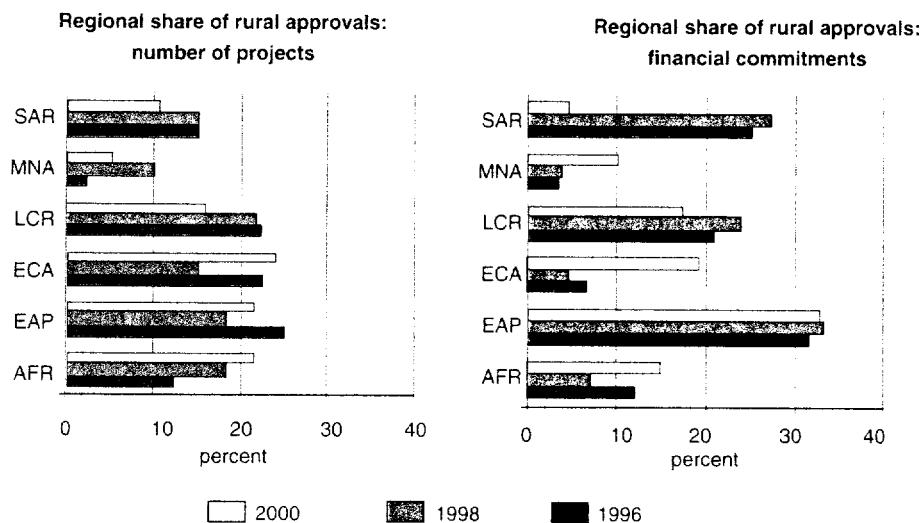
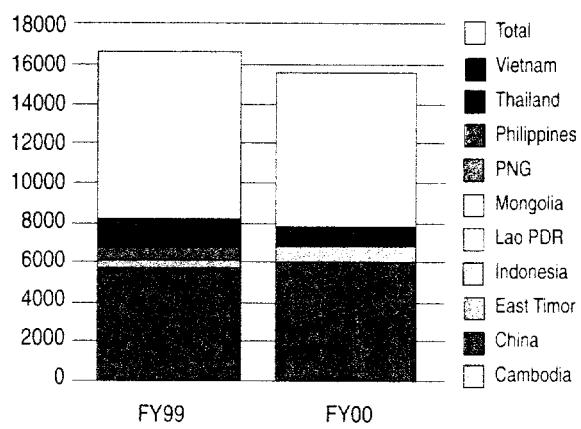


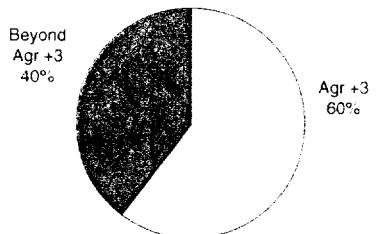
Figure 7: EASRD Portfolio



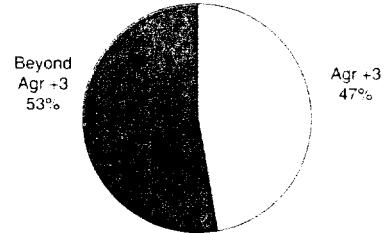
by 2 percent, though decreases in "Ag. +3" project shrank proportionately less than other regions;

- In terms of commitment, Bank funding for in East Asia slumped 70 percent between FY99 and FY00, while the average decrease in other regions was around 28 percent;
- EAP analyzed 41 rural loan projects (loans of \$2,620 million). Sixty-one percent of the funds, were devoted to promoting sustainable livelihoods (Outcome 1), 33 percent to better education, health, and job opportunities for poor people (Outcome 2), and 6 percent to protection of the natural environment (Outcome 3).
- Of the 62 percent (\$1,617 million) for outcome 1, 85 percent went to improvements in access to land, resources, and markets;
- In FY00, East Asia Transportation Unit carried out

Figure 8: EAP Rural Space Portfolio FY99



EAP Rural Space Portfolio FY00



nine rural projects with loans amounting to US\$1,086.37 million;

- Nutrition commanded a mere 1 percent of the funding devoted to Outcome 2, literacy only 5 percent;
- Within the Bank: In East Asia Human Development Unit, more than half of its programs focus on the rural poor while there are no specific 'rural space' lending in either the Financial sector or Private sector in FY00.

In sum, the rural EAP portfolio has become too small to target the outcomes that would result in a large reduction of rural poverty.



## CHAPTER 3

# *REVITALIZING RURAL EAST ASIA: STRATEGIC OBJECTIVES AND DIRECTIONS*

EASRD will continue its efforts to make rural development and agricultural growth key priorities on national agendas. Our strategy derives from a vision of the rural sector in which farmers' hard work is rewarded by market determined prices; farmers own and control their land and can use it as collateral; the living standards of rural residents steadily improve; governments provide adequate resources for the rural infrastructure and regulatory environment that encourages rural growth and creates off-farm employment opportunities in rural communities. If this vision became reality, rural poverty would be reduced, agriculture and other activities using natural resources would be sustainable, economic development would be more equitable, and the urban-rural income and infrastructure gaps would narrow. These activities come within the purview of the Bank's Comprehensive Development Framework (CDF).

While vision has not changed, EASRD has adopted a more holistic approach to our work has meant a change in our interlocutors. Increasingly, our policy dialogue on rural development is moving away from representatives of the line ministries, such as Agriculture and Forestry, to representatives of the core ministries that oversee public investment and policy reform such as Finance and Planning. EASRD is also conducting discussions with political decision makers and NGOs to a much greater extent.

In its reassessment, the Unit asked what contribution it could make to advance rural development in client countries. The characteristics that EASRD wants to bring to its clients are:

- a long-term perspective and commitment to policy and technical issues and problems;
- an emphasis on sectoral and cross-sectoral issues that are usually neglected by the private sector;
- financing of projects that are long-term and slow-maturing, and whose complex institutional issues

or externalities, make them unsuited to private investment;

- the benefit of wide experience and knowledge;
- technical excellence, political impartiality, and staff dedication to the process of rural development; and
- the ability to bring different groups together to leverage its influence, in the spirit of the Comprehensive Development Framework.

### **The Rural Development Agenda**

The primary objectives of the Unit, in order of priority, are:

- reducing rural poverty;
- stimulating rural growth;
- providing food security; and
- supporting natural resource management.

These objectives are common across all countries of the region, but the degree of emphasis place on each objective varies from country to country. Each of these objectives is discussed below.

### **Reducing Rural Poverty**

The incidence of poverty in East Asia is greatest in rural areas and was exacerbated by the recent financial crisis. The share of the rural population below the poverty line in East Asia is approximately 40 percent—about double that found in urban areas.<sup>7</sup> Since peri-urban poverty is largely the result of migration of rural workers seeking better employment opportunities, rural poverty reduction also helps to alleviate urban poverty.

While most EASRD projects have been designed to help reduce rural poverty, the unit (in collaboration with other sectoral units), is now focussing on projects that directly address the causes of poverty. The Southwest Poverty Reduction Project and Qinba Mountains Poverty Reduction Project in China, for example, are 100 percent grassroots poverty reduction projects. The Mindanao Ru-

<sup>7</sup>China, with a rural poverty rate of about 14 percent, is an exception.

ral Development Project supports the Philippine Government's decentralization program and has poverty reduction components. Other projects, such as the Community Based Resource Management Project and the Agrarian Reform Community Development Project in the Philippines, the Forestry in Poor Areas Project in China, and the Bengkulu Regional Development Project in Indonesia assist poverty reduction through targeted and productivity-enhancing investments in very poor rural areas.

In most countries in the region there is not enough arable land available per capita - to provide farm families with sufficient income from agriculture to escape poverty. The countries that have succeeded in reducing rural poverty have created off-farm employment opportunities in rural areas. They have accomplished this through enhanced investment in the physical infrastructure, education, and social services in rural areas, while creating an enabling environment for industries to locate in rural areas. In its updated strategic approach, EASRD is placing much greater emphasis on the creation of off-farm employment. Experience outside the EAP region, and how it might apply to its client countries, is being laid out in country strategy papers, and lessons from that experience are being incorporated into project design. The Rural Strategy Reports on the Philippines,

Vietnam, Thailand, and China identify the creation of rural nonfarm employment as a policy priority, and several new projects have employment creation components.

### Stimulating Rural Growth

A thriving rural economy is characterized by the following:

- widely shared rural growth, with private agriculture and agribusiness as the main engines of growth;
- family farms and family nonfarm enterprises as the main form of business organization (as opposed to state-owned enterprises);
- links to well-functioning markets for products, inputs, and finance;
- access to a physical and social infrastructure (particularly education) similar to that found in urban areas; and
- a stable macroeconomy with business- and environmentally friendly sectoral policies.

Given the current need for a rapid recovery of economic growth in East Asia, EASRD is placing increased emphasis on encouraging the countries in its region to make fundamental changes that will produce those characteristics. Recently completed country strategies have

### Box 1: Poverty Alleviation in China: A Collaboration

The Bank's work in China is widely recognized as having contributed to the reduction of absolute poverty in rural areas. The number of absolute poor in China's rural areas has decreased from 280 million in 1990 to 124 million in 1997\*

The Bank has facilitated the development of a national strategy to reduce absolute poverty. The preparation of *China: Strategies for Reducing Poverty in the 1990s* and its public release at a 1992 conference in Beijing was the result of close collaboration between the Chinese government and the Bank. At the conclusion of the 1992 conference, State Councilor Chen Junsheng (senior policymaker for rural development and poverty reduction) and the Bank announced a proposal to operationalize the strategies through the Southwest Poverty Reduction Project and the follow-up Qinba Mountains Poverty Reduction Project. Both projects included community participation during preparation and implementation. Since then, the Bank has strengthened its rural poverty focus in China by providing funding for other poverty characterized by better coordination, institution building, more rigorous supervision, and increased beneficiary participation. The "Leading Group for Poverty Reduction" (the State Council's Office for Poverty Reduction) is being strengthened at the county and township level, and the central government is con-

sidering giving it greater oversight of poverty alleviation funds. The Bank is encouraging the targeting of poverty funding to poor townships that are not located in poor counties, and to remote areas. The Loess Plateau, for example, has benefited from a program of coordinated investments in economic development, watershed management, and agricultural research. The program involves local participation in which the local beneficiaries are given the opportunity to explain their priorities and preferences. The Bank is now encouraging the central government to extend this approach to China's Karst area, where half of the remaining rural poor live, and to give special emphasis to providing an equitable share of benefits to all poor households in the project area.

While China, with the Bank's assistance, has made good progress in reducing poverty, the government is now reluctant to borrow from the bank what it considers to be for non-income generating activities under regular IBRD terms. Poverty projects in the future must be designed to stimulate "productive" activities that directly generate income for local beneficiaries in the near term. Accordingly, a new generation of poverty projects with significant community development components, such as the Loess Plateau II Project, is being developed.

\* The poverty numbers refer to those with an income of less than \$1.00 per day. The consensus is that absolute poverty in China exists almost exclusively in rural areas.

given the Unit an analytical basis for advising our clients on policy and a rationale for public investment priorities. The present decline in Analytical and Advisory Activities (AAA) means that the Bank is no longer building this knowledge. Ways must be found to continue the nonlending services that Bank clients value.

**Changing the Role of Government.** Governments in the region are not providing sufficient public services—such as land titling and registration, and judicial services—to the rural sector. Too little public investment is being made in rural transportation, communications, agricultural research, and human resource development. Conversely, many governments are still providing goods and services that could be delivered better and cheaper by the private sector such as fertilizer and agrochemicals, secondary and tertiary distribution of water, and provision of credit and extension services. Many governments also continue to intervene in the private economy through fixed prices, legal monopolies and compulsory marketing cooperatives.

Yet the Bank must proceed cautiously in providing advice on policy issues. Several countries are in transition from centrally-planned to market economies. The transition is difficult from an economic point of view and even more difficult from a political point of view. The Bank must have well-supported evidence to back up its policy advice and must yield to the judgment of elected and appointed officials who have to live with the consequences of their decisions.

Serious concerns arise when civil servants compromise their impartiality by accepting bribes, or when they divert public funds to private use. Corruption at all levels appears to be pervasive in the region, and the rural sector is not exempt. Building on the East Asia Anti-Corruption Strategy, EASRD is putting procedures in place to help minimize the opportunities for misuse of funds. Specifically:

- staff members are being encouraged to deal courageously with the issue of corruption, even when

it may be potentially disruptive to operations or country relations;

- emphasizing public sector reform, particularly the strengthening of internal procedures in many lending operations;
- during loan supervision, attempting to identify and quash corrupt and unprofessional practices;
- strengthening alliances with members of civil society who are involved in monitoring project operations, such as the monitoring of the subsidized rice program in Indonesia; and
- requiring increased transparency of project transactions by means of reporting requirements and open book rules.

A government can enhance rural growth by contributing to productivity or inhibit rural growth by implicit taxation of rural areas. Malfunctioning government institutions can sabotage even the best policies. Thus, EASRD sees an important part of its mission as assisting governments to strengthen rural institutions and decentralize governance structures.

**Integrating Rural Credit.** The rural finance component of its portfolio is large. Between 1994 and 1998 there were 23 projects, amounting to \$2.6 billion. In most EAP countries a major issue is that controlled or subsidized interest rates threaten the sustainability of rural financial institutions (RFIs). In the past, the EASRD response to weak RFIs was to provide additional lines of credit and management support. More recently, the approach has been to view rural finance in the context of the overall financial system and to collaborate with EASFS to ensure that the correct framework for strengthening the entire banking sector is in place. This means that much of the present activity is intended to encourage policy changes and institutional strengthening that will better ensure the long-term viability of RFIs. At the same time, however, we recognize that market failures can occur when bankers have little information about rural bor-

#### **Box 2: Philippines: Supporting Devolution and Broad-Based Rural Development**

A strong consultative process involving a wide range of key stakeholders underpinned the report titled *Philippines: Promoting Equitable Rural Growth* (1998). The report analyses the constraints that have limited the growth of the rural economy and provided the basis for the Bank's *Rural Development Sector Assistance Strategy* (1998). The two reports were discussed with key decision-makers at a seminar in Manila and are now being used to guide the Government's rural development program. The Bank's strategy, which is aimed at securing increased rural growth and reinforcing the devolution of government authority, focuses on poor sector rural performance, low levels of public and private investment in the rural economy, deficient

natural resources management; and weak institutional capacity.

Resource constraints in EAP slowed down this effort in FY00. The first of a series of new initiatives, the Mindanao Rural Development Program (APL) is being designed as a long term targeted rural poverty reduction program for the island of Mindanao and is aimed at increasing farm and nonfarm incomes, and building local government capacities. Other projects under development address smallholder agriculture, river basin development, support for agrarian reform beneficiaries, and land administration and management. This work fed directly into the formulation of the Country Assistance Strategy (CAS) (1998), an exercise carried out in close consultation with the government.

rowers and collateral is unavailable. Our current approach is to encourage the government to subsidize the transaction costs of bankers. The long-term objective is to create permanent relationships between bankers and rural borrowers so that transaction costs can be reduced.

**Encouraging Free Trade.** East Asia trade growth over the last 30 years has surpassed that of all regions. This growth was the result of policies that improved resource allocation, which in turn raised output and incomes. Export-oriented development pushed leading sectors to become more efficient and stimulated rapid technological change. Higher incomes and output, together with a traditionally high savings rate, facilitated greater investment in the most productive sectors. The region's export success has been accompanied by significant liberalization of trade through removal of quantitative import restrictions and the lowering of tariffs.

However, trade reforms in East Asian agriculture have not been as far-reaching as in other sectors. There are still high and escalating tariffs on major agricultural imports, and local content requirements. Import prohibitions and licensing have not been eliminated. The Philippines and the Republic of Korea still maintain quantitative restrictions on rice imports, while Indonesia has a system of managed trade in rice. The tariff equivalent protection on rice in the Republic of Korea is estimated at 214 percent, and rice subsidies make up 85 percent of the total agricultural subsidy. Tariffs on barley, soybeans, corn feed, potato, and sweet potato range from 300 to 500 percent. The previous multilateral agreement brought the East Asia agricultural sector under WTO rules but further work will be required in the next round. If the countries of the region want improved access for their agricultural exports, they need to offer easier access for agricultural imports. Such actions would also improve food security, although at some cost to farmers of some domestic products.

EASRD is collaborating with Rural Development Department (RDV) in providing analysis and advice to clients on trade issues in the upcoming WTO round. This work is designed to help clients understand the WTO negotiations process and provide them with analytical support equivalent to that available to industrial countries.

**Removing the Anti-Rural Bias.** Poverty is particularly persistent in rural areas where the quantity and quality of social services are inferior to those in urban areas. Accordingly, we are encouraging East Asia governments to redress the anti-rural bias in their national investment. Good rural schools, health care, roads, communications, and electric power help the agricultural sector and the nonfarm rural economy to thrive. Moreover, governments need to provide "rules of the road" for a well-functioning market economy. This includes a commercial code containing a clear definition of legal contracts and a fair and expeditious judicial process to resolve contract disputes. Guaranteeing title to land and land use rights are also im-

portant government functions. These are being strengthened in our rural lending program. In addition, the Unit is collaborating with East Asia Urban Development Sector Unit (EASUR) to get a better understanding of rural-urban linkages.

The pricing policy biases noted earlier are also being addressed through analytical work, Country/Bank policy dialogue, and loan conditionality.

**Designing Projects to Stimulate Rural Growth.** The EAP portfolio contains loans with elements designed to improve the enabling environment in rural areas. A few examples are provided here, along with that aspect of the environment that they seek to improve:

- The Tree Crops Smallholder Development Project in Indonesia sought (unsuccessfully) to strengthen the rural credit apparatus by demonstrating the bankability of smallholder tree-crop producers;
- The Agricultural Research II Project in Indonesia is designed to improve the scientific and human capital involved in agricultural research;
- The Water Sector Adjustment Loan in Indonesia is designed to introduce new paradigm of water management;
- The Mindanao Rural Development Project in the Philippines is a long-term program using the new Adaptable Program instrument to enhance devolution and strengthen local autonomy;
- The Agricultural Support Services Project in China is intended to strengthen public research institutions at the provincial and local levels and the delivery of extension services to farmers;
- The Land Titling Project in Laos is intended to provide the legal and bureaucratic infrastructure necessary for secure land ownership;
- The Animal Feed Project in China supports training, research, testing, quality control, and policy reform in the feed industry;
- The Seed Sector Commercialization Project in China is establishing a new seed policy and a regulatory framework for seeds;
- A series of land-titling projects in Thailand, concluding with the Land Titling III project, has developed institutions to record titles and assure legal ownership of land to those who have; traditionally occupied it; and
- The Heilongjiang Agricultural Development Project in China is supporting the commercialization and reform of state-owned agroprocessing enterprises.

### Providing Food Security

Rapid economic growth before the onset of the recent crisis lifted millions of low-income people in East Asia from poverty and increased their purchasing power and consumption of noncereal foods. Nevertheless, food security remains a matter of concern, even though food inadequacy in most countries of the region has declined significantly over the last two de-



*Malnutrition is still a problem in East Asia, Cambodia.*

cades (Annex 4).<sup>8</sup> Increases in agricultural productivity have outpaced the growth of demand for staple cereals, several countries have become net exporters of food, and many countries are now importing "luxury," nontraditional foods (meats and fruits).

At the personal level, food insecurity is caused mainly by inadequate purchasing power. The crisis increased the incidence of poverty and created pressure to develop or strengthen social safety nets, and EASRD and EASSD had a significant impact on the development, and monitoring of the targeted rice subsidy program in Indonesia. This work, institutionalized in the Social Safety Net Loan, is a good example of our ability to respond rapidly to an issue of national importance. It is likely to be emulated in our policy dialogue with other countries on social safety nets.

At the national level, food security is provided by a productive agriculture in a country where inputs and outputs are valued at border prices and where trade functions to equilibrate domestic supply-and-demand imbal-

ances. Although EAP governments have invested substantial sums in their agricultural sectors and the transportation infrastructure for food is being improved, food demand in many EAP countries has grown faster than supply. Food security is often equated with food (cereal) self-sufficiency. This has led to import protection policies and domestic price supports at levels above international prices to induce greater domestic production. In some countries (e.g., China, Indonesia), barriers to interregional movement of foodstuffs are also used to encourage local self-sufficiency.

Food self-sufficiency, however, is an inefficient policy goal. The EAP countries have good income-earning options to pay for food imports at a lower resource cost than the cost of domestic food production. As a policy matter, however, the EAP countries recognize a responsibility to provide food security. This frequently brings tension between the first-best policies that the Bank might recommend and the second- or third-best policies that will satisfy domestic political goals. Accordingly, EASRD sees its role as encouraging policymakers to adopt policies that limit distortions to the economy while also satisfying human and political objectives.

### **Supporting Resource Management**

Lands, forests, and water are the natural resource base on which agriculture and forestry depend. In many EAP countries, however, the goal of rural development often conflicts with the goal of resource management, and our clients frequently place a lesser value on long-term sustainability than we believe it necessary. Examples include the inability or unwillingness of Indonesia to enforce forestry policy, the lack of sustainable forestry policies in

### **Box 3: Food Security in China**

As recently as the and early 1960s, famine in China claimed millions of lives. That has had a profound impact on the way policymakers in China view food security and has caused them to place a high value on food self-reliance. Production, pricing, and marketing policies have focused on grain self-sufficiency, with shortfalls and surpluses balanced through external trade. These policies have been complemented with creation of large grain reserve stock to stabilize supplies. However, the cost of maintaining large reserve stocks absorbs substantial budgetary resources. Since China is a land- and water-short country (except in the south, where water is abundant but arable land is limited) its agricultural competitiveness lies in the production of high value, labor-intensive crops and livestock products rather than grain. More important, China's overall competitiveness lies in the production and export of labor intensive manufactured goods to

earn foreign exchange to purchase grain on international markets. As a rapidly industrializing country, China's arable land and irrigation water will be increasingly diverted to nonagricultural uses because industrial output earns more than most agricultural products. Such resource reallocation will present additional challenges to maintaining a politically comfortable level of food security. These challenges are reflected in our portfolio and policy dialogue with China. Sustainable water supply and water management projects make up a large share of our portfolio, complemented by rural development projects and an agricultural services project. A Grain Distribution and Marketing Project, problematic though it has been, is a novel effort by the government to address food security. In addition, recent sector studies have addressed some of the diseconomies of a self-sufficiency policy.

<sup>8</sup> Measurement of food inadequacy is the difference between actual per capita intake of the underfed and average capita requirement of the population. The food deficit is defined as the amount of additional food that would be needed to ensure that the present food inadequacy is eliminated.

Papua New Guinea and Laos, and Indonesia's plan to a million hectares of peat lands to convert to intensive agricultural production. Virtually no country in the region has fisheries management mechanisms in place, although some countries are developing them despite the fact that East Asia - and particularly its poor - is more reliant on fish for protein than the rest of the world. We consider natural resource management a key to achieving sustainable economic development and will continue to support policies and projects that generate a continuing flow of benefits.

In recent years, the EASRD has begun to incorporate specific conditionality on sustainability of natural resources in adjustment loans, and to a lesser extent with similar activities under the International Monetary Fund (IMF). The unit views the willingness of governments to strengthen and enforce conservation and resource management regulations as a measure of their commitment to sustainable use of natural resources. New Bank instruments, such as Adaptable Program Lendings (APLs), Learning and Innovation Loans (LILs), GEF grants, and unscheduled AAA will be important new instruments for promoting long-term policy changes and innovative approaches to natural resource management.

Dealing effectively with forestry, biodiversity, and other natural resources issues is central to strengthen partnerships with environmental NGOs. Since the Bank continues to be criticized for the environmental degradation that sometimes accompanies structural adjustment and project loans, EASRD is collaborating with East Asian Environmental Family (EASEN) to find better ways of explaining the Bank's goals. Specifically:

- in countries where forests are important and structural adjustment is taking place, the Bank is addressing its impact on forests and including forest sector conditionality in the program;
- becoming increasingly proactive in its dialogue with NGOs and other opinion-makers, and responding more actively to public criticism of the Bank when projects or activities are misconstrued;
- adopting community-based approaches to natural resources management; and
- implementing an alliance with the World Wildlife Fund (WWF) on sustainable forest management and processing a number of medium-sized grants that will be implemented by NGO partners, such as WWF, The Nature Conservancy and the World Conservation Union (IUCN).

**Better Land Use.** There is very little unused arable land in East Asia. Future growth in agricultural output must come through sustainable intensification of production from existing land. This theme is a part of all agricultural development projects supported by EASRD. There are numerous successful examples of intensification, particularly in China, where, for example, the Loess Plateau Project is underwriting poverty alleviation through land reclamation, erosion control, and reforestation. The Unit is also encouraging new farming prac-

ties through an Integrated Pest Management Project in Indonesia, an Agriculture Rehabilitation Project in Vietnam and the Tarim Basin II Project in China, among others. In addition, the unit has created projects on land-use regulation and cadastre/land-titling.

**Sustainable Forest Management.** Bank involvement in addressing the problems associated with exploitative and unsustainable use of the region's forest resources is considerable. This is an area of growing importance because several countries in the region are being negatively affected by land-clearing operations. Chronic forest fires have deterred tourism in Indonesia and neighboring countries, and the devastating floods in central China in the summer of 1998 have compelled the government to institute a logging ban that will affect 90 million hectares of forestland and 1 million workers. The government of Vietnam is embarking on a national forestry program to conserve the country's remaining forests and to reforest denuded land. Both China and Vietnam have requested our assistance in implementing these programs.

EASRD approach to sustainable forestry ranges from protection of valuable biodiversity to management of production forests. Its involvement in production forestry is critical, since pressure from environmental NGOs has made most donors reluctant to finance forest management. The Unit has taken the lead in promoting conservation management of production forests in Cambodia, Laos, and Papua New Guinea. A number of biodiversity conservation projects are under development; some of these are under the GEF umbrella, and some are free-standing Bank operations. Examples include the Priority Protected Areas Project in the Philippines, which is being implemented primarily through a consortium of local NGOs; the Nature Reserve Management Project in China, EASRD are helping to strengthen the management of nature reserves inhabited by pandas; the Vietnam Forest Protection and Rural Development Project, where its loan is assisting the government in integrating conservation with economic development; and the Kerinci Seblat National Reserve Project in Indonesia, which supports the conservation of endangered wildlife, including the sun bear, the tapir, several large cats, and the orangutan. In addition to conserving resources, these projects are designed to increase local awareness of the need for conservation of biodiversity.

**Improved Water Management.** Effective management of ground water and surface water is an essential part of our strategy. Water shortages are likely to become a binding constraint on agricultural production in East Asia, and conflicts over the apportionment of water between urban and rural uses will intensify. Since water is often priced at zero, there is little incentive to manage it carefully. A very large share of EASRD portfolio involves water management. Two-thirds of its portfolio in China is being used to finance large infrastructure projects that are essential components of the government's water re-



*Land terracing, construction of dams, revegetation of the slopes, comprehensive treatment.*

sources development program. These projects include the Xiaolangdi Multipurpose Dam and the Wanjiazhai Water Transfer Project, which are both located in the Yellow River Basin and which are essential to improving water control in that region. EASRD's also investing in rehabilitation of existing irrigation and in new concepts aimed at improving water use efficiency. Examples include the Tarim Basin I and II Projects (promotion of integrated river basin management), the Yangtze Basin Resources Development Project (development of farmer-managed user associations), and the forthcoming Water Conservation Project (support for a government program to introduce water saving irrigation technology nationwide).

Similar approaches are being taken in other EAP countries. Examples include the Irrigation Rehabilitation Project in Vietnam (creation of water user associations, improved pricing of water), the Thailand Natural Resources Management Project (integrated water management), the recent Water Sector Adjustment Loan in Indonesia (watershed management and local control), and Water Resources Development Project in the Philippines. Policy dialogue with Vietnam resulted in the passage of a law on water resources that is being supported by the River Basin Management Project (FY01), in partnership with the

ADB and Overseas Economic Cooperation Fund (OECF).

*Sustainable Aquaculture Development and Fisheries Management.* EASRD portfolio also has a number of fisheries and aquaculture components and projects. Its strategic approach has changed from the narrow financing of fisheries development to sustainable development of all coastal resources. This change was brought about by concern over the destruction of coastal zones, which are important as the breeding grounds of fish, and concerns about overexploitation of coastal and inland fisheries. The Sustainable Coastal Resource Development Project in four of China's provinces is intended to develop and implement effective coastal zone management, expand fish and shellfish aquaculture, test new shrimp farm management techniques to better control disease, and upgrade seafood processing facilities to international standards. The Coral Reef Management Rehabilitation Project in Indonesia is a 15-year, multidonor program loan to conserve and rehabilitate coral reefs through a community-based management system and to create alternative employment opportunities for local inhabitants. The Vietnam Coastal Wetlands Development and Protection Project takes a similar approach to mangrove areas. In Thailand, the Royal Department of Fisheries is coordinating the formulation of a code of conduct for sustainable shrimp farming in consultation with stakeholders, technical specialists, importers, and the Bank. In addition, a new program to identify the best shrimp farm management practices is being conducted in partnership with the WWF, the Network of Aquaculture Centres in Asia, the FAO, and The Environmental and Socially Sustainable Development (LCSES). Five projects in China also include inland and coastal aquaculture and fisheries components. EASRD intend to develop similar projects in the future, including a GEF-supported coastal and marine management component under the Mindanao Rural Development Project in the Philippines.

#### **Box 4. Indonesia: Modernizing Water Resource Management**

The Indonesia Water Sector Adjustment Loan (WATSAL) is a good example of the Unit's new support for sectoral policy and institutional change. The loan addresses policy and sector reform in three areas:

- Improving the National Institutional Framework for Water Resources Development and Management by establishing an interministerial coordinating body, adopting a National Water Policy, amending laws and regulations needed to implement the policy, and establishing a sustainable national network;
- Improving the Organizational and Administrative Framework for River Basin Management by improving river basin coordination and de-

cision-making institutions, establishing an organizational and financial framework for autonomous river basin water management corporations, and establishing an enforceable system for water allocation;

- Revising Irrigation Policy, Institutions and Regulations to Improve Irrigation Management Efficiency and Fiscal Sustainability by strengthening the ability of Water User Associations (WUA) and WUA Federations (WUAF) to manage irrigation networks, creating a framework for joint management in large schemes, and redefining the responsibilities of irrigation agencies.



## CHAPTER 4

# *IMPLEMENTATION OF ACTION PLANS*

The economic, political, and institutional context in East Asia is gradually being transformed by increasing democratization and decentralization, the rise of civil society organizations, and better macroeconomic and sectoral policies. This transformation has created a greater desire to address the problem of rural poverty and a new approach to rural development. In recent years there has been considerable experimentation with participatory approaches to rural development that are not found in the old state-led, integrated rural development model, and two lessons have been learned.

First, rural development programs and developments must be closely coordinated with macroeconomic and sectoral policies. Too often, those who determine macroeconomic policy have seen rural development and agricultural policies as passive appendages. The rural sector is often an institutional orphan with no representation at the highest levels of government. It is shunted off to agriculture or social welfare ministries, or decentralized to the municipal level. The result is poor (or non-existent) coordination between macroeconomic, sectoral, and rural development policies.

Second, rural development should be guided by the views of the people in rural communities and municipalities. Successful interventions must be planned and prioritized through participatory processes that allow the voices of the poor to be heard. This is necessary because of the heterogeneity of poverty, the possibility of multiple solutions, and the need for local ownership of programs.

Rural development is complex, however, and radical solutions are not offered here. Rather, suggestions are made, some of which are already practiced in parts of the Bank. Not all are applicable in all circumstances. Further, it is necessary to undertake many different interventions in rural areas in order to produce a significant

cumulative effect on rural development. Nonetheless, the implications for EASRD is clear. Rural development requires a coordinated, multipronged approach.

First, EASRD must continue to engage in policy dialogue that emphasizes the interests of the rural poor and the implications of macroeconomic and sectoral policies on the poor, both rural and urban. It must also strengthen the capacity of central governments to manage decentralization through legal and regulatory processes and achieve consistency between administrative devolution and fiscal decentralization. Many governments in East Asia see decentralization as worrisome because it implies greater regional and local autonomy. The fear is that decentralization will weaken national unity.

Second, while Bank lending is still needed for conventional rural projects, such as water control structures, trunk roads, and agricultural research, these projects must be coordinated with community-based development programs. And the connection between Bank projects and rural poverty must be made clearer. Bank documents, even when they focus on a narrow issue or sector, should explain how a project or program is related to the goal of rural poverty reduction.

Third, EASRD must continue to place greater emphasis on projects that involve local communities (especially the poor of those communities) in their conception, design, and implementation. Interviews and surveys of the poor in the community to understand their needs and ideas, and the participation of civic organizations in planning and implementation, are two actions that have been used successfully in a number of loans made by the Bank, such as the Indonesia Village Infrastructure Projects (VIP). Participatory rural community appraisals should become the norm. EAP need to develop a mechanism so that consensus is built up from participatory appraisal at the local level and reaches up to

higher levels of government. That will help to ensure appropriate changes at the provincial and central levels of government. EASRD may need to provide complementary assistance in strengthening the capacity of democratically elected local governments to manage decentralized development. Local governments need to understand such concepts as monitoring and evaluation, cost recovery, revenue sharing, matching grants, and revenue enhancement. The assistance should be provided by specialists and NGOs, who should act primarily as conveyors of information to local communities rather than as planners or decision-makers.

Fourth, stronger efforts must be made at the regional level to break down sectoral barriers in operational documents (such as CAS's), and in actual projects, so that integrated, cross-sectoral teams are assembled to address rural poverty. Empowering a thematic team that has members from all sectors and is responsible for designing a rural poverty reduction strategy and associated projects with country counterparts is a holistic approach to rural poverty alleviation. The same team would be responsible for designing lending instruments and making loans. Such teams would be, in large part, country-based and would spend considerable time in rural communities trying to improve local participation and local institutions while monitoring outputs and outcomes. Some country management units—notably Indonesia's—are already being organized in this manner. The Indonesia experience, as well as actual approaches and action plans in other countries in the region, is described in Part II.

Fifth, EASRD needs to recognize that in agriculture small is not beautiful, that for the foreseeable future farms will consolidate and get larger, labor will be shed, and urban or non-farm employment will be needed to absorb the labor freed from agriculture. EASRD also needs to recognize that part of the transition will involve more part-time farming, where possibly a wife with family help will undertake the main subsistence farming activities while the husband is employed off farm. Attempting to better the lot of subsistence farmers when farming is their only activity is not a viable strategy. Subsistence farming does not evolve into commercially viable and competitive enterprises. Recognition of the inevitable trend toward capturing economies of scale in commercial

farming is important for EAP staff as they design projects and policies to assist the transition. EAP must be ever-vigilant that Bank interventions in the rural sector manage, but do not inhibit, this transition.

### **Closing Comment**

The publication in 1997 of *Rural Development: From Vision to Action*, a document that was followed with Strategic Compact resources, challenged the rural units of the Bank to increase the visibility and the importance of the sector to sustainable development, to improve cross-sectoral synergies and linkages with the macro economy, and to strengthen the portfolio to provide the most favorable social and economic outcomes. EASRD accepted these challenges and is steadily repositioning itself to be an effective partner with other donors, the ADB, and our borrowers to achieve the sector's medium to long-term goals in a manner consistent with the Comprehensive Development Framework (CDF). EASRD's work in China focuses mainly on reducing rural poverty through decentralized productivity-enhancing development projects, improved water resources management, and an increase in sustainable landuse. Its first priority in Indonesia is strengthening food security, followed by structural adjustment and investments for improved, sustainable agriculture, and forest production and water management. Its strategy for Thailand is to redress the anti-rural imbalance that has emerged over the past decade and hasten rural development as a means of stimulating domestic demand, protecting the rural poor and vulnerable social groups, and ensuring a medium-term sustainable growth path. In the Philippines EASRD efforts will concentrate on implementing the recommendations of the sector strategy report on poverty reduction and smallholder development in Mindanao, on local institutional capacity-building, and on the provision of rural infrastructure. In Vietnam the rural development priorities are increase in agricultural productivity and income-generating rural employment in nonfarm activities, and achieving natural resource sustainability. EASRD has prepared, or is in the process of preparing a rural development strategy for each country except Indonesia and have discussed it with the government. The challenge now is to work with all its stakeholders to put those strategies into practice.

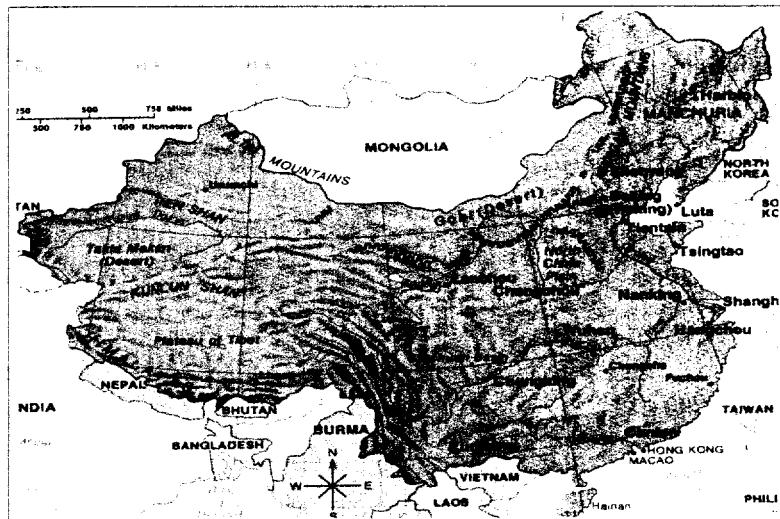


## *Country Action Plans*



## Box 5

# CHINA



### PROFILE OF THE RURAL POOR

Casual observations and the best data available indicate remarkable geographic differences in levels of living within China. For example, across the neighboring provinces spanning the region between Hong Kong and Myanmar, one finds the rural poverty rate in the inland mountainous province of Guizhou in 1990 7 to 10 times higher than in the coastal province of Guangdong, just few hundreds of kilometers away.

There is evidence of rising income disparities between urban and rural areas since mid-80s, and within the rural economy there is evidence of unconditional divergence over the post-reform period. The decline of incidence of rural poverty became less remarkable in the 1990s than in the 1980s and while spatial concentration of the poor population continues, rural poverty has increasingly attacked certain groups of households.

### NATURAL RESOURCE MANAGEMENT

China's land area totals 9,561,000 sq km. It is notable for the small proportion of land cultivated (only 13.5% in 1999) and the large share of land that is irrigated (40.9% in 1999), reflecting centuries of intensive land use. An estimated 156.4m ha were sown to crops in 1999. Irrigation efforts in arid western areas are failing to keep pace with the loss of arable land to building in the more fertile areas.

There are three main farming zones:

- south of the Yangtze river, where there is abundant rainfall, two crops of rice and one of spring wheat, as well as jute, sugarcane, and other subtropical crops;
- between the Yangtze and Yellow rivers, where a two-crop system of wheat and rice is used; and
- in the north, where the climate is cold and dry, and there is a one-crop wheat system.

### RURAL HEALTH

By 1975 insurance coverage and the rural Co-operative Medical System (CMS) operated by the communes reached nearly 90% of the population. Basic healthcare facilities were available to nearly everybody, free of charge or at a nominal cost. There was, however, a big gap between the facilities available in the big cities and those on in poorer rural areas. Now that the communes have disappeared, the CMS has virtually broken down in many rural areas, leaving the rural population to fend for itself. Only about 10% of the rural population is now covered by community-financed healthcare.

### RURAL INFRASTRUCTURE

The backbone of the transportation system remains the railway, which typically carries over 1/3 of cargo and passengers. The link between infrastructure and rural poverty lies in the very cause of poverty. The geographic immobility restrict rural poor to move on/out of business or area, thereby restrict to the poorer service provided by the area. A 'geographic poverty trap' is then created, such that a poor household living in a well-endowed area can eventually escape poverty, yet an otherwise identical household living in a poor area experiences stagnation or decline.

### RURAL EDUCATION

The enrollment rate disparity between rich and poor provinces grows as students move on to secondary and higher levels. Such disparity is particularly acute among the '12/14' and '14 and older' age groups. Urban-rural differentials are also apparent in China. Primary education that corresponds to age range 7-11 is compulsory in China but attendance is not universal in rural areas, particularly among females. Urban children and those from high income provinces are much more likely to attend secondary school than children from rural area and low-income provinces.

### Gross enrollment

|       | 7-11 yr old | 12-14 yr old |
|-------|-------------|--------------|
| Rural | 90.1        | 32.9         |
| Urban | 96.7        | 72.5         |

### Number of teachers, 1998

|          | Rural | Urban  |
|----------|-------|--------|
| Beijing  | 9,260 | 26,104 |
| Shanghai | 1,610 | 30,815 |
| Tianjin  | 9,454 | 18,906 |

### Main towns: Population (m), end-1999

|                              |      |
|------------------------------|------|
| Chongqing(a)                 | 30.7 |
| Shanghai(a)                  | 14.7 |
| Beijing(a) (Peking, capital) | 12.5 |
| Chengdu                      | 10.0 |
| Harbin                       | 9.3  |

(a) Includes the surrounding counties.

### THE AGRICULTURAL SECTOR

Total agricultural output grew at an annual rate of 4.2% between 1985-1997. Crops continued to contribute well over half of the output value despite rapid growth in livestock and fisheries. Livestock contributes about 30% of the output value, fisheries less than 10%, and forestry about 3%. The explosion of rural industrial growth and off farm employment in the last decade has been an important element of China's overall rapid economic growth, rapid increase in rural incomes and poverty reduction.

### RURAL PROBLEM

Environmental degradation, diversion of land to other uses, and chronic overpopulation are among the factors depressing the growth of agricultural productivity and rural incomes in many areas. The rural-urban terms of trade have moved against the rural population in the 1990s. The state is withdrawing from subsidized purchase of staple crops, and years of bumper harvests are depressing market prices for staples. The grain distribution system is only partly reformed. The government recognizes an incipient crisis in agriculture, in which farmers' incomes could fall even further behind those of town dwellers.

**Land area:** 9,561,000 sq km • **Population:** 1.3bn (end-1999) • **Language:** Mainly Mandarin; local dialects and languages also used

## **Areas of Strategic Emphasis**

The Chinese government's medium-term strategy for the development of rural areas has four objectives: (1) improving income and welfare, especially in the poorest counties; (2) increasing the productivity of agricultural production so as to maintain food security; (3) developing and managing water resources on a sustainable basis; and (4) improving natural resource management and environmental protection. These also represent the key areas of Bank support for rural development in China. The government's adoption of the Bank's assistance strategy is based on the country's development needs and reflects the value-added of Bank lending and nonlending services and the Bank's comparative advantage vis-a-vis other donors.

This strategy reflects the continuation of Bank support for poverty reduction and management of sustainable natural resources in rural China, with emphasis on the western provinces. Most of China's poor reside in those provinces, where the environment is extremely vulnerable and it is where rational management of land, water, forests, and other natural resources is needed most.

## **The Strategic Emphasis of Other Donors**

Apart from the Bank, China's major donors include the ADB, various United Nations (UN) agencies, the International Monetary Fund, the Japanese Bank of International Cooperation (JBIC), and other bilaterals, including the European Union.

The ADB program concentrated initially on infrastructure development (energy, transport, and urban), environmental investments, and, to a lesser extent, rural development. The ADB is shifting its focus to rural development, poverty reduction, and natural resource and water conservation. Emphasis is also being placed on rural microfinance, agricultural research, and rural industry.

The UN agencies, including the United Nations Development Programme (UNDP), are working on human resource development, including job creation in inland areas. Grants have been provided to pay for technical assistance in improving public administration and management. Public administration and management are being improved through grants to pay for technical assistance. The IMF provides advice on macroeconomic management, including the development of a legislative framework for strengthening the central bank and commercializing and restructuring the banking sector.

The JBIC is mainly involved in the development of the physical infrastructure (ports, roads, railways, airports, telecommunications, and energy development), water resource development, and environmental improvement projects. Other sources of bilateral funding are Germany, Australia, Canada, the United Kingdom, France, Italy, and Spain. Their financial assistance consists of bilateral grants and mixed credits, and mainly supports technological and management improvement, poverty reduction and human development, environ-

mental improvement, strengthening institutional capacities, and social development.

## **Bank Operations in Support of the China's Rural Development Strategies**

The 1999 Rural Sector Study Report called "Accelerating China's Rural Transformation" provides a comprehensive framework for the Bank's rural development dialogue with the government, along with a policy and action matrix. The Bank will support China's rural development with an average lending operations a year and sector studies in a number of key areas. The lending operations will support continued commercialization, improved fiscal policy, productivity increases through greater emphasis on agricultural research and extension, off-farm employment creation through village and township enterprises, and further liberalization of foreign trade. Building upon a sector strategy note on how to cope with China's regional water imbalances, Bank support for conservation and development of water resources will likely increase in the coming years. This will include lending for irrigation and drainage, water transfer and water saving, and improved flood management through structural and nonstructural measures. The Bank will also support improvements in the institutional and policy framework, including the determination of water pricing and the establishment of participatory water management associations. In response to severe flooding in 1998 and the subsequent decision to ban logging in the upper watershed of the Yangtze, the Bank - together with a number of other donors - will support the government's new framework for sustainable management of forest resources. Other lending operations will focus on soil conservation and, with GEF support, biodiversity protection.

The Bank's new strategy is to seek collaboration with bilateral agencies. Funding from the Department for International Development (DFID) of the United Kingdom, will serve to "soften" the Bank lending rate and make it possible to use Bank loans for poverty reduction operations.

## **Rural Poverty Reduction**

The Chinese government has brought about a sharp reduction in rural poverty during the past twenty years, from roughly 260 million in 1978 to 42 million in 1998, or from one-third to 4.6 percent of the total rural population. The majority of the remaining rural poor are concentrated in resource-deficient areas, mostly in upland sections of the interior provinces of northern, northwestern, and southwestern China.

Assisting the remaining poor, however, will be increasingly difficult and will require improvements in the current methods of poverty reduction. The issue is not additional funding but making more efficient and effective use of available funding. This can be achieved by (a) targeting funding to poor townships (including some of those outside the nationally designated 592 poor coun-

ties) and strengthening supervision of those funds; (b) maintaining funding to increase productivity in upland agriculture by adopting a multiyear project-based approach that includes participatory design and implementation; (c) developing new agricultural technologies for mountainous regions; (d) completing realistic assessments of the market prospects for a wide array of tree crops from trees that are now being planted extensively in upland areas to ensure that these crops are a sustainable source of income; and (e) improving management of natural resources so that rural development can be made environmentally sustainable.

### Bank Instruments

Now that China will pay the higher interest rate of IBRD funds because of the loss of IDA funding, its requests for loans have become more sharply targeted. In general, the government will use Bank loans over the next four years to support the transition to a market-based economy. Loan funds will be used (i) for infrastructure improvements to link markets and hasten the development of an efficient and globally competitive economy;

(ii) for agricultural growth and improved management of natural resources, and (iii) for support of urban development, including basic infrastructure services and environmental protection.

Direct bank support for poverty reduction and social development is now limited to implementing the large current portfolio and to nonlending services, such as technical assistance, sector studies, and agricultural research. Poverty projects require mostly local costs and do not generate funds to repay loans. The government of China is, therefore, reluctant to use Bank financing for these activities.

### Expected Outcomes (Indicators)

The main indicators of successful outcomes will include: (1) a reduction in the number of absolute rural poor; (2) an increase in farm income in the targeted areas; (3) an increase in agricultural productivity and food security in targeted areas; (4) greater productivity per unit of water and a reduction in losses due to floods and drought; (5) an increase in forested land area; and (6) a reduction in loss of tillable land because of soil erosion.

**Table 3: Matrix of Strategic Actions to Support Rural Development in China**

| Goals and objectives for rural development   | Components and preconditions  | Enabling policy and Institutional framework   | Bank instruments and supporting actions  |
|--|---|---|--|
| <p>(1) improving income and welfare, especially in the poorest regions</p> <p>(2) increasing the productivity of agricultural production so as to maintain food security</p> <p>(3) developing and managing water resources on a sustainable basis</p> <p>(4) improving natural resource management and environmental protection</p> | <p>(1) Improve identification of the poor to permit better targeting of antipoverty programs; augment supervision of poverty reduction programs at local level to improve quality of works and services; invest in services and infrastructure that will assist the poor to migrate or otherwise transfer out of agriculture, including education, transport, and communication services; design and implement anti-poverty programs on the basis of detailed consultation with local leaders and planned participants; remove any remaining barriers to rural migration; consolidate market information systems under the auspices of a single central agency; invest more in rural infrastructure where economically merited.</p> <p>(2) Permit and encourage competition and innovation; establish research priorities, including subsistence commodities for poverty groups in resource-poor areas; centralize and increase budgetary allocations to agricultural research; increase cooperation with international</p> | <p>(1) Recentralize taxation authority and establish reallocation mechanisms and provide incentives that ensure significant resources are transferred from affluent to poor areas; discontinue trade quotas and the grain self-sufficiency policy, and address food security through trade linkages with multiple suppliers and long-term contracts; rely more on the private sector and market forces to improve agricultural resource allocation and farmer incomes; design, establish, and enforce national quarantine and phytosanitary standards applicable to all interjurisdictional commodity movements; encourage and promote associations through legislation and training programs; promote private sector ownership and develop institutional structures which will limit the liability of investors, reward or penalize managers for their performance, and appropriately compensate shareholders.</p> | <p>(1) To increase rural incomes and welfare, future agricultural and water development projects will be targeted at the poor interior provinces in the western region, to structural change and income-generation;</p> <p>(2) To increase agricultural productivity, a number of lending operations will support continued commercialization, improved fiscal policy, further productivity increases through greater emphasis on research and extension, off-farm employment creation through village and township enterprises, and further liberalization of trade and marketing;</p> <p>(3) To improve water resources development and management, and building upon a major sector strategy note that will set out a framework for coping with regional water imbalances, Bank support for water conservation and develop-</p> |

Table 3: Matrix of Strategic Actions to Support Rural Development in China (Continued)

| Goals and objectives for rural development | Components and preconditions   | Enabling policy and Institutional framework   | Bank instruments and supporting actions   |
|--|--|---|---|
|  | <p>agricultural research centers; restructure and revitalize extension service, and improve extension staff training; promote formation of commodity producer groups and encourage them to retain specialists to provide up-to-date information on varieties, pest control, and other cultivation practices; discontinue subsidized and unsustainable credit programs for poverty alleviation and refocus on microfinance programs or other household-based poverty alleviation programs; develop rural finance institutions and introduce training programs for staff; use a portion of central government poverty reduction funding for developing applied upland agricultural research.</p> <p>(3) Adopt strategic water resources planning and demand management; increase public awareness of water shortage and water-saving needs; introduce a rational system of volumetric measurement and water pricing; strengthen flood and drought management to reduce damages to crops and property; conduct study of conveyance and delivery efficiency; rehabilitate systems, line canals, and introduce improved technologies; establish training programs for water management staff.</p> <p>(4) Develop integrated management plans and rigorously enforce regulatory framework; continue to analyze costs and benefits of alternative land rights regimes and experiment with rental markets and tenure arrangements to improve land management; improve training of nature reserve and forest staff; invest in rehabilitation of watersheds and grasslands where economically efficient; improve farmer training on application and placement of pesticides and fertilizers.</p> | <p>(2) Publicize and strictly enforce intellectual property rights for agricultural technology; assign policy lending to an institution without commercial responsibilities to ensure that policy and commercial lending are fully separated.</p> <p>(3) Improve the legal system for integrated water resources management through revision of the Water Law and completing detailed implementation rules for existing water-related laws and regulations; strengthening river basin management; institutionalize nationwide water-saving and water rights and permit system; promote management, operation, and maintenance of water supply and irrigation systems by self-financing organizations.</p> <p>(4) Remove forest policy distortions, including pricing and tariff protection that impedes international trade; consolidate nature preserves and commit more financial and staff resources to natural resource management and protection services.</p> | <p>ment will likely increase in the coming years. This will include lending for irrigation and drainage, water transfer and water saving, and improved flood control through dam and dike construction. We will also support improvements in the institutional and policy framework, including water pricing and the establishment of participatory water management associations.</p> <p>(4) To improve natural resources management and environmental protection, in response to severe flooding and the subsequent decision to ban logging in the upper watershed of the Yangtze River as well as the government's Western Region development strategy, the Bank - together with a number of other donors - will support the government's new comprehensive framework for sustainable management of forest resources. Other lending operations will focus on soil conservation and, with GEF support, biodiversity protection.</p> |

Box 6

# INDONESIA



## RURAL HEALTH (WELFARE GAPS, 1994)

|                    | Population below poverty line | Life expectancy at birth | Child mortality rate | Household with electricity |
|--------------------|-------------------------------|--------------------------|----------------------|----------------------------|
| North Sulawesi     | -2.3                          | 2.1                      | -16                  | 8.0                        |
| Central Sulawesi   | 3.8                           | -4.1                     | 29.0                 | -21.7                      |
| South Sulawesi     | 2.0                           | 0.5                      | 4.0                  | -7.5                       |
| Southeast Sulawesi | 7.7                           | -1.0                     | 6.0                  | -28.7                      |
| West Nusa Tenggara | 6.5                           | -13.5                    | 111.0                | -7.4                       |
| East Nusa Tenggara | 24.5                          | -0.9                     | 6.0                  | -33.4                      |
| East Timor         | n/a                           | -2.5                     | 18.0                 | -31.6                      |
| Maluku             | 7.9                           | -0.8                     | 5.0                  | -10.4                      |
| Java               | 21.1                          | 59.5                     | 106.0                | 48.2                       |
| Indonesia          | -1.5                          | 0.3                      | -3.0                 | -1.4                       |

## PROFILE OF THE RURAL POOR

### Share of the Population below poverty line % 1990

|                    |       |
|--------------------|-------|
| North Sulawesi     | 17.5% |
| Central Sulawesi   | 27.0% |
| South Sulawesi     | 10.4% |
| Southeast Sulawesi | 15.0% |
| West Nusa Tenggara | 7.3%  |
| East Nusa Tenggara | 31.0% |
| Maluku             | 26.0% |
| Java               | 9.2%  |

A survey conducted by the World Bank in 1994 concluded that around 19% of the inhabitants of Eastern Islands live in urban areas. Only 6,000,000 urban residents are estimated to be below the poverty line and nearly half of the urban poor in this region are found in South Sulawesi. Nearly 90% of the poor inhabitants in the East are therefore found in rural areas.

The Gini ratio assessment on rural-urban areas shows that inequity in urban areas is worse than in rural areas even though the rate of poor population in rural areas is less than in urban areas. The Gini coefficient for urban areas in Indonesia was 0.34 in 1990 and 0.366 in 1996, while in the rural areas it was 0.25 and 0.2648 respectively.

## RURAL INFRASTRUCTURE

The main means of transportation in Eastern Indonesia are roads, rivers, ferries, and ships. In 1990, the density of roads in Eastern Indonesia was measured at 102 meters per square kilometer, compared to 178 meters for the other provinces. There are also major differences in the condition of roads in Eastern Indonesia compared to the rest of the country. Whereas 65% of the roads in other provinces were considered moderate to good, only about half of the roads in Eastern Indonesia could be identified in that category. Nine provinces in the Eastern Indonesia depend on sea transportation for cargo shipping purposes. Cargo shipments to and from the Eastern Indonesia provinces represent only a very small proportion of total sea cargo shipping in Indonesia as a whole (9%).

**Land area:** 1,904,443 sq km

**Sea area (exclusive economic zone):** 3,166,163 sq km

**Total area:** 5,070,606 sq km

**Population:** 211.4m (end-2000 estimate)

### Main towns: Population in '000, 1990 census

|                   |       |           |       |
|-------------------|-------|-----------|-------|
| Jakarta (capital) | 8,228 | Medan     | 1,730 |
| Surabaya          | 2,484 | Semarang  | 1,251 |
| Bandung           | 2,058 | Palembang | 1,144 |

**Languages:** Indonesian (Bahasa Indonesia), as well as some 250 other regional languages and dialects. English has increasingly replaced Dutch as the main second language, and is widely spoken in government and business circles

## THE AGRICULTURAL SECTOR

Agriculture, including forestry and fishing, is of vital importance to the Indonesian economy. It is both an important source of export earnings and employment, and the means by which the majority of Indonesia's rural population subsists. In the subsistence part of this economy wages are in the form of crop shares, a large portion of food crops are for home consumption, and much output goes unrecorded in the national economic statistics. In the early 1970s, it accounted between 40%-50% of the constant price GDP; its share had declined to approximately 23% by the early 1980s and to 14.8% in 1997. In 1998, agricultural product accounted for 18% of total exports and 21.4% of non-oil/gas exports. Sea and inland fisheries contribute an important part of the national diet, although the sector accounted for only 1.8% of GDP in 1998.

## NATURAL RESOURCE MANAGEMENT

With approximately 100 million hectares, Indonesia's rainforest is one of the most species-rich ecosystems on the planet. The rainforest is an important source of livelihood for close to a million rural families.

## RURAL EDUCATION

The average poor people in urban areas are better educated than those in rural areas. Related to the phenomenon of rural-urban migration, those who migrate tend to be young and educated, while the old and uneducated tend to stay in the rural areas because of both occupational and geographical immobility concerns.

Indonesia made remarkable progress on poverty alleviation through the mid-1990s, and the economic crisis that struck in 1998 had less impact on rural than on urban populations. But the Bank's recent report on Indonesia indicates that vulnerability to poverty is still an issue that concerns about half of the population. Over a three-year period, between 30 and 60 percent of all Indonesians face a greater than 50-50 chance of becoming poor.

More than three-quarters of Indonesia's poor live in rural areas. For almost 60 percent of the poor, agriculture is the main source of income, whether from owned land or labor. The poorest regions are scattered and include parts of the eastern islands, but are also found in East and Central Java, Lampung, and West Kalimantan. Although agriculture is the main employment, it provides only about half of the income of the average poor rural household; both rural men and women gain income from other rural activities or urban employment.

The recent crisis exposed the low level of accountability of Indonesia's bureaucracy, the lack of transparency in the functioning of the state apparatus, and the weakness of the legal system, particularly in rural areas. These problems affect the rural poor in many ways, from ineffectiveness of public service provision to the extractive operations of the land certification administration, and leakage of public funds intended for rural development.

In addition to dealing with these weaknesses, Indonesia has taken on the challenge of implementing a massive government decentralization. The preparations for this decentralization have revealed substantial shortcomings, and the approximately 400 district and municipal governments will be struggling to cope with their responsibilities for at least a year. Decisions regarding decentralization that are critical to defining the rules and expectations for future Bank activity remain unclear.

A turbulent transformation is occurring in rural areas. Village heads who used to be handpicked by the government are now being elected by popular vote. State-sponsored cooperatives that once benefited from the required membership of farmers and local monopoly rights are being democratized and pushed into the commercial realm. The guiding hand of the command-and-control government is being loosened, and a halting process of shifting the role of the government to that of facilitator, regulator, and policy maker is under way.

Seeking a way forward in this situation, the government has articulated an economic plan that gives the rural economy a high profile, with emphasis on (1) increased agricultural productivity and welfare; (2) better use of natural resources; (3) boosting micro, small, and medium-scale businesses; and (4) prioritizing improvements in rural areas to strengthen the country's socio-political stability. The complexity of the transformation under way, and the enormity of the pressures on the national government, are putting longer-term strategy formulation and the pursuit of cross-ministry policy agendas on the endangered list. Ru-

ral development will be difficult to move from the realm of rhetoric to actual implementation.

### **Strategic Emphasis of Bank Assistance**

The recent CAS identifies three broad areas as priorities for the Bank in Indonesia. The base case for Bank activity is defined as a "muddle through" scenario, with the Government only managing to deal partially with the challenges facing it. Bank lending would be substantially less (about US\$400 million annually) than historically under this scenario, and project lending for the coming year would be limited to investments in the water sector, land administration, community-demanded development, basic education, and primary health care. A high case scenario would produce about twice the lending level of the base case, with a substantial increase in IDA lending, and permit a much broader scope for rural project development.

Decentralization presents new risks and opportunities for project design. Basic elements of the operational environment remain to be clarified. The new rules of central-local financial relations have yet to clarify how resources from foreign sources will be added to local governments' budgets. The criteria for providing Bank resources have yet to be finalized, with current discussions considering poverty indicators and demonstration of local government commitment to reform. An additional challenge is designing projects that can leverage successful innovations while retaining adequate supervision and application of fiduciary safeguards. The fiscal weakness of most local governments, the lack of transparency and accountability mechanisms and habits, and the unwillingness of the central government to impose a common accounting framework will be major hurdles to designing sound projects.

As the locus of Bank activity shifts toward subnational governments, we will need to develop tools and relationships for systematic assessment of potential local government partners. Reviews of provincial and district management of public resources are expected to be an important cross-sector activity of the country team during the coming year.

### **Sustaining Economic Recovery and Quality Growth**

The elimination in 1997 of local taxes and fees that were a barrier to domestic trade risks being reversed by local governments eager to supplement their resources. Maintaining open internal trade, however, is a very important, pro-rural poor task. The Bank will stay engaged on this, using ASEM resources and policy dialogue.

Assisting the central government in defining new directions for rice and food policy will be another priority. We are continuing to advise against import controls and higher tariffs, and we are supporting a shift from the current floor price policy to a procurement price policy. Building productivity-enhancing measures into the strategy will also be important. Analytical work and

policy dialogue will be the Bank's main involvement, including cooperation with USAID-financed policy work, which has more resources than the Bank.

Improving access to secure possession of land is a third component. The Bank's efforts will be to assist on both broader land policy issues and on support of land administration improvement.

The Bank is also providing policy advice on strengthening microfinance in rural areas—building sustainable microfinance institutions rather than the recent resurgence of subsidized program credits aimed at specific sectoral clientele, improving geographical access, and strengthening the regulatory framework and implementation.

Public spending on infrastructure maintenance has declined in the past few years. Private sector participation is expected to be slow because of a poor investment climate, and public investment capacity is low. Decentralization is expected to complicate the management of infrastructure, and responsibilities will have to be clarified. Meanwhile, service standards and investments may deteriorate further, and interregional linkages may suffer. The Bank will increasingly focus on the regional level and work with receptive local governments on improving capacity and supporting basic investments in upgrading of existing facilities. Assistance will be provided to programs to improve local governance and accountability. For community-level investments, more authority for priority setting and implementation will be decentralized to villages.

### **Sustainable Natural Resource Management and Environmental Protection**

Indonesia faces an immediate crisis in natural resource management because of unsustainable levels of resource extraction. The key resources are water, forests, coastal resources, and biodiversity. Improved resource management would include better definition and security of resource rights.

Forests are a major and a contested resource. Over 70 percent of the country's land is formally in the public domain, but the forest resource is rapidly disappearing under the pressure of illegal extraction, rent-seeking, government mismanagement, and lack of a strategic vision. Addressing this mismanagement is important for generating more equitable growth, slowing degradation of the environmental benefits provided by forests, and alleviating social conflict arising from the trammeling of local communities' and indigenous peoples' traditional rights. The recent government opening to policy reform, under consistent urging from donors via the CGI, has resulted in some first steps, but there is as yet no self-sustaining momentum. Powerful industrial interests and an old-guard bureaucracy are obstacles to reform.

Indonesia's biodiversity assets are a valuable national asset and an important source of livelihood. The

economic crisis has led to further exploitation of these resources (including illegal local and national government licensing of logging in national parks). Poor communities, meanwhile, often resort to harvesting timber in times of economic hardship. The government's decentralization program may have a negative impact on protected areas, given local desires to develop such areas for mining and other resource extraction activities.

Contested rights to land and forest resources and an inadequate legal and institutional framework for resolving these conflicts are rapidly emerging as major constraints to sound natural resource management. Failing to address these constraints will accelerate unsustainable exploitation for short-term profits and dampen private investment in more sustainable uses. Even in farming areas where land rights are mostly uncontested, only a small fraction of land is properly titled, limiting both its use as collateral and any incentive to make investments with a longer-term payoff.

In support of land administration reform, the Bank has financed a Land Administration Project as the first phase of an effort to title most agricultural land. Reform is bringing fundamental changes which must be taken into account in a second Land Administration Project: decentralization of land administration to local governments, land titling activities in islands other than Java, and a resolution of conflicts over land rights arising from the government's public plantations, private investment in tree crops, migration, and policies on the licensing of forest users.

Land policy reform is complex and contentious. Conflicts over land use and rights assignments have erupted, and finding mechanisms to resolve these conflicts is important because of their impact on social stability, rural investment, natural resource use, and the lives of indigenous peoples. A participatory approach will be needed to develop the institutions and mechanisms capable of resolving these conflicts and for identifying and registering community lands equitably.

Water is an increasing constraint to economic growth. An increasing number of Indonesia's watersheds are the scene of water quality deterioration and intersectoral competition for limited quantities. Bringing economic incentives to bear on quality and allocation decisions within a strengthened regulatory and institutional framework is critical. This agenda is the goal of the Bank's Water Sector Adjustment Loan (WATSAL). Completing the WATSAL policy reforms is taking longer than anticipated and implies an additional investment that will include support for river basin management.

Through the COREMAP project, the first phase of a three-phase APL, the Bank is supporting the building of local government capacity to protect coral reefs and the development of a national coral reef policy and strategy.

### **Delivering Better Public Services to the Poor**

Diversification and decentralization of rural institutions is vital to rural growth and agricultural productivity after years of state control and the stunting of representative rural organizations. The Bank is working with cooperatives, other farmer associations and community groups, and providers of public services on this problem.

Decentralization of public services, especially agricultural research and extension, needs continued support to achieve greater responsiveness to farmers' priorities. The Bank is supporting the decentralization of agricultural research through the Agricultural Research Management II Project. Improving the capacity of extension services, which are being decentralized to the district (Kabupaten) level, is the focus of the Decentralized Agriculture and Forestry Extension Project.

Decentralizing the management of irrigation systems to autonomous and democratically run water user groups is being complemented by reform and strengthening of irrigation services in the public sector. Irrigation service fees are now being retained by water user groups instead of being sent to local government. Innovations are being introduced and tested through an ongoing project, and future lending is in the work program.

The development of dynamic and representative farmer organizations will be essential to producing better agricultural policies and delivery of services. Public sector priorities suffer from inadequate awareness of rural constituencies, a weakness resulting from the young shallow roots of representative farming organizations. Up until a few years ago, rural organizations were co-opted to the purposes of the central Government and farmers participation was limited to usually ineffective KUD (cooperatives). New organizations are needed to cement the shift of incentives in public research and extension delivery to the real needs of farming communities and to prevent a return to marketing monopolies and input policies that benefited a privileged few. Through an IDE, the Bank is supporting a national process of participatory input to revisions of the national law on cooperatives to assist the emergence of true cooperatives with accountable leadership. Using rural development projects, the Bank is working at the village level to support local participation in the setting of development priorities, activity planning, and implementation of those activities.

### **Building Accountable National Institutions**

This section covers items not normally dealt with in rural development strategy but which, in Indonesia's current context, are fundamental to the building of a foundation for rural development. Action is required at the national level on legal and judicial reform, civil service



*Fishing in coastal areas.*

reforms, improved financial management and public procurement, and central government management of its decentralization program. Our success in delivering rural development projects in a decentralized environment will depend heavily on progress in these areas.

### **Areas of Strategic Emphasis for Other Donors**

The ADB is concentrating on rural empowerment and an increase in agricultural productivity through technical improvements, market development, capacity building, and small-scale infrastructure. Japan (JBIC, JICA) is providing large program credits to the agricultural sector to finance irrigation system improvements and extension agent mobility, among others.

The Bank is a key catalyst for donor groups that are forging a united stance on water and forestry policy issues and investment approaches. The ADB is focusing on coastal and marine resources, and decentralized resource management. AusAID is providing technical assistance for land administration reform and land management decentralization.

Decentralization and community development are active areas for many donors. The ADB is supporting projects in various provinces, while other donors such as the GTZ, CIDA, USAID, and DFID operate on a smaller scale or with a specific focus on such matters as livestock services, dryland agriculture, and irrigation user groups.

There is active donor involvement in building rural microfinance, but this is not yet being done in a coordinated fashion. The ADB has several projects that will link rural self-help groups with formal banks. It is also active in small- and medium-sized enterprise (SME) sector promotion, including efforts to correct financial services constraints. The GTZ is assisting the central bank in strengthening the institutional and regulatory framework for small rural banks. USAID is also providing technical assistance on micro-finance to the Central Bank.

**Table 4: Rural Vision to Action Update for Indonesia Strategic Actions to Support Rural Development**

| Goals and Objectives                               | Components/Preconditions   | Bank Group Instruments  | Other Donor Instruments   | Progress Indicators/ Benchmarks |
|--|--|---|---|---------------------------------|
| A. Sustaining economic recovery and quality growth |  |   |   |                                 |
| <b>Promote rural poverty alleviation</b>           | <ul style="list-style-type: none"> <li>• Encourage local revenue decisions that limit deterioration of the business environment</li> <li>• Implement pro-poor rice price policy</li> </ul> | <ul style="list-style-type: none"> <li>• Monitoring (ASEM grant), policy advice</li> <li>• Policy advice and CAS element (indicator of an adequate poverty strategy for moving to a high lending case)</li> <li>• High case: set medium-term direction of rice policy: (i) shift from floor price to procurement price, (ii) establish inter-departmental policy team, (iii) prepare strategy for future rice policy, including price and trade policies, role of BULOG, and productivity-enhancing measures for farmers</li> </ul> | <ul style="list-style-type: none"> <li>• Farm gate prices of commodities as share of world price</li> <li>• Price of rice to consumers; tariff level; shift to procurement price</li> <li>• Number of new land titles processed</li> </ul>  |                                 |
|  | <ul style="list-style-type: none"> <li>• Maintain open internal trade</li> </ul>   | <ul style="list-style-type: none"> <li>• Base case: maintain open rice trade, with moderate tariff protection and no domestic restrictions</li> </ul>   | <ul style="list-style-type: none"> <li>• AusAID preparing a second phase of technical assistance in support of land administration. USAID is providing ongoing support through its National Resource Management project for strengthening community mapping and rights identification for forestry land</li> <li>• ADB - leadership on SME finance via TA and lending; supervision of ongoing microfinance and P4K projects</li> <li>• Public promulgation of a strategy</li> <li>• Reduction of budget support for subsidized program credits</li> </ul> |                                 |
|  | <ul style="list-style-type: none"> <li>• Expand access to financial services</li> </ul>  | <ul style="list-style-type: none"> <li>• ESW/TA</li> <li>• SPN of existing portfolio of community-based projects (NAATP, SAADP, BRDP) that involve revolving microcredit activities</li> </ul>  | <ul style="list-style-type: none"> <li>• Improve the rights of the poor to own land and improve village authority over natural resources</li> <li>• Establish a strategy that focuses on developing a market-based financial system and decreases reliance on subsidized program credits</li> </ul>   |                                 |

**Table 4: Rural Vision to Action Update for Indonesia Strategic Actions to Support Rural Development (Continued)**

| Goals and Objectives                               | Components/Preconditions   | Bank Group Instruments  | Other Donor Instruments  | Progress Indicators/ Benchmarks   |
|--|--|---|--|---|
| A. Sustaining economic recovery and quality growth | <ul style="list-style-type: none"> <li>Complete BRI's reorientation to focus on micro- and small-scale finance</li> <li>Strengthen the regulatory and supervisory framework</li> </ul>   | <ul style="list-style-type: none"> <li>IFC support to micro-finance institutions, SME facilities, and SME-focused banks</li> </ul>  | <ul style="list-style-type: none"> <li>GTZ ongoing PROFI project supporting Bank Indonesia in strengthening the regulatory framework for Bank Perkreditan Rakyat (BPR)</li> </ul>  | <ul style="list-style-type: none"> <li>IDCF operational</li> <li>National forest program formulated</li> <li>Urgent actions taken</li> </ul>  |
| <b>Sustainable Natural Resource Management</b>     | <ul style="list-style-type: none"> <li>Implement CGI forestry commitments</li> <li>GEF long-term support if political commitment is demonstrated</li> <li>Institutional- strengthening LIL</li> <li>Strengthen marine resource management</li> </ul> | <ul style="list-style-type: none"> <li>AAA/Donor Coordination</li> <li>DFID Secondment</li> <li>GEF long-term support if political commitment is demonstrated</li> <li>Institutional- strengthening LIL</li> <li>COREMAP</li> <li>IDF Grant to DKP</li> </ul> | <ul style="list-style-type: none"> <li>TA loans and grants and institutional strengthening programs (EU, JICA, DFID, USAID, GTZ, others)</li> <li>COFISH Project (ADB); Marine Resources Loan (ADB); COREMAP (ADB, AusAID); Proyek Pesisir (USAID); JICA coral reef project</li> </ul> | <ul style="list-style-type: none"> <li>DKP fully operational</li> <li>COREMAP Phase I satisfactory</li> <li>COREMAP Phase II goes ahead</li> <li>COREMAP Phase I satisfactory</li> <li>COREMAP Phase II effective</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>Public participation in effective forest and protected area management</li> <li>Water—establish policy framework for river basin management and irrigation management</li> </ul>                              | <ul style="list-style-type: none"> <li>Various</li> <li>Kerinci Seblat ICDP</li> <li>Forestry AAA</li> <li>Land Policy AAA</li> <li>Decentralized, demand-driven projects</li> </ul>  | <ul style="list-style-type: none"> <li>SPN—piloting of new approaches through the JIWRMP</li> <li>LEN—new National Water Resources Program consistent with the WATSAI framework</li> </ul>   | <ul style="list-style-type: none"> <li>Improved access to resources</li> <li>Secure tenure for resources</li> <li>Removal of nonforest land from "forest estate" for use in agroforestry, social forestry</li> <li>Intensive replanting programs</li> <li>Post-WATSAI investment phase is being closely coordinated through a local donors group that includes ADB, EU, JICA, JICA, FAO, GTZ, Netherlands</li> <li>Completion of WATSAI agenda</li> </ul> |

| Goals and Objectives  | Components/Preconditions  | Bank Group Instruments  | Other Donor Instruments  | Progress Indicators/<br>Benchmarks  |
|---|---|---|--|---|
| <b>B. Delivering better public services for the poor through local government and community empowerment</b> |   |   |  |   |
| Demand-responsive delivery of public goods and services to empower rural communities                        | <ul style="list-style-type: none"> <li>Empirically determined mix of demand and supply side policies centered on improving provider-client interactions; local resource mobilization with targeted central subsidies</li> <li>Improve incentives for demand orientation of public good providers through civil service reform and introduction of competition through use of nongovernment providers</li> <li>Sector-by-sector analysis and stakeholder consultation to work out appropriate level of government for planning and administration of services</li> </ul> | <ul style="list-style-type: none"> <li>AAA - work on a sectoral and cross-sectoral basis, e.g., provincial public expenditure reviews sector surveys and impact studies</li> <li>LEN - Community Demanded Development Projects; SILs that are province based, district and facility focused with institutional features, e.g. LAP2; provincial adjustment loans.</li> </ul> | <ul style="list-style-type: none"> <li>Local Government Capacity Building; ADB is addressing via a community development project; GTZ/USAID/CIDA study is supporting analytical work and strategy formulation for local capacity building</li> <li>Participatory planning; many donors are using, including IFAD, ADB</li> </ul> | <ul style="list-style-type: none"> <li>Use of government services.</li> <li>Effective use of non-government service delivery</li> </ul> |

**Box 7**

# PHILIPPINES

**PROFILE OF THE RURAL POOR**

Poverty in the Philippines is a largely rural phenomenon. The rural poor account for about 77% of the poor. While agriculture-dependent households represent only 40% of the total population, the sector accounts for over 2/3 of the poor, simply because poverty incidence is higher in agriculture than in any other sector of the economy. 72% of the poor were found to live in rural households in 1997.

Poverty appears positively correlated with household size. There are pronounced regional differences in poverty rates, reflecting only in part differential levels of urbanization and reliance on agriculture for income. The poverty headcount ranges from 3.5% in Metro Manila to 87.5% in Sulu province in ARMM.

There has been some concern that inequalities have been widening in the Philippines in recent years. Average living standards are significantly higher (twice) and poverty levels are significantly lower in urban areas (1/3).

**RURAL HEALTH**

A recent draft report by Department of Health (DOH) concludes that overall healthcare provision is inadequate for the needs of the country. According to DOH report, 10% of the doctors, dentists and pharmacists, 20% of nurses and medical technicians, and 35% of nurses practice in rural areas in the Philippines, where the vast majority of the poor live. While there are negligible rural-urban differences in infant mortality among the poor, the poorest in rural areas experience higher child mortality.

**RURAL EDUCATION**

Education standards are fairly high. Of the population over 15, 90% are literate. In 1990 some 99% of children of the relevant age were enrolled in primary and 73% in secondary schools. There is a fairly high level of tertiary education: 27% of the relevant group were enrolled in 1990. This national figure also conceals the familiar disparity between Manila and the poorer provinces: in the former, nearly 100% complete their primary education; in the latter, only around 30% do so. The percentage who are functionally literate is slightly higher for women (74%) than for men (72.9%). Women in the urban areas have higher functional literacy rates than rural women (83.9% Vs 66.8%).

**RURAL INFRASTRUCTURE**

Although average road density is comparatively high, at 2.35 km per 1,000 people, there is a very wide disparity between regions, the NCR having the highest density and parts of Mindanao the lowest. Less than half the network is all-weather; only 17% of all roads are paved with concrete or asphalt.

**LAND AREA:** 300,176 sq km, of which 53% is classified as forest (although only 21% is under forest cover) and 34% is under agricultural cultivation

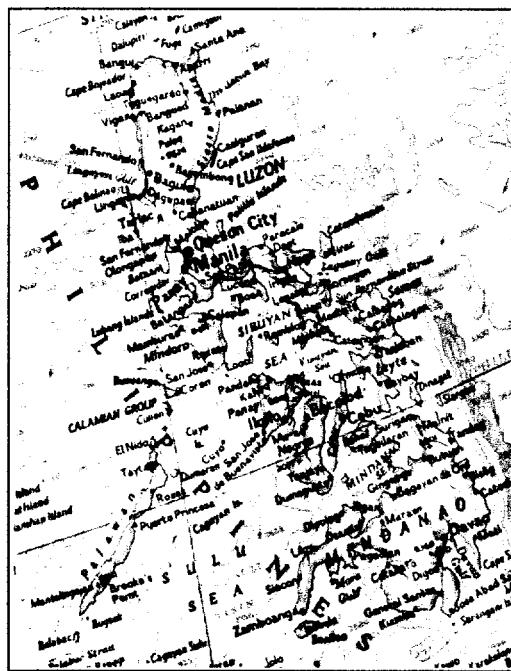
Population: 76.37m (average for first half of 1999: official estimate)

**MAIN TOWNS: POPULATION IN '000, 1995**

| Metropolitan Manila (National Capital Region) | 9,454 |
|---|-------|
| of which:                                     |       |
| Manila (capital)                              | 1,655 |
| Quezon City                                   | 1,989 |
| Kalookan                                      | 1,023 |
| Makati  | 484   |
| Davao   | 1,007 |
| Cebu  | 662   |
| Zamboanga                                     | 511   |
| Cagayan de Oro                                | 428   |
| Bacolod                                       | 402   |
| Iloilo  | 335   |

**GDP AND SECTORAL GROWTH, % P.A.**

|              | 1980-90 | 1990-98 | 1998 | 1999 |
|--------------|---------|---------|------|------|
| Agricultural | 1.0     | 1.5     | -6.6 | 6.6  |
| Industry     | -0.9    | 3.6     | -1.9 | 0.5  |
| Services     | 2.8     | 3.8     | 3.5  | 3.9  |
| GDP          | 1.0     | 3.3     | -0.5 | 3.2  |



**LANGUAGES:** Tagalog, English, and Spanish; many local dialects

**THE AGRICULTURAL SECTOR**

Although the Philippines produces a wide range of crops and exports, many of them in significant quantities, agriculture is dominated by rice and coconuts.

**Forestry:** Continuous resource depletion has resulted in a continuous decline in forestry production since the early 1970s. The sector accounted for under 0.5% of GDP in the early 1990s but as little as 0.06% in 1997, when total export earnings from forestry products were only \$45 million, compared with \$261 million nine years earlier.

**Fishing:** Fishing is an important sector, contributing around 3 times as much as mining to GDP, employing some 1.8 million people, and providing an important and growing source of foreign earnings. Sustenance fishing registered a decline of 171,000 tons from 1992-97 which reflects overfishing of inshore waters.

| Indicators                   | 1993            | 1997 |
|------------------------------|-----------------|------|
| Mortality rate (1,000) birth | 40              | 35   |
| Life expectancy (yrs)        | 65/a            | 68   |
| Access to safe water %       | 83              | 83   |
| Access to safe water (R)%    | 68 <sup>b</sup> | 81   |
| Access to safe water (U)%    | 81 <sup>b</sup> | 91   |
| Access to sanitation %       | 72              | 77   |
| Access to sanitation (R)%    | 66 <sup>b</sup> | 64   |
| Access to sanitation (U)%    | 76 <sup>b</sup> | 88   |

<sup>a</sup> 1990,

(R) Rural

<sup>b</sup> 1988,

(U) Urban

**P**overty in the Philippines is pervasive and is predominantly a rural problem. The absolute poor constitute about one-third of the total population, with two-thirds of the poor located in rural areas and with about 50 percent of the rural population numbered among the absolute poor. Reducing poverty remains a formidable challenge, given the relatively high population growth rate and geographic unevenness in economic growth. The agricultural sector has only grown about 2 percent a year over the past 20 years and the gap between rural and urban incomes has been growing larger. The vast majority of the rural poor engage in farming and artisanal fishing. The agriculture sector accounts for nearly 20 percent of the country's GDP, employs about half of the labor force, and generates about 10 percent of exports. Hence, improved performance in the rural sector is vital for the reduction of poverty, especially given that the industrial sector has a poor record of generating employment and that much of the country's economic potential lies in agroprocessing.

The other problem contributing to pervasive rural poverty is the deterioration of the country's natural resources, particularly in the uplands and coastal areas where the majority of the absolute poor live. This group includes indigenous peoples, upland farmers, landless farm workers, and artisanal fisherfolk. Key issues include: old growth forests, the destruction of which have been reduced from about 10 million ha in 1950 to about 0.8 million ha in 2000; low-input shifting agriculture which has severely degraded the uplands; and rampant illegal overfishing, destruction of coral reefs (only about 5 percent of the reefs yielding 10-15 percent of fish production are in excellent condition); and degradation of mangrove areas.

Rural development and poverty alleviation are top priorities of the government of the Philippines (GOP), as reflected in its Medium Term Philippine Development Plan (1999-2004). Accelerating environmentally sustainable rural development is also a core element of the Bank's Philippines Country Assistance Strategy (issued in May 1999 and reconfirmed in an ongoing mid-term review of the CAS). Two recent Bank sector reports discuss the pertinent issues and strategies ("Promoting Equitable Rural Growth", May 1998, and "RD/NRM Trends, Strategy Implementation and Performance Indicator System", May 2000). The Bank has been working closely with the GOP and with other donors to address the obstacles which have hindered agricultural sector growth and progress in reducing rural poverty. Bank assistance is directed to removing four constraints: (a) low agricultural growth; (b) the low amounts and impact of public and private investments, with limited participation of, and benefits to, marginalized groups; (c) unsustainable natural resource use; and (d) fragmented institutional roles and weak capacities. In line with the thrust of the CAS, about one third of the Bank's lending portfolio in the Philippines supports key elements of the

rural sector strategy. Currently, there are nine RD/NRM projects with total commitments of nearly US\$1 billion.

#### **Areas of Strategic Emphasis**

Although the Bank has supported the agriculture and natural resources sector of the Philippines for more than three decades, Bank-financed assistance has constituted only a small percentage of total public investment in the sector. It is generally recognized (based on feedback during CAS consultations and Vision to Action assessment in mid-1999) that the Bank's role is significant and catalytic. Its updated rural sector strategy emphasizes the following elements (summarized in Table 6, which also shows key performance indicators):

**Deepening of Structural/Policy Reforms.** Although the government has adopted increasingly sound sector policies, it has an uneven track record on implementation. Accordingly, the Bank is placing emphasis on removing key distortions and thus enabling the sector to be more efficient, more competitive and more diversified. Components of Bank assistance (mostly in the form of nonlending assistance) include:

**Grain Sector Reform.** Price and marketing distortions still affect basic food commodities (rice, corn, and sugar). The ADB is supporting a policy-based Grain Sector Development Project while the Bank (in a secondary role to ADB) is working on the formulation and implementation of relevant policy reforms, such as reduction of tariff levels and restructuring of the National Food Authority.

**Land Reform.** The Bank carried out a sector study of rural and urban land policies and institutional issues that led to the formulation of a LIL as part of a land and management program to provide secure tenure rights to vulnerable groups. The Bank is also helping the GOP to implement its lagging land reform program by supporting a feasibility study for implementing several Land Reform pilots and parallel Land Reform policy research work.

**Rural Finance Reforms.** The Bank continues to provide policy advice on rural finance, especially given the divergence between the GOP's national credit policies (such as Executive Order 138) and their implementation (in the name of assisting the rural poor). Bank assistance in this area will continue, given the need to enhance the impact of two ongoing rural finance projects (RF II and III) being implemented by the Land Bank of the Philippines.

**Budgetary Reforms.** There is a large divergence between stated RD/NRM strategies and actual budgetary prioritization, reflecting deeper weaknesses in the government's budgetary processes. The Bank is supporting an interagency initiative to operationalize an improved performance indicator system that links budgetary allocations to sector and agency performance.

**Natural Resource Management Reforms.** There is inconsistency between the GOP's resource management policies and its practices. The Bank is using both dialogue and lending to help establish a consistent forest management policy (e.g., CBRMP), protected area management policy and user charges (e.g., Coordinating Council of the Philippines Assistance Program -CPPAP) and sound institutional arrangements for river basin and watershed management (e.g., WRDP and proposed River Basin and W/S Management Project).

**Expanding Access of the Rural Poor to Productive Assets.** The GOP has been carrying out a major land reform program and reforming its rural finance policies to enable more smallholders, the landless, and other marginalized groups to obtain access to land, but progress is slow. The Bank's assistance includes support for the following:

**Agrarian Reform.** The Bank has been supporting smallholder productivity gains and income increases by financing the provision of essential rural infrastructure and support services (e.g., ARCDP I). Our assistance is being shaped into a more integrated and strategic approach to expediting the lagging land reform program by supporting community and market-driven approaches to reform.

**Land Administration and Management.** Earlier sector work led to an initial pilot project (LAMP/LIL) to expedite the issuance of secure land titles for marginal groups in urban and rural areas by streamlining the institutional framework.

**Rural Finance.** The Bank's current support in this area (e.g., RF II and II) is constrained by the GOP's deficient implementation of sound rural finance policies, resulting in noncompliance with the projects' financial covenants. Efforts will be made to address the policy and institutional constraints to implementing sustainable microfinance interventions that will expand the access of marginalized groups to credit.

**Promotion of Targeted and Community-Driven Programs.** Virtually all of the ongoing and proposed Bank-financed projects in the rural sector use community-based approaches. The Bank is laying the groundwork for expanding its assistance to Mindanao through support for a multisectoral rehabilitation program as part of postconflict assistance. The Bank's rural sector team is assisting the GOP in the planning process by supporting a social assessment in Mindanao. The priority components include:

**Expanded Rural Infrastructure.** Several projects will provide key infrastructure, especially farm-to-market roads (ARCDP, MRDP) and irrigation water supply (e.g., IQSP II, WRDP, MRDP). Support of social infra-

structure such as education and health facilities, is limited to a social fund project in Mindanao. Most of these projects are cost-sharing arrangements, with operation and maintenance responsibilities lodged with local governments and communities. A proposed APL for river-basin and watershed management would implement an integrated river-basin approach to water resources management.

**Enhanced Smallholder Productivity.** Several projects are promoting smallholder productivity and diversification by way of improved agricultural technologies, stronger research and extension activities, and private sector-driven market linkages (e.g., MRDP, ARCDP I).

**Enhanced Natural Resource Management.** Better management of natural resources will have a long-term impact on rural incomes, and the livelihood components of the projects mentioned below will contribute to higher incomes in the short to medium terms thereby easing pressure on the natural resource base. The GEF-financed Protected Areas Project (CPPAP) is supporting an innovative partnership of NGOs, the Department of Environment and Natural Resources, and local communities to establish protected-area management zones and instruments. The implementation experiences of the ENR-SECAL and the CPPAP are providing the basis for this work. The Bank's ongoing support for the initial phase of a community-based resource management program (CBRMP) will enable rural communities to design and implement priority subprojects.

**Strengthening Institutional Arrangements and Capacities.** The Bank is using both nonlending and lending assistance to promote urgently needed institutional reforms and to strengthen the implementation capacities of participating agencies and partners. Key components include support for:

**Performance Indicator System.** The Bank is supporting the GOP's ongoing effort to operationalize a performance indicator system for the rural sector. The system would help to formulate, implement and monitor an appropriate mix of interventions that would result in rural poverty reduction. Other donors (e.g., GTZ) are being mobilized to provide technical assistance for this work.

**Capacity Building.** All Bank rural development projects include capacity-building assistance for participating agencies and stakeholder groups (NGAs, local government, community organizations, cooperatives), mostly in the form of in-service training. Coordination with other ongoing capacity-building programs is necessary to minimize overlap and help create synergy.

**Institutional Roles.** All ongoing and proposed Bank-financed projects will help to intensify decentralization of

authority by giving expanded planning and implementation responsibilities to local governments, and by improved cost-sharing arrangements. This strategy will empower communities to become integrators of program implementation, at the local level, while national agencies shift their role to one of providing technical advisory services.

#### **Areas of Emphasis of Other Donors**

A large number of donor agencies including ADB, UNDP, FAO, EU, IFAD, AusAID, CIDA, JBIC, USAID, Sweden, and the Netherlands are providing rural sector assistance to the Philippines. There is active dialogue and exchange of information, with regular exchanges on areas of special attention (e.g., agrarian reform, Mindanao). Most of the donors intend to provide of targeted assistance to marginalized groups, with increasing emphasis on community-driven projects. Most donors support the GOP's Agrarian Reform Communities Program.

Financial assistance to the GOP for rural development is provided mainly by the World Bank, the ADB, and Japan (about 95 percent of total ODA to the Philippines over the past three years). JBIC and ADB place major emphasis on financing rural infrastructure (especially irrigation and rural roads). The UNDP is giving special emphasis to post conflict capacity-building in Mindanao, as in Canada's CIDA. USAID is providing technical assistance to promote private sector investment in Mindanao, expand NGO/community roles in natural resource management, and improve local government governance. The GOP's budgetary constraints (which are expected to become more apparent over the next two years), weak implementation capacity, and constraints on donor administrative budgets will reinforce the need for donor collaboration and complementarity.

#### **Lessons Learned**

Implementation of the Bank's assistance program in the Philippine rural sector has produced the following lessons.

- Intensify efforts to design and implement projects (including small-scale rural infrastructure) that give priority to community-driven approaches to poverty reduction.
- Community-driven delivery mechanisms need to be worked out, and fine-tuned according to implementation experience. Sustainable arrangements and results do not occur overnight, and proactive approaches need to be taken to strengthen the capacity of local government units (LGUs) and rural communities to take the lead in rural development. This also implies changing the role of national government agencies from front-line implementers to providers of technical support; this will require a change in the mindset of national agency management and staff.
- Appropriate mechanisms for channeling funds to LGUs and rural communities are vital to ensure

timely and efficient implementation.

- There is need for a consistent approach to rural development issues by government agencies.
- While the Municipal Development Fund Office (MDFO) provides a possible mechanism for more orderly funding of devolution, there is a lack of clear strategic vision on the links with NGAs. Hence, there is an urgent need for the GOP to clarify this strategic mechanism. Cost-sharing between national government agencies, LGUs and rural communities will play a key role in ensuring local ownership and sustainability.
- Most of the projects that include activities to expand access to rural financing are experiencing implementation difficulties. Some of the underlying constraints involve the need for a sound policy environment for rural finance (e.g., full and effective implementation of EO 138, including nonsubsidized interest rates, the phasing-out of directed credit programs, suitable and credit insurance schemes, and a level playing field among financial intermediaries. One approach would be to use Bank projects to facilitate improved access to rural finance rather than provide finance directly by strengthening the ability of financial intermediaries, farmer organizations, and other borrowers to prepare bankable projects.
- Some infrastructure components targeted to the poor should be financed through grants rather than requiring cost recovery by means of an elaborate credit recovery system. Social and economic infrastructure, if "owned" by rural communities, is a valuable source of employment and can help trigger other self-reliant strategies by local communities. (In certain cases, through credit recovery in-kind managed by a suitable local institution might be a preferable approach).
- Projects that rely on interagency coordination usually experience great difficulties, but avoiding interagency coordination is not a panacea because many rural development issues require effective interagency activities.
- LGU capacities need to be strengthened so that they are a more effective in assuming devolution responsibilities and coordinating inputs from NGAs, NGOs, and other service providers.
- Interagency coordination committees play an important role in resolving bottlenecks. Senior representation on the committees and continuity in agency representation are vital. Agency management should provide clear signals to staff and recognition for good performance by staff.

Table 5 outlines major achievements and operational lessons of the Philippines CAS.

#### **Internal Operational Issues**

Implementation of Bank's projects raises a number of is-

sues which need attention during the course of updating our assistance strategies and activities for the Philippines.

1. The Bank's safeguard policies have implications regarding approaches to key issues. Given their interpretation by the Bank's elaborate internal review system, it is possible that the safeguard policies are having the unintended effect of causing Bank staff to avoid tough strategic issues.
2. Budgetary cutbacks and other Bank constraints may severely limit funding for nonlending assistance, policy dialogue, and the Bank's catalytic role in supporting strategic reforms.
3. There is still scope for maximizing the potential

benefits of the Bank's decentralization strategy in terms of providing more proactive assistance to clients and in scaling down operational costs for portfolio management, pipeline development, and nonlending sector work. Such a decentralization strategy is linked to improved use of local skills and relevant cross-country practices on strategic issues, such as land reform.

4. There appear to be weak linkages and interactions between sector/strategy/nonlending work and portfolio management, pipeline development, and lending activities. These linkages need to be strengthened.

**Table 5: Progress on Key Philippines CAS Themes**

| Key Themes        | Main Achievements<br>(show link with CAS strategic objectives)  | Lessons Learned  |
|-------------------|---|--|
| Capacity Building | <ul style="list-style-type: none"> <li>MRDP: efforts focused on synchronizing and integrating local and national rural development planning and budgeting processes; enhancing LGU and community capacities on local planning and resource allocation skills, rural contract management and implementation.</li> <li>CBRM: enhancing LGU capabilities in preparing and implementing NRM sub-projects, utilizing community-based approach; improving NRM technical skills of LGUs by facilitating effective technical assistance service delivery from DENR, DA/BFAR, to LGUs and communities/beneficiaries.</li> <li>CPPAP: enhancing capabilities of communities on institutionalizing local protected area management. Boards and of major local stakeholders on protected area planning and management</li> <li>SZOPAD Social Fund: enhancing capabilities of communities on planning, contracting and implementing priority subprojects.</li> <li>ARCDP: enhancing capabilities of communities and farmer groups on resource prioritization in support of agrarian reform.</li> </ul> | <ul style="list-style-type: none"> <li>Capacity building efforts need to be institutionalized if sustainable outcomes and impacts are to be achieved from such investments.</li> <li>Learning-by-doing approaches are more suitable modes for capacity building.</li> <li>Capacity building efforts which are clearly linked to specific work-related outputs or local investments are more effective than stand-alone capacity-building efforts.</li> </ul> |
| Transparency      | <ul style="list-style-type: none"> <li>CBRM: Use of community billboards to indicate subproject costs, descriptions, and other details.</li> <li>CPPAP: Inclusion of all stakeholders (from the private and public sectors) in the PAMBs.</li> <li>MRDP: Mandatory inclusion of women and indigenous peoples in multisectoral committees that decide on local sub-project prioritization.</li> <li>SZOPAD: Use of billboards, internal and external supervisors, and beneficiary groups for contract supervision; took preventive actions to minimize corruption opportunities.</li> </ul>  | <ul style="list-style-type: none"> <li>Communities are the most effective and vigilant monitors against corruption and abuse, provided that they have adequate information and are engaged in the whole process of project identification, preparation, and design.</li> </ul>   |

| Key Themes   | Main Achievements<br>(show link with CAS strategic objectives)   | Lessons Learned  |
|--|--|--|
| Monitoring and Evaluation                          | <ul style="list-style-type: none"> <li>MTPDP Performance Indicator (PI) System: Conduct of several workshops among various stakeholders to assist in institutionalizing a PI system which will monitor status of implementation of priority RD/NRM strategies.</li> <li>MRDP: Completion of collection of baseline data for all year one subprojects before actual commencement of implementation; established M&amp;E systems at all levels of participating LGUs; pilot-testing of project MIS at the provincial and municipal levels.</li> <li>CBRM: Issuance of guidelines for collection of sub-project baseline data; ongoing efforts on establishing the project M&amp;E system and MIS.</li> <li>CPPAP: Drafting of Terms of Reference (TORs) for project impact assessment.</li> <li>ARCDP: Drafting of TORs and arrangements for project impact assessment, commencement of assessment by fourth quarter of 2000.</li> <li>SZOPAD: Preparation of TORs and arrangements for project impact assessment.</li> </ul>  | <ul style="list-style-type: none"> <li>Planners and budget officers need to be fully engaged in identifying and prioritizing PI system indicators.</li> <li>Communities and LGUs are the best sources of indicators by which project impacts can be gauged.</li> <li>LGUs are capable of generating reliable baseline data as long as they have been provided with simple and locally appropriate tools and on-the-job training.</li> <li>Arrangements for independent impact assessments need to be started early on (during design and implementation stages) to ensure collection of all required information.</li> </ul>   |
| Effectiveness of Partnerships with NGOs and Donors | <p>With NGOs:</p> <ul style="list-style-type: none"> <li>SZOPAD: Monitoring of first batch of completed subprojects as Bank's "external monitors"; participation in mid-term review and supervision mission (focusing on participation and O&amp;M); membership on the executive committee.</li> <li>MRDP: Social Assessment conducted in five (5) provinces; engagement of local NGOs to assist LGUs in community mobilization activities in relation to CFAD component.</li> <li>LAMP: Social assessment carried out.</li> <li>CBRM: Technical assistance to LGUs on subproject proposal preparation; resource speakers on various LGU capacity enhancement activities.</li> <li>CPPAP: Membership on the executive committee and PAMB; involvement in implementation of project.</li> <li>WRDP: Membership on watershed Management Steering Committee; involvement as irrigators' associations in construction/rehabilitation and O&amp;M of irrigation systems.</li> <li>CIDP II: Involvement as irrigators' associations in design, construction/rehabilitation, and O&amp;M of communal irrigation projects.</li> <li>IOSP II: Involvement as irrigators' associations in construction/rehabilitation and O&amp;M of irrigation systems.</li> <li>RFIII: Financial intermediaries for Grameen Bank replication.</li> <li>ARCDP: Involvement in farm systems development (FSD) plan formulation; provision of technical assistance on community organizing, enterprise development, savings mobilization, and credit.</li> </ul> <p>With Donors:</p> <ul style="list-style-type: none"> <li>LAMP: AusAID provided technical assistance for the project preparation activities; "bridging technical assistance" provided to ensure no gap in project implementation during delay in AusAID approval.</li> <li>ARCDP: Collaborated with donors on assessment of Comprehensive Land Reform Program (CARP) implementation.</li> </ul> | <p>With NGOs:</p> <ul style="list-style-type: none"> <li>Engagement of locally-based NGOs/ Peoples Organizations (POs) have produced better and faster results because of their familiarity with beneficiary-groups and the situation of project sites.</li> <li>NGOs have varying capacity and level of experience. In this the Bank should be very careful in assessing the strengths and weaknesses of these groups and engage them in areas/aspects where they have comparative advantage.</li> <li>Most NGOs not familiar with Bank's guidelines, policies, and procedures. Including them in selected capacity enhancement activities may lead to better partnerships and collaboration.</li> <li>Use of NGOs is not always a cheap way to go. However, they have their own comparative advantages—able to reach greater number of the population in remote areas and able to raise awareness and mobilize support of primary stakeholders.</li> </ul> <p>With Donors:</p> <ul style="list-style-type: none"> <li>Collaborating with other donors provides opportunity for maximization of resources.</li> <li>Partnership in specific activities produces better results and consistency in dealing with the government.</li> </ul> |

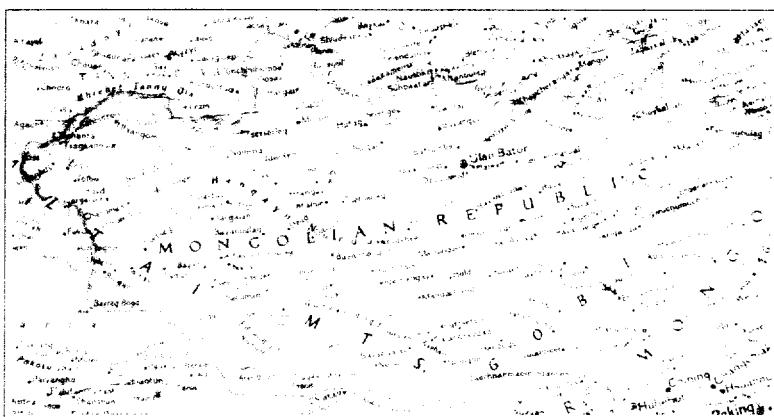
**Table 6: Rural Vision to Action Update for the Philippines**  
**Strategy Framework for World Bank Assistance in Rural Development**

| Strategic Objectives  | Priority Components/<br>Programs  | Performance Indicators   |  | World Bank Instruments<br>(L and NL)   |
|---|---|--|--|--|
|   |   | Rural Development Sector<br>Outcomes   | World Bank Assistance  |  |
| Promote priority structural/<br>policy reforms in RD/NRM<br>to support higher, competitive,<br>diversified, sustained,<br>and equitable rural development | Grain sector reforms<br><br>Land reforms<br><br>Budgetary reforms<br><br>Natural resource management<br>reforms | <ul style="list-style-type: none"> <li>Reduced tariff levels (of rice and sugar)</li> <li>National Food Administration restructured</li> <li>Supply and price of rice stabilized</li> <li>Agrarian Reform Law and modalities reformed</li> <li>Budget for land acquisition increased</li> <li>Performance-based, multiyear budget linked to medium-term plans</li> <li>Forest Management Policy updated and key recommendations adopted</li> <li>GOIP adoption of key institutional reforms and arrangements in water/irrigation sector</li> <li>Community-based resource management adopted as core policy</li> </ul> | <ul style="list-style-type: none"> <li>Rice/sugar and NFA policy studies/recommendations endorsed to executive and legislative branches.</li> <li>Community-driven, market-oriented modalities for land admin and transfer developed and piloted under WB-assisted programs.</li> <li>Pilot and scale-up performance indicator system.</li> <li>WB-financed projects to support strategic programs.</li> <li>Viable models for community-based resource management developed and scaled-up</li> <li>Protected area bills submitted to Congress</li> <li>NRM user charge framework adopted and implemented</li> <li>GOIP adoption of key institutional reforms and arrangements in water/irrigation sector for proposed River Basin &amp; W/S management</li> </ul> | <ul style="list-style-type: none"> <li>Policy note(s) and honor coordination (ADB) (NL)</li> <li>Policy note (NL)</li> <li>ARC DPP II (L)</li> <li>LAMP (L)</li> <li>DRF Task (NL)</li> <li>RD/NRM portfolio (L)</li> <li>CBRMP (L)</li> <li>WRDP and River Basin and W/S Mgt Project (L)</li> <li>CPPAP (L)</li> <li>RBWSMP (L)</li> <li>Policy Note (NL)</li> <li>RF-H &amp; II (L)</li> <li>ARC DPP I &amp; II (L)</li> </ul> |
| Expand access of rural peer to<br>productive assets   | Agrarian reform   | <ul style="list-style-type: none"> <li>Unified credit policy in place (and implementation of EO 138)</li> <li>Market-based interest rate policy in place</li> </ul>  | <ul style="list-style-type: none"> <li>CARPed vs. CARPable lands increased</li> <li>Actual beneficiaries increased</li> </ul>  | <ul style="list-style-type: none"> <li>Hectares covered under initial and scaled-up pilots</li> <li>Landless/benefited</li> <li>ARC DPP II (L)</li> </ul>  |

| Strategic Objectives  |   | Performance Indicators   |  |   |   |
|---|---|--|--|---|---|
|   |   | Priority Components/ Programs  | Rural Development Sector Outcomes  | World Bank Assistance   | World Bank Instruments (L and NL)   |
| Land administration and management  | <ul style="list-style-type: none"> <li>Surveyed vs. A&amp;D lands increased</li> <li>Titled vs. surveyed land increased</li> <li>Institutional reforms adopted</li> </ul> | <ul style="list-style-type: none"> <li>Land surveyed</li> <li>Land titled</li> </ul>   | <ul style="list-style-type: none"> <li>Beneficiaries able to access institutional credit and hectarage</li> </ul>  | <ul style="list-style-type: none"> <li>• LAMP L1L and follow-up phase (L)</li> </ul>  | <ul style="list-style-type: none"> <li>• LAMP L1L and follow-up phase (L)</li> </ul>  |
| Rural finance   | <ul style="list-style-type: none"> <li>Rural population with access to formal credit sources increased</li> <li>Credit recovery rates (formal credit)</li> </ul>          | <ul style="list-style-type: none"> <li>• Rural population with access to water resources increased</li> </ul>  | <ul style="list-style-type: none"> <li>Beneficiaries</li> <li>Watershed areas</li> </ul>   | <ul style="list-style-type: none"> <li>• RF II &amp; III (L)</li> </ul>   | <ul style="list-style-type: none"> <li>• WRSDFP/RB (L)</li> </ul>   |
| Water/irrigation  | <ul style="list-style-type: none"> <li>Rural infrastructure, including irrigation</li> </ul>  | <ul style="list-style-type: none"> <li>Road density increased in strategic areas</li> <li>Road maintenance improved</li> <li>Irrigated vs. irrigable increased</li> <li>Irrigation efficiency increased</li> </ul> | <ul style="list-style-type: none"> <li>Kilometers of roads</li> <li>Hectares irrigated (new vs. rehabilitated)</li> <li>Adequacy of O&amp;M</li> </ul>                           | <ul style="list-style-type: none"> <li>• ARCDP I/ II (L)</li> <li>• SZOPAD SF (L)</li> <li>• CBRMP (L)</li> <li>• WRDP and RBWMP (L)</li> <li>• MRDP (L)</li> </ul> | <ul style="list-style-type: none"> <li>• ARCDP I/ II (L)</li> <li>• SZOPAD SF (L)</li> <li>• CBRMP (L)</li> <li>• WRDP and RBWMP (L)</li> <li>• MRDP (L)</li> </ul> |
| Promote community-driven agriculture and natural resources programs targeted to poor/marginalized provinces/municipalities/groups                           | <ul style="list-style-type: none"> <li>Enhance smallholder productivity and diversification</li> </ul>  | <ul style="list-style-type: none"> <li>% cultivable area in nonrice commodities</li> <li>yield trends/growth rates</li> </ul>  | <ul style="list-style-type: none"> <li>% cultivable area in nonrice commodities</li> <li>yield trends/growth rates</li> </ul>  | <ul style="list-style-type: none"> <li>• ARCDP I and II (L)</li> <li>• MRDP (L)</li> </ul>  | <ul style="list-style-type: none"> <li>• ARCDP I and II (L)</li> <li>• MRDP (L)</li> </ul>  |
| NRM: protected areas; coastal areas; upland areas/watershed   | <ul style="list-style-type: none"> <li>Land-carrying capacity maintained</li> <li>Maximum sustainable yield maintained</li> <li>Forest cover increased</li> </ul>         | <ul style="list-style-type: none"> <li>Number of protected area bills submitted to Congress</li> <li>Hectares in critical zones being managed</li> </ul>   | <ul style="list-style-type: none"> <li>• PIS/PMS system pilot-tested and scaled up</li> </ul>  | <ul style="list-style-type: none"> <li>• CPAP (L)</li> <li>• CBRMP (L)</li> <li>• RBWMP (L)</li> </ul>  | <ul style="list-style-type: none"> <li>• CPAP (L)</li> <li>• CBRMP (L)</li> <li>• RBWMP (L)</li> </ul>  |
| Agricultural/rural enterprise   | <ul style="list-style-type: none"> <li>Business assets increased</li> <li>Expanded joint venture investments</li> </ul>   | <ul style="list-style-type: none"> <li>Business assets increased</li> <li>Expanded joint venture investments</li> </ul>  | <ul style="list-style-type: none"> <li>Business assets increased in rural areas</li> <li>Expanded joint venture investments</li> <li>Expanded access to rural finance</li> </ul> | <ul style="list-style-type: none"> <li>• ARCDP I and II (L)</li> <li>• MRDP (L)</li> <li>• CPAP (L)</li> <li>• CBRMP (L)</li> </ul>                                 | <ul style="list-style-type: none"> <li>• RD/NRM Portfolio</li> </ul>  |
| Strengthen institutional arrangements, coordination and capacities for planning and implementation, with emphasis on devolution and community participation | <ul style="list-style-type: none"> <li>RD/NRM Performance Indicator and Management System</li> </ul>  | <ul style="list-style-type: none"> <li>Resource allocation and efficiencies within sector improved</li> <li>Strategic value of agency programs enhanced</li> </ul>   | <ul style="list-style-type: none"> <li>PIS/PMS system pilot-tested and scaled up</li> </ul>  | <ul style="list-style-type: none"> <li>• PIS (IDF-funded) (NL)</li> </ul>   | <ul style="list-style-type: none"> <li>• PIS (IDF-funded) (NL)</li> </ul>   |
| Improve RD Portfolio Performance  | <ul style="list-style-type: none"> <li>Improved performance ratings and disbursement performance of ODA projects</li> </ul>   | <ul style="list-style-type: none"> <li>IP and DO performance ratings (100% = S)</li> <li>Improved disbursement performance of ODA projects</li> </ul>  | <ul style="list-style-type: none"> <li>IP and DO performance ratings (100% = S)</li> <li>Improved disbursement performance (at least 20% in 2001 and 25% in 2002).</li> </ul>    | <ul style="list-style-type: none"> <li>• RD/NRM Portfolio</li> </ul>  | <ul style="list-style-type: none"> <li>• RD/NRM Portfolio</li> </ul>  |
| Capacity-building   | <ul style="list-style-type: none"> <li>Efficiency of target institutions increased</li> </ul>   | <ul style="list-style-type: none"> <li>IGU and PO beneficiaries</li> </ul>   | <ul style="list-style-type: none"> <li>IGU and PO beneficiaries</li> </ul>   | <ul style="list-style-type: none"> <li>• CBRMP (L)</li> </ul>   | <ul style="list-style-type: none"> <li>• CBRMP (L)</li> </ul>   |
| Delineating institutional arrangements/roles (with emphasis on LGUs)  | <ul style="list-style-type: none"> <li>Intergovernmental working relationships improved</li> <li>Increased % of projects with sound cost-sharing</li> </ul>               | <ul style="list-style-type: none"> <li>Sound cost-sharing arrangements between NGAs, LGUs, and rural communities that are in place and functional</li> </ul>   | <ul style="list-style-type: none"> <li>Sound cost-sharing arrangements between NGAs, LGUs, and rural communities that are in place and functional</li> </ul>                     | <ul style="list-style-type: none"> <li>• CBRMP (L)</li> <li>• CBRMP (L)</li> <li>• MRDP (L)</li> </ul>  | <ul style="list-style-type: none"> <li>• CBRMP (L)</li> <li>• CBRMP (L)</li> <li>• MRDP (L)</li> </ul>  |

**Box 8**

# MONGOLIA

**NATURAL RESOURCE MANAGEMENT**

Mongolia is a landlocked and mountainous country, located in the northern part of the central Asia plateau. Mongolia's 1.6m sq. km land area includes mountain, forest, steppe and semi-desert regions. The country is mineral rich, with significant oil reserves and deposits of other ores. Most of the country is designated pasture land, where camels, horses, cattle, sheep, and goats are reared. Over 40% of the territory lies above the country's average altitude of 1,580 m and 80% above 1,000 m. Mongolia has an extremely severe continental climate which is the major constraint to agricultural production. Land quality is limited by desertification, which affects 30% of pasture, and by overgrazing, especially by goats.

**RURAL EDUCATION**

Under communism, both education and health were fully funded by the state. Hence, Mongolia has a pool of highly literate and well-educated people. Now education is provided by both the state and the private sector. The proportion of the state budget spent on education fell from 16.2% in 1994 to 14.7% in 1998, and rural education services have been particularly hard hit.

**RURAL INFRASTRUCTURE**

The most crucial transportation link is the Ulaanbaatar Railway, which moves freight and passengers into Russia, China and beyond. It serves the three largest industrial conurbations, Ulaanbaatar, Darkhan, and Erdenet. Transport within the country is limited by a poor road network, of which only 1,471 km was paved in 1996, by limited supplies of imported fuel, and by a national air carrier, MIAT. Roads, bridges, and airport and railway facilities have been refurbished and new ones constructed, mainly with external aid.

**PROFILE OF THE RURAL POOR**

During the initial period of transition to a more market-oriented economy, poverty was never a problem in the society. According to the 1995 Living Standard Measurement Survey, poverty, which had been unknown for decades, suddenly became a serious problem with 35-36% of the population living below the poverty line in 1995. The negative impact of poverty on social development became an important issue, creating illiteracy, lowering access to health services, and generally becoming the major obstacle for human development in Mongolia.

**POVERTY INDICATORS IN MONGOLIA**

|       | Head count index (%) |      | Depth Index (%) |      | Severity Index |      |
|-------|----------------------|------|-----------------|------|----------------|------|
|       | 1995                 | 1998 | 1995            | 1998 | 1995           | 1998 |
| URBAN | 38.5                 | 39.4 | 12.2            | 13.9 | 5.7            | 7.1  |
| RURAL | 35.1                 | 34.1 | 10.4            | 13.0 | 4.5            | 7.4  |
| TOTAL | 36.3                 | 35.6 | 10.9            | 11.7 | 4.8            | 5.6  |

**Land area:** 1,566,500 sq km

**Population:** 2.38m (January 5th 2000)

**Main towns: Population in '000 (1999)**

|                       |         |
|-----------------------|---------|
| Ulaanbaatar (capital) | 773,700 |
| Darkhan               | 84,800  |
| Erdenet               | 73,900  |

**Climate:** Continental with extremes of temperature. Weather in Ulaanbaatar (altitude 1,350 metres): rainy season, June-August; mean winter temperature, -20 C; mean summer temperature, 15 C but with wide daily fluctuations

**Language:** Mongolian

**Gross domestic product, (% real change)**

|             | 1996  | 1997 | 1998 |
|-------------|-------|------|------|
| GDP         | 2.4   | 3.3  | 3.5  |
| Agriculture | 10.0  | 4.8  | 3.0  |
| Industry    | 1.2   | 1.8  | 4.9  |
| Finance     | -16.9 | 1.3  | 4.8  |

**AGRICULTURAL SECTOR**

Agriculture, dominated by the livestock sector, remains an important sector of the economy. It contributes about 35% of the GDP and provides about 40% of total employment. Processing of agricultural raw materials accounts for nearly 20% of national industrial output while agricultural and agro-processed exports are an important source of foreign exchange earnings. Animal husbandry contributes 76% of the output of the sector and provides livelihoods for 153,000 households. Crop farming is of much less importance, being constrained by the severe climate which often permits only a 90-day growing season and frequently results in unfavorable weather conditions during the cereal harvest.

**RURAL HEALTH**

By 1998 infant mortality had fallen to 35.3 per 1,000 live births from 64.4 in 1990, and the overall death rate from 8.5 to 7.5 per 1,000 people per year. Government spending on health was cut after 1991. Rural health services declined and the poor cannot afford health insurance. Reforms are in progress to provide more primary care and preventive medicine, and better distribution of health workers. In a country of sparse population, adequate transportation is important for ensuring effective emergency services. At present sums have no ambulances and 70 sums are not able to use the vehicles they have because of lack of spare parts. Because of this emergency services are delayed or unavailable and the system of preventive check-ups by mobile doctors have been halted.

Mongolia embarked a difficult transition to a market-led economy in 1990, following 70 years under state socialism. Urban-industrial development during the central planning period led to a decline in agriculture's contribution to the national economy from around 60 percent in 1940 to 15 percent by 1990, and to a decline in the rural share of the total population, from 78 percent in 1956 (the first available census data) to 43 percent by 1990. The rural economy has always been dominated by livestock production, which in 1990 accounted for 73 percent of gross agricultural output, a decline from 99 percent in 1940. Trends in the rural sector are shown in the table.

**Rural Resurgence in the 1990s.** The pattern of development in Mongolia prior to 1990 was to a large extent artificial, relying as it did on subsidies from the Soviet bloc that accounted for around a third of

GDP by the late 1980s. Meanwhile, state farms absorbed a disproportionate share of total investment in the agricultural sector. The ending of state subsidies in 1991, led to massive formal-sector unemployment and renewed growth in agriculture (and in livestock production in particular). By 1999, agriculture accounted for 36 percent of GDP, nine-tenths of it derived from livestock production. These figures, however, understate the importance of the rural sector. Livestock is the mainstay of domestic food security, and a significant share of Mongolia's foreign exchange earnings is derived from livestock processing. Throughout the transition in the 1990s, the livestock sector played a vital role as an economy wide safety net. Given a lack of alternative livelihood opportunities and greater access to livestock ownership under a national program of asset privatization, full-time herding households grew, from around 17 percent of



*Livestock in Mongolia.*



**Table 7: Key Indicators for Rural Mongolia, 1940-1999**

|   | 1940 | 1960 | 1990 | 1999 |
|---|------|------|------|------|
| Rural population (%)                          | n.a. | 49   | 43   | 41   |
| Urban population (%)                          | n.a. | 33   | 57   | 57   |
| Capital city population (%)                   | n.a. | 18   | 27   | 32   |
| Agriculture as share of national economy (%)  | 60   | 36   | 15   | 36   |
| Livestock as share of agricultural output (%) | 99   | 84   | 73   | 89   |

Sources: Statistical Office of Mongolia, 1991; National Statistical Office of Mongolia, 2000.

all households in 1989 to 34 percent by 1999. Total livestock rose, from around 25 million head in 1995 to around 33 million in 1999.

**Rising Vulnerability to Risk.** Although the livestock sector's importance rose in the 1990s, this was accompanied by rising herder vulnerability to risk. This shift was caused by several factors: a decline in state support during weather-related emergencies (including both drought and harsh winter conditions, referred to in Mongolia as *dzud*); a decline in the herding infrastructure (e.g., wells for watering livestock); a decline in fodder crop production; a relative decline in livestock mobility; and a rise in herd congestion on pastures near urban markets. All these, in turn, caused a rise in the level of conflict over pasture land. Almost overnight, responsibility for risk management was transferred from the state to individual herders, many of whom (particularly poorer herders and newcomers to herding) were ill-equipped to assume it. The harsh winters of 1999-2000 and 2000-2001, both of which were preceded by drought, led to some of the most severe *dzud* conditions in living memory and livestock mortality of 10%.

**Rising Poverty.** Poverty in general, and rural poverty in particular, became a central issue in national politics in the 1990s. While market reforms spurred a thriving formal and informal economy in Ulaanbaatar, where a third to a half of the national population of 2.4 million lives, there was chronic underinvestment in rural areas and smaller urban centers, which became "poverty traps". Official data showed that a third of the population was living below the poverty line in 1995, whereas poverty had officially been absent at the beginning of the 1990s. The poverty headcount has remained at around a third of the total population, while inequality in income and assets has worsened. A participatory poverty assessment conducted by the Bank in 2000 helped shed light on changing livelihood profiles, and the importance of geographical location in a country characterized by vast distances and extremely low rural population density.

**Areas of Strategic Emphasis for the Bank.** The goals of the most recent CAS (January 1998) are to support the government in completing the transition to a market-led economy, to improve living standards, and to reduce poverty. The CAS adopts a four-pronged approach: (1) support macroeconomic stabilization; (2) facilitate private sector development and associated employment and income-generation opportunities; (3) develop infrastruc-

ture to support private-sector growth and market development; and (4) promote equity in development through direct poverty-targeted assistance to the most vulnerable. More recently, rural development has come into clearer focus as an important means to achieve poverty reduction. The Bank's rural strategy has shifted from narrowly welfarist measures toward alternative means of promoting secure and sustainable livelihoods. The next Mongolia CAS, now in preparation, is likely to emphasize the strengthening of pastoral risk management and the importance of rural as well as urban development.

**Specific Actions.** The Bank's rural strategy has involved considerable effort to *improve its understanding of poverty and livelihood dynamics* in Mongolia, including an understanding of rural-urban linkages, the lessons to be learned from the National Poverty Alleviation Program, how to bring the perspectives of poor urban and rural people to bear on national policy formulation, and policy options in land reform. Three priority areas for long-term operational support have been selected: (a) development of a strategy for pastoral risk management (including pilot-testing of group-based approaches to land tenure and management, livestock marketing, and pastoral conflict management); (b) institutional innovation in the field of rural microfinance services (supporting the outreach of savings, loans, and micro-insurance services in rural areas through diverse, locally appropriate mechanisms); and (c) long-term support for decentralization through creation of community-driven mechanisms for prioritizing, selecting, cofinancing, and executing investments in small-scale infrastructure and social services.

**Bank Instruments to be Used for Delivering Support**  
The current strategy is being implemented through a combination of lending and non-lending services. An intensive learning Implementation Completion Report (ICR) (ILI) is being carried out for an IDA credit, which closed December 2000, to alleviate poverty among vulnerable groups.

The findings of this ILI are also being used to prepare of a long-term APL that will contribute to fostering secure and sustainable livelihoods. The APL will focus on pastoral risk management, rural microfinance services, and community-driven infrastructure investment. The implementation of land law and policy will be addressed in conjunction with operational work to support pastoral risk management, with a particular emphasis on ways to strengthen community-based pasture land tenure and management. Depending on local interest,

parallel operational activities may focus on promoting public access to information about the rights, responsibilities, and management options open to of land users under the land law.

#### Expected Outcomes

The expected outcomes of this strategy are: (i) a coordinated and sustainable strategy for pastoral risk management; (ii) microfinance and insurance services serving poor households; and (iii) investments in community-level infrastructure that combine transparent, formula-driven central resource allocation with a high level of local participation.

#### Performance Indicators

Indicators for monitoring progress towards these outcomes will include indicators of economic performance (increases in per capita income and household asset status in project areas, increases both livestock-related and “off-herd” investments by individual households in project areas, and a declining proportion of households in project areas having to dispose of assets at low prices or borrow at high rates of interest); community members’ assessments of the local infrastructure, using community “scorecards”; and policy and legislative reforms that scale up project-level innovations to the national level.

**Table 8: Strategic Actions to Support Rural Development in Mongolia**

| Goals and objectives of rural development  | Components and preconditions  | Policy and institutional matrix  | Bank instruments and supporting action   |
|--|---|--|--|
| <b>Overall goal</b><br>A national anti-poverty strategy developed and adopted to contribute to the achievement of secure and sustainable livelihoods for the entire population   | 1. A coordinated and sustainable strategy for pastoral risk management<br><br>2. Microfinance and insurance services available to poor households to build assets and smooth consumption on a sustainable basis<br><br>3. Appropriate fiscal decentralization; investments in community-level infrastructure made with high degree of local participation | 1. Establishment of monitoring unit in cabinet or prime minister’s office<br><br>2. Strengthening of administrative and fiscal decentralization to subnational and local governments<br><br>3. Pilot-testing of institutional innovations at community level (e.g., group-based approaches to land tenure, livestock marketing, pastoral conflict management, savings and loans groups)<br><br>4. Amendments to land policy legislation to facilitate transferability of land rights | 1. AAA to deepen understanding of poverty and livelihood dynamics, including urban-rural linkages<br><br>2. Evaluation of lessons learned from National Poverty Alleviation Program<br><br>3. Long-term, phased APL to foster secure and sustainable livelihoods, focusing on pastoral risk management, rural micro-finance services, and decentralized community investment funds<br><br>4. Possible operational support for land law implementation, with focus on promoting “legal literacy”. |
| <b>Specific objectives</b><br>Enhanced capabilities of poor households and individuals in rural areas and smaller urban settlements to manage risk; build up income-generating assets; and participate in creation and maintenance of community-level infrastructure |   |  |  |

**Box 9**

## LAO PDR

## PROFILE OF THE RURAL POOR

Over 80% of the population live in rural areas. Approximately 96% of the rural population either have land use rights or free access to land. However, the availability of lowland is limited while the upland has increasingly deteriorated in quality. About 3/4 of the population have access to dry land only, 6% cultivated irrigated land, 13% cultivated dry and irrigated land, while 6% are not involved in agriculture.

More than 80% of the labor force are farmers. The growing number of rural migrants to Vientiane means there is no shortage of unskilled labour. Rural-urban migration is a growing trend which will need to be considered

## RURAL INFRASTRUCTURE

Rural infrastructure in Laos has remained largely underdeveloped. Many of the country's villages and some districts lack access to the main road network; less than 50% of the population have access to safe drinking water and only about 13,000 ha of land is irrigated annually during the dry season. The total length of the road network is approximately 14,700 km, of which 28% are classified as national roads, 39% as provincial roads, and 33% as local and district roads. While the underdevelopment of rural roads is a countrywide problem, it is more severe in the mountainous northern provinces of Phongsaly, Oudomsay, Luang Prabang, Xayabury, and Huaphanh.

## RURAL EDUCATION

The poor quality of the education system is a further constraint on Laos's development prospects. According to government figures cited by the World Bank in 1999, only 57% of the adult population is literate, and this figure is much lower for women in the rural areas. Laos suffers from a shortage of schools, a lack of textbooks, poorly qualified teachers, and low school enrolment and completion levels.

NATURAL RESOURCE MANAGEMENT

The country's most valuable natural resources are its forests and rivers; the latter have considerable potential for generating hydroelectric power. However, there are concerns over the sustainability of the exploitation of the forests, and not just because of the logging industry; hydroelectric facilities and slash-and-burn agriculture involve deforestation too. Laos is endowed with a wide range of mineral deposits, the most important of which are tin, lead, gravel, gypsum, and salt, although there are also small deposits of coal, iron ore, gold, and oil and gas.

### GROSS DOMESTIC PRODUCT (% REAL CHANGE)

|             | 1999 | Annual average 1995-1999 |
|-------------|------|--------------------------|
| GDP         | 7.3  | 6.4                      |
| Agriculture | 8.2  | 4.8                      |
| Industry    | 7.9  | 11.1                     |
| Services    | 6.9  | 7.7                      |

## THE AGRICULTURAL SECTOR

The agricultural sector is the backbone of the Lao economy, providing more than 50% of output (at current prices) and employing the majority of the labor force. Like many former centrally planned economies, the agricultural sector in Laos is grappling with a history of chronic underinvestment and, to a lesser extent, the legacy of collectivization. Most agricultural land is used for rice, which is still the largest single crop. Timber and wood products have historically been the most important sources of export earnings, although restrictions on logging imposed in 1993 and the emergence of new products such as coffee mean that they are no longer the mainstay.



## RURAL HEALTH

The health of the Lao people are among the worst in the world. Malaria is the most serious public health problem in Lao, yet until recently, prevention has been seriously underfunded. Malaria is said to be a major health problem in 87% of Lao villages.

### **Health Conditions (per '000) FY97**

|             | IMR* | U5MR* |
|-------------|------|-------|
| Rural       | 136  | 200   |
| Urban       | 52   | 76    |
| Well off    | 82   | 108   |
| Poor        | 148  | 250   |
| Lowlanders  | 115  | 161   |
| Highlanders | 147  | 230   |

IMR= Infant mortality rate

U5MR= under five mortality

#### BASIC DATA—LAOS 2000/2001

**BASIC DATA (EADS 2000)**

Population: 5.1m (mid-1999 official estimate)

**Main towns: Population of province in which main town is situated, in '000, mid-1999**

|                          |     |
|--------------------------|-----|
| Vientiane (capital)      | 319 |
| Vientiane (municipality) | 583 |
| Savannakhet              | 748 |
| Champasak                | 558 |
| Luang Prabang            | 406 |

The Lao People's Democratic Republic, with a predominantly agricultural and rural economy, is one of the poorest and least developed countries in East Asia. Per capita income was around US\$400 per annum in 1997, and poverty incidence (using 1997/98 data) was 39 percent. Over 90 percent of the rural poor live in farming households. Social indicators in Lao PDR (life expectancy, infant mortality, adult illiteracy, female illiteracy, access to safe water, etc.) are among the worst in the region.

While the share of agriculture in GDP has been declining steadily over the past decade, it continues to be a major sector of the Lao economy, contributing well over 50 percent of GDP and providing employment to more than 80 percent of the labor force. Agriculture's declining share reflects increases in the manufacturing and services sectors, particularly up to 1997, and slow growth in the agricultural sector. Given its importance to the economy, agriculture growth will be necessary for realizing economic growth and bringing about a reduction in poverty. Severe institutional constraints and limited human resources restrict the government's capacity to design and implement effective development policies and programs. It seems fair to say that Lao PDR will need several decades to respond effectively to the varied challenges faced in the agricultural sector.

During the 1980s the agricultural sector grew at around 3.8 percent annually. In the 1990s, however, growth slowed to around 3 percent a year. (Sector growth in 1997 was only 1.2 percent). Total cultivated area is about 700,000 ha, of which rice accounts for more than 80 percent. Only a small percentage of the area under cultivation is irrigated. Characterized as an extensive but low productivity sector, agriculture has been unable to meet the needs of the growing population and while also providing a reliable surplus for export and for processing. Generally, the low output of Lao agriculture and the low rural incomes that are its result stem from supply and demand side factors: ineffective services to help farmers upgrade production techniques, and inadequate marketing opportunities.

About 80 percent of the country is forested (though more than half is extremely degraded forest), and the forest sector is extremely important to the economy, contributing 7-10 percent of total GDP and 15-20 percent of nonagricultural GDP. Forest exploitation is an important activity in rural areas, and nontimber products provide more than half of family income. The sector contributes 34 percent of total export value and an even higher proportion of net foreign exchange. Much of the forest area provides critical habitats for threatened and endangered species. Forest resources, however, have not been managed in a manner that will allow sustainable returns over time and more careful stewardship is needed. Two and a half million hectares are designated as production forests, but these are not mapped, criteria for their designation are not published, and logging is not confined to

this hectareage. Deforestation is occurring at a rate of 0.6-0.8 percent per year, while log production has grown at an increasing rate since the 1980s. Current wood industry capacity largely exceeds long-term sustainable annual allowable cut, and performance has not met expectations despite heavy investment.

### Strategic Issues

The key issues faced by the agricultural sector reflect the stage of development of the overall Lao economy, and in particular its human resources and institutions. Although the government embarked on a path of economic reforms over the past decade, there are important issues that need to be addressed. First, insufficient institutional and human resources capacity which limits the government's ability to design and implement effective development policies and programs. Second, inadequacies in rural infrastructure and services (particularly road access, dry season irrigation, availability of agricultural technologies, good quality seed, planting materials and other key inputs, and extension and research), constrain sector growth. In addition, poor public expenditure management has resulted in biases against some subsectors with potential comparative advantages, and a sound framework for sustainable natural resources management is lacking.

The economy also suffers from various distortions, including the pursuit of self-sufficiency in the allocation of public resources; government involvement in supplying inputs due to limited success in implementing privatization policies; weaknesses in public expenditure management, including investments in irrigation pumps without adequate feasibility studies; limited access to credit; and a subsidized interest rate structure.

The challenge in the forestry sector is to arrest the deterioration in the resource base. The key issue is that the potential of the sector to contribute to overall growth and poverty reduction in an environmentally sustainable manner is being compromised by a weak regulatory framework and poor enforcement. To address these issues, it is important to focus on improving forest management and utilization, community participation in the management of forests, and controlling illegal logging.

### Strategic Role of the Bank

The Bank's limited program of ongoing projects in support of the agriculture and forestry sectors in Lao PDR, represents a relatively small percentage of total public investment in the sectors. It has played a more substantial role through sector work, much of it done in the second half of the 1990s. Within the portfolio of 10 IDA-supported projects is a land titling project that aims to strengthen long-term economic and social development through the creation of efficient land markets, and help to provide a system of clear and enforceable land ownership rights and land valuation capacity. Also underway is a District Upland Development and Conserva-

tion Project to facilitate the adoption of more intensified agricultural practices in pilot areas while at the same time conserving biodiversity. A Forest Management and Conservation Project, that closed recently, was designed to assist the government in implementing new forest resource management systems. An ICR is under preparation.

IDA has become more involved with the agriculture and forestry sectors recently, but macroeconomic issues allow only limited possibilities for increasing IDA involvement quickly. An Agricultural Development Project is seen as the first phase of a long-term program that would support human resources and

institutional development at both the national and provincial levels to improve the quality of agricultural support services for small farmers. This would be closely linked to a program to improve rural infrastructure by establishing technical, financial, and economic criteria for public sector investments and providing support for decentralization.

A Production Forestry Policy Review has been done jointly with other key donors. If we are successful in persuading the government to introduce changes in the forest management regimes and obtaining the active engagement of village communities, the payoff in terms of poverty reduction could be substantial.

**Table 9: Matrix of Strategic Actions in Lao**

| Key Issue/Objective   | Current Status  | Proposed Strategy/Action  | Bank Instruments  |
|---|---|---|---|
| Rural development to reduce poverty, promote crop diversification                 | <ul style="list-style-type: none"> <li>Largely rice based, non-diversified rural production structure with low productivity and limited use of improved inputs</li> <li>Extremely weak research and extension system, that is poorly linked to communities and their problems</li> <li>Insufficient community participation in planning development</li> <li>Distorted rural credit system; lack of rural and microcredit</li> <li>Weak interpretation and implementation of land policies; insecurity of land tenure in rural areas</li> </ul> | <ul style="list-style-type: none"> <li>Strengthen institutions and closer linkage to provinces in supporting agricultural development</li> <li>Strengthen agriculture services - improved technical support for extension services; better credit delivery</li> <li>Improved rural infrastructure, more sustainable irrigation development, with focus on O&amp;M</li> <li>expanding land-titling program to rural areas</li> <li>Stronger role for rural communities in designing and implementing programs</li> </ul> | <ul style="list-style-type: none"> <li>Policy Dialogue</li> <li>Agricultural Development Project</li> <li>Ongoing Land Titling Project</li> <li>Financial Sector Adjustment Operation that will tackle the issue of rural credit</li> <li>Possible Agricultural Services/ RD project</li> </ul> |
| Manage forestry and other natural resources in environmentally sustainable manner | <ul style="list-style-type: none"> <li>Weak legal and regulatory framework</li> <li>Absence of meaningful institutional arrangements for forest management and utilization</li> <li>Noncommercial allocation of logging rights and loss of potential revenues</li> <li>Skewed incentives for sustainable natural resources management</li> <li>Illegal logging</li> </ul>   | <ul style="list-style-type: none"> <li>Define forestry sector strategy</li> <li>Improve forest management and utilization; strengthen regulatory apparatus</li> <li>Increase reliance on market mechanisms</li> <li>Expand community participation in management of well-stocked forests</li> <li>Strengthen prevention and detection of illegal logging</li> </ul>   | <ul style="list-style-type: none"> <li>Policy dialogue in the context of the Forestry Policy Review</li> <li>New Investment operation for the forestry sector, possibly an APL</li> <li>Dialogue and related actions on proposed NT2 project.</li> </ul>  |

**Box 10**

# CAMBODIA



## PROFILE OF THE RURAL POOR

The incidence of poverty is considerably lower in Phnom Penh than in both urban and rural areas. These differences are even more marked when using the 'food poverty line' or the 'poverty security index'. The 'poverty severity index' in Phnom Penh is only about 1/6 that in either other urban areas or rural areas. The majority of the poor live in rural areas: rural poverty accounts for 83% of the 'poverty gap index' and about 81% of the 'severity index'.

gap index and about 51% of the 'severity index'. By employment of the household head, the poverty headcount is highest in agriculture-44%. Most of Cambodia's poor-70%- are employed in agriculture. In no other industry is there more than 10% of the total poor, and people in households where the head is not in the labor force accounted for more than 5% of poverty.

*Land area:* 181,035 sq km

**Population:** 11.9m (mid-1999 estimate)

| Main towns           | Population in '000 |
|----------------------|--------------------|
| Phnom Penh (capital) | 691.0              |
| Battambang           | 573.9              |

## HUMAN DEVELOPMENT INDEX, 1997

|          | % children 0-5 yr.<br>severely stunted | Average life<br>expectancy at birth | life expectancy<br>index | adult literacy<br>rate (%) | combined 1st,<br>2nd, 3rd level<br>gross enrollment<br>rate % | educational<br>attainment<br>index |
|----------|--|-------------------------------------|--------------------------|----------------------------|---|------------------------------------|
| Cambodia | 33.1                                   | 54.42                               | 0.490                    | 65.86                      | 51.62   | 0.611                              |
| Rural    | 33.8                                   | 53.84                               | 0.481                    | 62.91                      | 48.85   | 0.582                              |
| Urban    | 27.8                                   | 58.70                               | 0.562                    | 76.70                      | 62.35   | 0.719                              |

## RURAL EDUCATION

There are large disparities in enrollment between urban and rural areas, especially at higher levels of schooling. For instance, the net primary enrollment ratio is 81% in Phnom Penh, or 25% higher than in the rural areas, while its net lower secondary enrollment ratio is 10 times higher. Almost 86% of the children between 6-11 who are not in school live in rural areas, 10% in urban areas outside of Phnom Penh, and 4% in Phnom Penh.

## RURAL INFRASTRUCTURE

The transportation network was severely damaged by the protracted conflict. The current network consists of only 3,200 kilometers of national roads, about 3,100 kilometers of provincial roads, and about 28,000 rural roads are impassable during the rainy season. Moreover, it has been estimated that 2/3 of railway lines need repair.

## RURAL HEALTH

Nutrition is a serious problem in Cambodia. This applies to both rural and urban area. It is estimated that average calorie intake per person is 2,300 calories per day in rural area and only 2,150 in urban areas.

## MAIN ECONOMIC INDICATORS 1999

### REAL GDP GROWTH (%)

4.3 Consumer price inflation (%; av) 4.1 Current-account balance (US\$ m) -224<sup>a</sup> Foreign debt (US\$ m) 2,129 Exchange rate (CR:US\$; year end) 3,770

#### GROSS DOMESTIC PRODUCT (% REAL CHANGE, 1998)

|             | ANNUAL | AVERAGE |
|-------------|--------|---------|
| 1994-98GDP  | 1.0    | 3.9     |
| Agriculture | 0.4    | 2.1     |
| Industry    | 1.1    | 6.6     |
| Services    | -1.0   | 4.8     |

## AGRICULTURAL SECTOR

Agriculture dominates the economy, contributing an estimated 43% of constant-price GDP in 1998. Rice and live-stock each accounted for almost one-third of total agricultural output and together around 27% of total GDP, and fishing and forestry together made up just over 5% of total GDP in 1998. Although the area used for rice cultivation has been falling, the rice crop still accounted for 13.4% of GDP in 1998. In 1998/99 the country produced an exportable rice surplus of 30,000 tonnes and the government has forecast a 60,000 tonne surplus in 1999/2000.

**P**overty in Cambodia is primarily a rural phenomenon: rural residents account for 90 percent of the poor. Besides such factors as poor health and education, low rural incomes in Cambodia reflect the general unavailability of public services in rural areas and, in the case of the hard-core poor, lack of access to basic productive assets like agricultural land and permanent water supplies.

Cambodia's 1.5 million rural households depend mostly on small-scale farming, including livestock rearing, although many also rely on fishing and on seasonal work in town. About 20 percent of households are headed by widows without access to adult male farm labor. Agriculture accounts for nearly 50 percent of GDP and provides employment for about 75 percent of the labor force. Timber, rubber, and fish are Cambodia's three most important export commodities: other agricultural products, including live cattle, rice and fruits are also traded to neighboring countries.

Cambodian agriculture is small-scale and much less input-intensive than in Thailand and Vietnam. The average family holding is around 1 hectare. Agricultural land use is dominated by lowland rainfed rice cultivation, which covers almost 90 percent of the total arable area and absorbs most on-farm labor. Increasing the yield and reliability of rice production systems has been the main objective of the Cambodia-IRRI rice research program supported for more than 10 years by Australia.

Agriculture's low productivity reflects both war-related and natural factors. Displacement of rural communities, damage to roads, bridges, dikes, and weirs, extensive presence of land mines, and shortages of manpower and draft animals have all contributed to a decline in agricultural investment, yield, and area cultivated. In 1967, rice cultivation covered an estimated 2.5 million hectares; in 1998, despite some recovery during the 1990s, the paddy area was only 1.9 million hectares. Poor soil fertility, irregular rainfall often accompanied by prolonged flooding, and plant and animal pest and disease problems contribute to Cambodia's low agricultural productivity.

The road network in Cambodia provides less than one kilometer of road for every 1,000 hectares of land, an indication of how much the rural economy is handicapped by lack of infrastructure. Most primary and secondary roads were built 60 to 70 years ago by the French for light traffic, although to a relatively good standard for the time. A major rehabilitation program begun in 1992-93 with support from UNDP, ADB and the governments of Australia, Japan, Thailand, and the United States. By the end of 1997, 450 km of main road had been reconstructed, while another 700 km were rehabilitated. Subsequent damage by overloaded vehicles and heavy rain and floods, combined with inadequate maintenance, have reduced sections of these roads and number of bridges to as bad a condition as they were in before. An International Labor Organization (ILO) project funded by SIDA is exploring alternative techni-

cal solutions for stable rehabilitation of low-traffic roads and assisting government agencies to frame appropriate policies.

Since Cambodia's transition to a market economy, agricultural marketing activities have been switched to the private sector. However, high transportation costs and lack of banking services raise costs of marketing and distribution costs and lack of banking services raise costs of marketing and distribution, and impede producers access to urban markets. Furthermore, despite the government's commitment in 1995 to end the ban on rice exports, implementation of the ban has not been consistent. This may ultimately limit the incentive for rural producers to increase their incomes by selling rice to export markets. Improved rural infrastructure and banking services would help the private sector overcome these difficulties, and there is no good argument for restoring public sector involvement. But the government needs to send clear and consistent signals in support of agricultural marketing reforms.

There are also two land-related impediments to raising rural incomes in Cambodia. First is a growing shortage of agricultural land in some areas; second is the problem of insecure occupancy even when land is available. Poor households can end up losing their land when forced to sell by circumstances (such as indebtedness or ill health) in order to pay their creditors. Problems of land law enforcement and insecurity of tenure have received heightened attention due to a surge in land disputes and occasional expropriations.

#### **Bank Programs**

An IDA-funded Agriculture Productivity Improvement Project (APIP), cofinanced with IFAD and other agencies, is the keystone of the government's effort to improve services to smallholders. We will maintain above-average levels of supervision of this US\$35 million investment, using partnership arrangements with bilateral donors to spread the cost and maximize efficiency. After a slow start in 1997 due to political instability, implementation is moving forward. A mid-term review is planned for March, 2001.

A possible new project would involve provision of support for the establishment of smallholder plantations in rubber, coffee, fruit trees, and diversified cash crops (such as banana, maize, soybeans, and cotton). The project would be based in part on the results of an ongoing pilot project for smallholder rubber plantings in traditional rubber-growing areas by the French AFD and in part on the results of the APIP component for testing the feasibility of developing smallholder rubber in nontraditional areas. Issues to be considered during preparation would include land availability and impact on habitat areas, social criteria for selection of smallholders, impact on local ethnic groups, long-term credit financing needs, and comparative economic and financial returns of alternative crops and farm enterprises, as well as technical aspects.

**Rural infrastructure.** The CARERE-SEILA program has proved capable of expansion to meet national poverty reduction, governance, and institution-building needs in the rural sector. Moreover, its high standards of transparency and financial management have managed to sustain the confidence of a growing number of donors. The Bank participated in an evaluation in 2000 of the first phase of SEILA and has closely followed the formulating of a second phase, which is planned to start in July, 2001. A first IDA credit for this program, supporting an expanded Local Development Fund for community-drive, small-scale infrastructure projects in five new provinces, could be appraised in 2001 for FY02 approval.

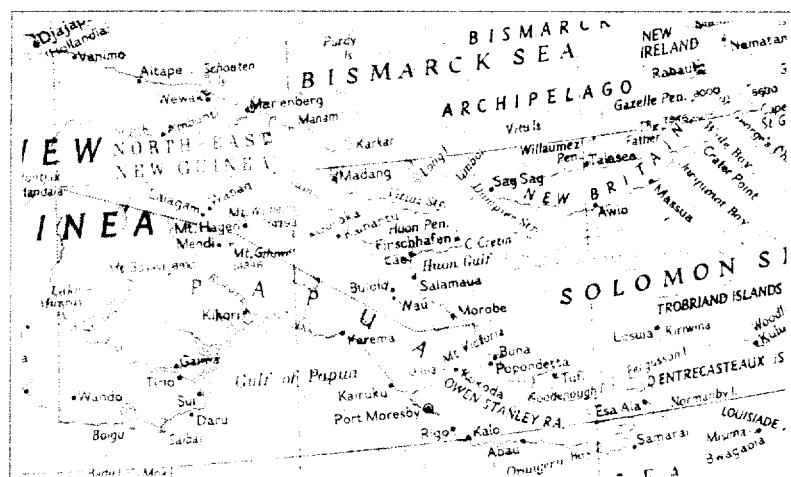
**Land tenure.** A comprehensive land policy note will be prepared jointly by the Bank and the government in collaboration with other donors and NGOs, identifying key issues and options in the land sector and an action program to address them. After dialogue with the government, a land administration and management project will be identified as a vehicle to address land issues. In parallel, there will be support for ongoing efforts to protect natural resources, including surveying and mapping of national parks and forests. Protection of Cambodia's world-famous temples, located mostly in rural areas, is also a matter of concern.

**Table 10: Rural Vision to Action Update, 2001 IDA's Strategy for Assisting Rural Development and Poverty Reduction in Cambodia**

| National Goals and Objectives  | Components and Preconditions  | Enabling Policy and Institutional Framework   | Bank instruments and supporting action   |
|--|---|---|--|
| Improve the reach, impact and sustainability of rural development programs, with focus on substantially reducing numbers of people living in poverty.  | Encourage fuller participation of rural communities in RD programs, and show leaders and officials that it works.   | Facilitate emergence of community-based institutions (VDC/CDC); decentralize decision-making to provincial (PRDCs) and local government (CDCs, commune councils etc.).  | Supervision of Northeast Village Development Project (NVDP-LIL, FY99); preparation of Rural Investment & Local Governance Project (RILGP, planned for FY02)  |
| Rehabilitate and improve physical infrastructure needed for rural economic recovery and social development.  | Increase public investment for repairing physical infrastructure in rural areas, with priority given to likely impact on poverty reduction and development of the local economy.  | Develop satisfactory plans for rehabilitation, operation and maintenance of secondary and tertiary roads, rural water supplies and irrigation systems.  | APIP (FY97, agricultural hydraulics component); PRIP (secondary roads, 02); SFKC/NVDP/NWRR/RILG (rural water supply, other community-based rural infrastructure subprojects); FERP (rehabilitation of roads, irrigation and flood control systems, FY01)   |
| Increase productivity in agriculture to raise incomes in rural areas (both directly and through induced effects on job creation for the poor in the informal sector and improved food security for all vulnerable groups). | Improve understanding of the constraints limiting productivity in crop and livestock production, and devise strategies at both national and local levels to overcome them, drawing on relevant local and international research.                      | Prepare national strategies for seeds production and distribution; animal health and production; water resource management and irrigation; policy for access to common property resources, forest management and protected areas; fisheries management. Develop local research and management capacities of various kinds (technical/scientific, socio-political, economic) | APIP (seeds, AHP, WRM, fisheries management strategies); Forest Concession Management (LIL, FY00); Biodiversity & Protected Areas Management (LIL, FY00); Review of Government's full PRSP (Oct. 2001); RILGP (application and evaluation of national strategies at selected provincial/local levels through the decentralized Seila framework). |
| Enhance contribution of the agriculture sector to a rapid and sustainable development of the national economy (i.e. ensure high GDP growth with external payments, fiscal and price stability).                            | Within an overall strategy of broad-based and secure rural development, encourage private investment in commercial agriculture, forestry and fishing, but without granting incentives detrimental or not available to small-scale farming households. | Develop and test regulations under Land Law 2001; monitor progress of Bank for Rural Development and of retail-level MFIs; restructure and renovate the rubber plantation sector; and introduce new agricultural products and processing technologies.  | Monitoring of SAC (FY00); appraisal of Land Policy Administration Project (planned for FY02); possible future project cofinanced with AFD for Smallholder Agricultural Diversification (FY04); look at possible IFC/MPDF investments.  |

**Box 11**

# PAPUA NEW GUINEA



## PROFILE OF THE RURAL POOR

Over 94% of those below the poverty line reside in rural areas. For example, in the Momase Region, the poverty rate for the urban sector (20.3%) is half that observed in the rural sector (46%).

Statistical analysis of the 1996 survey results shows strong linkages between the low quality of life in the rural areas and unemployment, education and the quality of service delivery. Deprivation and poor access to social services in the rural areas are reinforced by low cash incomes, poor communication facilities, inadequate support for self-starters, and capacity constraints.

## RURAL HEALTH

Overall, the nutritional status of the population is poor: according to the UNDP, in 1999, 30% of children under age five were underweight. It is estimated that between 30-50% of the rural children are malnourished; average life expectancy is less than 50; infant mortality rates range from 50-110 deaths per 1000 live births. UNDP also reported that only 32% of Papua New Guineans had access to safe water in 1999. In 1993 PNG had only 18 doctors per 1,000 people. The PNG Institute of Medical Research (IMR) estimates that more than 15,000 Papua New Guineans have HIV and that it is spreading rapidly. Almost three-quarters of new HIV cases detected in 1998 were in the capital, Port Moresby.

## NATURAL RESOURCES MANAGEMENT

PNG's total land area is 462,840 sq km, with the eastern part of the main island of New Guinea comprising most of this; a handful of other relatively large islands and hundreds of smaller ones make up the rest of the country. PNG's terrain is rugged, with the jagged mountainous interior, which rises to 5,000 meters in the New Guinea mainland, giving way to coastal lowlands and rolling foothills. The difficult terrain makes the building and maintenance of physical infrastructure very costly, hindering the development of interior regions. The terrain also means that only 30% of the total land area is suitable for cultivation. Forests and woodland cover more than 80% of PNG's land area. Volcanic and seismic activity is common, particularly in the island regions.

## RURAL INFRASTRUCTURE

Given that most new roads have been urban-based, many villages within PNG are likely to remain isolated for years to come. Papua New Guinea is one of the few countries in the world where the capital city is not accessible to the rest of the country by road. This is specifically true for the highlands, where the bulk of PNG's population lives. But given the cost of building and maintaining such a road over unstable mountainous terrain, the economic gains are not clear-cut.

PNG has only around 20,000 km of non-urban roads. Because the number of islands in PNG and the poor road infrastructure, river and coastal shipping remains of vital importance. PNG has 17 main ports, which are under the control of the PNG Harbours Board.

**Land area:** 462,840 sq km

**Population:** 3.6m (provisional at mid-1990 census); 4.6m (World Bank estimate for mid-1998)

**Major islands:** New Britain, New Ireland, Manus, Bougainville

## Main towns: Population in '000 (1990 census)

|                        |     |
|------------------------|-----|
| Port Moresby (capital) | 193 |
| Lae                    | 78  |
| Madang                 | 27  |
| Wewak                  | 23  |
| Goroka                 | 18  |
| Rabaul                 | 17  |
| Mount Hagen            | 17  |

**Languages:** Tok Pisin (Pidgin English), English and Hiri Motu; more than 800 other distinct languages also in use

## Growth in Gross Domestic Product by sector, 1999 (% change year on year)

|             |      |
|-------------|------|
| Real GDP    | 3.6  |
| Agriculture | 7.8  |
| Petroleum   | 4.2  |
| Mining      | 29.5 |

## THE AGRICULTURAL SECTOR

Agriculture is important in Papua New Guinea (PNG), both for subsistence and for the export of cash crops, the export of agricultural commodities (excluding forestry) accounted for about 22% of total export receipts in 1999, and remains the principal source of livelihood for about 85% of the population. Cash crops are cultivated on large estates as well as in smallholdings. Rubber is grown mainly on large holdings in the southern coastal region, and there are large palm-oil plantations. Tea is grown almost entirely on estates in the Highlands. Smallholder production has boomed since independence whereas the output of large holdings has fallen, partly because of the restrictions imposed by the system of communally held land. Smallholders have traditionally accounted for most of the output of the three main agricultural export commodities—coffee, cocoa and copra. Both palm oil and rubber are also produced on a small scale. The principal crops for domestic consumption include sweet potato, banana, taro, yam, sugarcane, maize, and groundnut.

## RURAL EDUCATION

Most Papua New Guineans are multilingual and the adult literacy rate has improved (from 47% in 1970 to 72.2% in 1995), but the plethora of isolated villages, combined with a shortage of skilled teachers and poor infrastructure, has hampered the objective of successive governments of providing a basic education to all children. The gross primary enrollment had reached 80% by 1996 but females accounted only 33% of total enrollment. It is estimated that nearly 75% of the rural population has no formal schooling.

Rural livelihood indicators in Papua New Guinea (PNG), already low, appear to be declining. Outmigration from rural areas and urbanization are accelerating, with consequent social stress. Deterioration of the natural resource base is continuing, and globalization is creating a new trade and policy environment.

The key strategic objectives for rural development in Papua New Guinea are: reducing poverty and improving livelihoods and food security by ensuring equitable delivery of services to rural residents, greater agricultural productivity and profitable nonfarm enterprise development, and fostering sustainable management of natural resources. These are generally highly consistent with the objectives of the National Program for Reconstruction and Development (NPRD), which is "to create the environment that will enable all Papua New Guineans to mobilize their own resources, their land, their labor and skills, as the principal means for bringing about a sustainable improvement in living standards."

#### **Governance In Rural Areas**

The Organic Law of Papua New Guinea has established a framework for the allocation of authority and resources to lower levels of government and for promoting a bottom-up planning process, but it does not yet function effectively. Accordingly, it is necessary to coordinate policies and administration at different levels of government to yield effective decentralization and build capacity. There is urgent need to develop connections between elected local governments, provincial assemblies, the national government, and representatives of community-based organizations. There is also a need to facilitate a collaborative, consultative process involving civil society, beneficiaries, local stakeholders and communities, the private sector, and international donors and development agencies.

The draft NPRD emphasizes full implementation of the Organic Law as the principal strategy for improvement of the service delivery system and enhancement of planning capacity at all government levels. The govern-

ment already has multiple consultative mechanisms in place to facilitate input to the policy process.

#### **Implementation of Interventions**

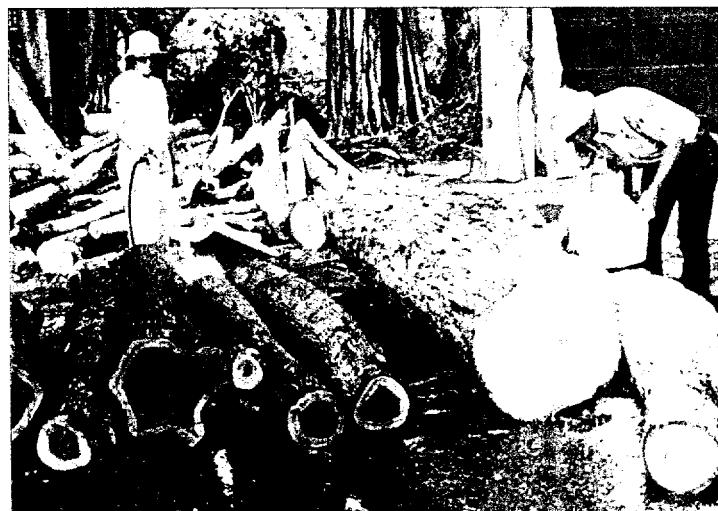
One objective is to enhance the focus of interventions by giving more attention to issues of concern to low-income groups and populations in remote areas, by improving access to markets and services and focusing on income-increasing opportunities for farmers and other rural dwellers.

The draft NPRD builds on the definition of national development priority areas in the Medium Term Development Strategy (1997-2002) and the National Charter on Reconstruction and Development (2000-2002). Accordingly, investments in basic education, primary healthcare, infrastructure maintenance, law and order, and income-earning opportunities (especially in rural areas) are the pillars of Papua New Guinea's development strategy.

Any successful approach must build on the trust and reciprocity that characterize local cultures and recognize the defining role they play in determining feasible outcomes. This will mean investing more time and resources to ensure the viability of social assets that should serve rural communities (health, education, community resources, safety nets) and putting more focus on access to education, health, credit, markets, and information. Also needed is greater emphasis on rehabilitation of infrastructure.

The NPRD insists on the need for shared responsibility for provision of basic services among all levels of government. The planning system in place, while incomplete, allows for a mixed top-down, bottom-up approach. Funding instruments have been made available to provide flexibility in the allocation of resources in order to compensate for regional differences. Nevertheless, the planning roles and responsibilities of different tiers of government require further clarification.

As the draft program states, income-earning opportunities are best promoted through good governance, macroeconomic stability, and effective planning, budget-



| Key Issue/Objective   | Current Status   | Proposed Strategy Actions   | Bank Instrument  |
|---|--|---|--|
| Rural development to reduce poverty, promote agriculture and crop diversification | <ul style="list-style-type: none"> <li>Largely subsistence root-crop based, only partly-diversified rural production structure; limited use of improved inputs</li> <li>Export commodity research and extension system quite effective, industry-supported, and well linked to communities, but access to markets restricted</li> <li>Insufficient community participation in planning for local development</li> <li>Weak interpretation and implementation of the Organic Law</li> <li>Constrained development of the rural nonfarm economy</li> </ul> | <ul style="list-style-type: none"> <li>Sustained support for NARI and better funded role for Provinces in supporting agricultural development</li> <li>Continue dialogue for better credit delivery</li> <li>Improved rural infrastructure, especially rural roads</li> <li>Improve governance at ward, district, and provincial levels</li> <li>Get resources flowing more effectively from national to local level</li> <li>Dialogue on enabling environment</li> </ul> | <ul style="list-style-type: none"> <li>Policy dialogue, on importance of such support</li> <li>Financial sector reform under SAP to continue</li> <li>New multidonor roads project (including World Bank, ADB, and AusAID)</li> <li>Articulate a national RDS and develop and refine methods in a recent PHRD grant; and possibly seek a JSDF grant to pilot procedures in 6 LGAs</li> </ul> |

ary, and service delivery systems. However, the government has undertaken direct action in the micro-credit and skills development projects with different donors. In addition, research and extension activities and farming training programs have received considerable attention in recent budgets.

Capacity and skills at the ward, district, and provincial levels must be boosted to address the above implementation steps effectively. It is view of the government that these are the areas in which assistance from the Bank is most required. The efficiency of the decentralized delivery system depends on technical capacity at the local level. Such capacity building is also a feature of current efforts supported by the Asian Development Bank, the other multilateral financial institution chiefly engaged with Papua New Guinea.

There has long been wide recognition in the country of the importance of promoting sustainable agricultural growth and improving the management of natural resources; land, water, forests, and biodiversity. The agricultural aspects of rural development are receiving particular attention in the government/AusAID renewable resources strategy paper. It will also be important to give attention to the seasonal and inter-annual vulnerability of rural households.

Recognizing the contributions of nonagricultural rural development continues to be a major challenge to the different arms of government. There has, however, been increasing recognition of microfinance gaps and the need

for reform of rural financing mechanisms. Under the development budget, various projects are devoted to the provision of microcredit in the rural areas. A microcredit policy for Papua New Guinea has also been approved by NEC. The privatization of the PNG Banking Corporation will require definition of a set of community service obligations that includes the level of services to rural areas that this financial institution must provide. To ensure that the level of services to rural areas is not affected by privatization, the Government will also apply microcredit principles.

Investment in the Education sector should aim at equalizing enrolment rates for males and females. There is a direct relationship between the level of education of the female population and health indicators. The gender issue is covered extensively in the Department of Health's National Health Plan. The focus on primary health proposed in the NRPD (through rehabilitation of aid posts) should allow increased pre- and postnatal care and reduced infant and maternal mortality. Micro-credit and employment and skills development projects in the 2001 Budget (ADB-funded) contain a well-defined gender component and specific initiatives in support of women's business, such as the Women's Textile Industry Project.

It is clear that there must be better understanding of the dynamics of local economies. This means fostering an environment that enables the private sector to play a constructive role in nonagricultural rural development

and poverty alleviation. At a practical level, there will be an ongoing need to monitor the allocation and delivery, and evaluate the effectiveness, of funds handled through the district development program. It will also be necessary to review and coordinate donor contributions to rural development.

Features of the latest (2001) national budget are useful indicators of the Government's strategic intentions and emerging policy priorities. The key initiative under Development Budget 2001 is the development charter program. This program will deliver the commitments stated in the national charter. One of the components of the charter program is the basic services improvement

package (BSIP). In 2001, the package will target basic education and primary health care, with a focus on aid post infrastructure, primary schools, and housing for health workers, teachers, and school inspectors.

The 2001 Development Budget includes a number of initiatives for renewable resources development, smallholder support services and the Food Security Program. The forestry sector receives one of the biggest increases in the development budget because of the Bank's planned Forestry and Conservation Project and the EU's Ecoforestry Program (over K35 million in total). It is to be hoped that the obstacles to launching this Project can be quickly overcome.

| Key Issue/Objective  | Current Status  | Proposed Strategy Actions  | Bank Instrument   |
|--|---|--|---|
| Manage forests, fisheries, and other natural resources in sustainable manner to generate growth and reduce poverty | <ul style="list-style-type: none"> <li>• Weak legal and regulatory framework</li> <li>• Ineffective institutional arrangements for forest management and conservation</li> <li>• Noncommercial allocation of logging; losses of potential revenues via illegal logging</li> <li>• Skewed incentives for sustainable natural resources management</li> </ul> | <ul style="list-style-type: none"> <li>• Improve forest management and utilization; strengthen regulatory apparatus</li> <li>• Expand community participation in forestry/management</li> <li>• Strengthen prevention and detection of illegal logging</li> <li>• Engage communities and NGOs to clarify possibilities in fisheries</li> </ul> | <ul style="list-style-type: none"> <li>• Policy dialogue in the context of the long-planned but still unlaunched Forestry and Conservation Project (including GEF and a multi-donor trust fund for conservation)</li> <li>• Work toward a new national fisheries policy, an aspect presently neglected in donor dialogue</li> </ul> |

## Box 12

# Vietnam

### PROFILE OF THE RURAL POOR

Rural areas contain 90% of Vietnam's poor who make up 80% of the population.

*The incidence of poverty has declined in rural and urban areas.*

|                           |       | 1993 | 1998 |
|---------------------------|-------|------|------|
| <b>Total Poverty Line</b> | Rural | 66   | 25   |
|                           | Urban | 45   | 9    |
| <b>Food Poverty Line</b>  | Rural | 29   | 8    |
|                           | Urban | 18   | 2    |

Rapid growth since 1990 has raised living standards. The percentage of people living in poverty (as defined by a budget adequate to buy 2,100 calories of food per person per day and a modest amount of non-food purchases) fell from 58% in 1993 to 37% by 1998. The drop in poverty was accompanied by a modest rise in inequality. The rise in inequality in Vietnam is almost entirely due to the widening gap between rural and urban areas, rather than due to inequality rising within either rural or urban areas.

*In 1998, almost 80% of the poor worked in the agricultural sector.*

|                   | 1993 | 1998 |
|-------------------|------|------|
| Unemployment Rate |      |      |
| Rural             | 2.6  | 1.4  |
| Urban             | 7.7  | 5.4  |
| Nationwide        | 3.7  | 2.2  |

### NATURAL RESOURCES MANAGEMENT

About 36% of land area is categorized as unused or barren. Most of this is land that was once forested and now lies fallow, and much of it is badly degraded. Cultivated area per ls. 0.1 ha, one of the lowest in the world. Vietnam's natural forest is officially estimated at 10m ha, although only 199,000 ha are counted as "concentrated" forest. Around 1.6% of the forest and woodland is being deforested annually. The main causes of deforestation have been logging, demand for fuel wood, and the clearing of forests for agricultural purposes, including clearing by slash-and-burn farmers.

### RURAL EDUCATION

Poverty rates decline with higher levels of education and those with elementary education or less make up almost 90% of the poor. Because education funding depends on user fees, poorer communities have poorer funded schools, and rural areas contain 90% of poor. The highest incidence of poverty (57%) is among those who have not completed primary education. By contrast, there is hardly any poverty (4%) among those with a university education.

### RURAL HEALTH

In general, health care coverage and standards are better than the average of the region. There are approximately 350 hospitals in rural areas; 95% of children are vaccinated.

| Indicators                         | 1985 | 1988 | 1990 | 1993 | 1997 |
|------------------------------------|------|------|------|------|------|
| Mortality rate (1,000) birth       | 57   | 37   | 44   | 52   | 29   |
| Life expectancy (yrs)              | 63   | 66   | 67   | n/a  | 68   |
| Access to sanitation total pop (%) | 30   | 67   | 56   | 60   | n/a  |
| Access to safe water (Rural) %     | 30   | 33   | 66   | n/a  | n/a  |
| Access to safe water (Urban)%      | 90   | 70   | 100  | n/a  | n/a  |

**Land area:** 330,363 sq km

**Population:** 76.3m (1999 census)

### Main towns: Population (of province) in '000 (1994)

|                  |       |
|------------------|-------|
| Ho Chi Minh City | 4,392 |
| Hanoi (capital)  | 2,194 |
| Haiphong         | 1,615 |

**Languages:** Vietnamese; English (increasingly favored as a second language); some French and Russian



### RURAL INFRASTRUCTURE

Most rural Vietnamese do not have access to basic infrastructure services, such as all-weather roads, irrigation, drainage, and flood control facilities, clean drinking water, permanent markets, and national electric grid. Vietnam has about 105,000 kilometers of roads, of which 10% are national roads, 15% are provincial roads, 24% are district roads, and 44% are village roads. It is estimated that over 10% of villages are inaccessible by road for at least one month of the year. In the 1996-2000 Public Investment Program, rural transport was budgeted to receive only 5% of total expenditure on transport.

### Gross Domestic product

|             | % real change | Annual average |
|-------------|---------------|----------------|
| 1999        |               | 1994-1999      |
| GDP         | 4.8           | 7.4            |
| Agriculture | 5.4           | 4.5            |
| Industry    | 7.7           | 12.1           |
| Services    | 2.7           | 6.8            |

### THE AGRICULTURAL SECTOR

Vietnam is still a predominantly agricultural society. Over three-quarters of the population lives in rural areas, 70% of employment is in agriculture, and seven out of every ten households cultivate at least some rice. The sector still contributes about one-quarter of non-oil exports, and agricultural GDP grew at a robust 4.5% annually between 1994 and 1999. It accounts for 26% of current-price GDP, down from 30% in 1993. Cultivated land is scarce: only about 22% of the total land area is devoted to agriculture and the cultivated area per head is just 0.13 ha, one of the lowest rates in the world. Of the total cultivated area, 63% is devoted to rice and a further 22% to other annual crops, with the remaining 15% going to multi-year crops. About one-third of the increase in land area has been used to grow industrial crops, such as cotton, sugar, rubber, tea and coffee; another one-third comes from additional paddy land that has become available as a result of investment in irrigation.

In 1998, in collaboration with other donors and the Government of Vietnam, the World Bank prepared a rural sector review: *Vietnam - Advancing Rural Development: From Vision to Action*. That report was discussed at the December 1998 Consultative Group Meeting for Vietnam. The report has been widely distributed and has been used as the major policy document of the Ministry of Agriculture and Rural Development over the last two years. It was also used to draft the five-year plan which will be presented to the next Communist Party Congress in March, 2001.

*Advancing Rural Development* concluded that Vietnam faces a three-part challenge as it continues to deepen its transition from a planned to a market economy:

- increasing agricultural productivity and farm incomes by continuing policy reforms;
- stimulating nonfarm rural employment by removing constraints on private business development; and
- managing natural resources sustainably by making hard choices about future rates of resource use.

These challenges drew attention to four ingredients for faster and more sustainable rural development:

- developing a market in land-use rights;
- expanding access to rural credit;
- closing gaps in public infrastructure between "have" and "have-not" areas; and
- investing in the health and education of rural people.

In addition to these economy wide requirements, an additional challenge is posed by Vietnam's uplands, home to the poorest rural people, including ethnic minorities. Some 15 percent of Vietnam's population is ethnic minorities, and 85 percent of them fall below the poverty line.

The 1999 report, *Attacking Poverty*, provided a framework for planning and implementing measures to reduce poverty in Vietnam by:

- creating opportunity to raise incomes;
- ensuring equity so that citizens everywhere benefit from poverty reduction; and
- reducing vulnerability so that the most disadvantaged are not left behind.

This three-part framework is the basis of the Bank's rural development strategy in Vietnam.

### Current Areas of Strategic Emphasis in the Rural Sector

The Government's development strategy envisages a Vietnam that has an economy that grows both rapidly and sustainably, that provides a just and high quality of life for all its citizens and that maintains the best of Vietnam's culture and traditions. It will be a socialist market economy that is integrated into the global economy and evolves into an industrialized and knowledge-based society within 20 years.

These aspirations in concrete terms mean:

- eradicating hard-core poverty;
- cutting malnutrition in half, from one-third of the population to 15-20 percent;
- raising access to clean water from 65 percent to 90 percent;

- increasing forest cover from 28 percent to 43 percent of the country;
- doubling GDP in a decade, through a growth rate of more than 7 percent annually;
- a decline in agriculture's share of GDP from 25 percent to 16 percent;
- the share of rural employment falling from about two-thirds to one-half; and
- the urban population growing from one-quarter to one-third of the population.

Achieving these goals will require a transformation of the rural economy, since rural areas are now home to 75 percent of the population and 90 percent of the poor. Farms average only 0.8 hectares in size and provide far less than full employment for farm households. Lack of growth in off-farm employment has been a feature of the past decade, but agriculture must shed labor to become more productive. Vietnam faces four imperatives:

- intensifying agricultural production through the introduction of new technology by increasing the share of the agricultural budget spent on research from less than two percent to between 6 and 10 percent;
- diversifying agriculture by investing in high-value crops and doubling the value of output to \$2,000 per hectare. Rice still dominates Vietnam's agriculture, (60% of the cropped area) and farm households must be encouraged to diversify;
- promoting off-farm employment by promoting rural industrialization and the growth of private small- and medium-sized enterprises (SMEs); and
- targeting remote and upland areas, where the highest rates of poverty persist.

### The CDF Approach and Relations to Donors

Support for Vietnam is implemented within a Comprehensive Development Framework (CDF). The approach is summarized in the 2001 Vietnam Development Report Partnerships for Development. This report summarizes the work of the Government and key donors in 22 working groups, of which six are exclusively rural:

- food security;
- support for the poorest communes;
- water resources development and management;
- reforestation;
- natural disaster mitigation and prevention; and
- a pilot development partnership in Tra Vinh Province.

Four questions are addressed by the groups:

- what is the long-term vision?
- what steps are needed to achieve that vision?
- what are the roles of the partners and the government in the driver's seat?
- how will progress be measured?

In practical terms, this approach is leading to new relationships between donors and government where the partnership works jointly on policy development, institutional strengthening, and investment planning. The approach is beginning to create conditions where:

- duplication of donor effort is avoided;
- selectivity is practiced;

- the burden of championing development and co-ordinating donors is shared;
- the national capacity to use ODA effectively is not overwhelmed;
- key areas for ODA are not neglected; and
- policy improvement and institutional strengthening precede investment.

### Poverty Reduction Focus

Rural development is central to Vietnam's development strategy, and poverty reduction is central to rural development. Poverty in Vietnam is mainly a rural phenomenon; 45% of the rural population was below the poverty line in 1998. Recent gains in poverty reduction have been widespread, although these gains remain quite fragile (with many people only just above the poverty line). The northern uplands, central highlands, and north central coast are Vietnam's three poorest regions. The distribution of poverty significantly influences the location and type of investments in IDA's rural development portfolio for Vietnam.

### Delivering the Strategy

Vietnam's rural development strategy is reflected in

IDA's Country Assistance Strategy (CAS), prepared in 1998 and updated in 2000. The CAS will be revised in 2001, and the emphasis on rural development be expected to continue. The Ministry of Agriculture and Rural Development (MARD) is under pressure from a large and active donor community that supports more than 450 grant- and loan-supported projects. The Bank's aim is to restore the focus of both MARD and the donors on strategic imperatives and to build coalitions that support further programmatic or sectoral approaches to development and fewer construction projects.

In addition to sectoral operations, growth in off-farm employment is supported by macroeconomic support for banking reform, trade reform, enterprise development (including widespread application of the new Enterprise Law), and reform of state-owned enterprises. Support for education, primary health care, rural transport, and rural electricity will support further development of the off-farm rural economy.

### Links to Bank Operations — Present and Future

Links between rural development imperatives and Bank lending operations are illustrated in the following table:

| Imperative                                  | Response   |
|---|--|
| Intensifying agricultural production        | Irrigation Rehabilitation Project<br>Mekong Delta Water Resources Project<br>Vietnam Water Resources Assistance Project<br>Future agricultural research and extension project                          |
| Diversifying agriculture                    | Agricultural Rehabilitation Project<br>Agricultural Diversification Project<br>Rural Finance Project   |
| Promoting off-farm employment               | Rural Transport Project I and II<br>Rural Energy Project<br>SAC II   |
| Targeting remote and upland areas           | Forest Protection and Rural Development Project<br>Coastal Wetlands Protection and Development Project<br>Community Based Rural Infrastructure Project<br>Northern Mountains Poverty Reduction Project |
| Preventing and mitigating natural disasters | Future natural disaster prevention and mitigation project  |

### Indicators of Progress

Key progress measures, disaggregated by region, ethnicity, and gender where needed, include:

- incidence of rural poverty or rate of rural poverty reduction;
- levels of rural employment and underemployment;
- food security from rice self-sufficiency;
- level of child malnutrition;
- share of rural household income attributable to nonfarm employment;
- share of growth in agricultural GDP attributable to new technology;

- share of public expenditure dedicated to agricultural research; and
- number of SOEs equitized.

Key process indicators include:

- ability of the government to fully lead the ODA agenda;
- availability of realtime, market information to farm households;
- level of rural household decision-making that is independent and market-driven; and
- share of rural development funding that is program-based rather than project-based.

**Table 12: Matrix of Strategic Actions to Support Rural Development**

| <b>1. Goals and Objectives of Rural Development</b> | <b>2. Components and Preconditions</b>               | <b>3. Enabling Policy and Institutional Framework</b>  | <b>4. Instruments and Supporting Actions</b>  |
|---|--|--|---|
| <b>Reduce poverty, and drive economic growth</b>    | Intensify agricultural production                    | Develop and transfer new technology<br><br>Improve access to formal capital<br><br>Continue to secure access to, and develop market in, land-use rights                                | Develop new investment in agricultural research and extension (new initiative)<br><br>Banking reform (SAC) and expand investment in Vietnam Bank for Agriculture and Rural Development (Rural Finance I and II)<br><br>Develop and extend sustainable micro-finance (Rural Finance II)<br><br>Invest in lowland land-use rights issuance (in agricultural diversification project) and new forms of land-use rights in uplands (in future forestry project) |
|   | Diversify into higher value products and new markets | Reinterpret "food security"<br><br>Promote nonrice production<br><br>Add value to agricultural production  | Policy dialog and food security partnership<br><br>Agricultural diversification project<br><br>Partner activities   |
|   | Promote off-farm employment                          | Develop health and education in rural areas<br><br>Create a level playing field for the private sector<br><br>Create enabling environment at the local level<br><br>Promote rural SMEs | Investments in primary education, health care for the poor<br><br>Change attitudes, promote rule of law, make capital accessible, and improve corporate governance<br><br>Reform rural SOEs, extend Enterprise Law to rural areas<br><br>Extend scope of MPDF, promote entrepreneurship, and energize Tra Vinh provincial pilot project   |
|   | Target remote and upland areas                       | Target larger share of a growing agricultural research budget to uplands agriculture.<br><br>Dedicate a larger share of public expenditure to the uplands                              | Build poverty targeting in rural infrastructure (e.g., rural transport and energy), invest in new agricultural research initiative and Northern Mountains Poverty Reduction Project<br><br>Revision of Government Program 135 and new investment in Community-Based Rural Infrastructure Project  |
|   | Prevent and mitigate natural disasters               | Strengthen national policy and national and provincial institutions  | Build on the Central Provinces Initiative, a multidonor partnership:<br>- software<br>- hardware<br>- emergency fund source   |

**Box 13**

# THAILAND



## PROFILE OF THE RURAL POOR

The rural sector in Thailand is home to 38 million people, almost 2/3 of the country's population. More than 90% of these households are farmers, who generate 11% of GDP.

The Northeast, covering 1/3 of the total land area and with 44% of the rural population, is the poorest region, with almost 25% of households below the poverty line. The North, covering 1/3 of the land area and 21% of population has an incidence of poverty around 13%. The South, with about 14% of the land area and population, has a well developed economy, with large investment in rubber, tourism, mining, and natural gas development. The incidence of poverty is around 11%.

The Center, comprising western mountains and southeast coast, is the richest, with a low 6% incidence of poverty (Bangkok with 1.12%). According to the Socio-Economic Surveys (SES), average household income in 1992 was almost three times higher in the Bangkok Metropolitan area and more than twice as high in the surrounding provinces than that for the Kingdom as a whole.

## RURAL HEALTH

Healthcare is administered through the Ministry of Public Health, which owns and operates approximately 70% of the country's hospitals. The public health network includes a health center in every tambon (group of villages), a hospital with 10-90 beds in every district, and one referral hospital with at least 200 beds and specialized care in every province.

Access to sanitation has increased almost two fold in both rural and urban areas. However, access to safe water has risen more for urban than rural areas.

| <b>Indicators</b>                  | <b>1993</b> | <b>1997</b> |
|------------------------------------|-------------|-------------|
| Mortality rate (1,000) births      | 37          | 33          |
| Life expectancy (yrs)              | 69          | 69          |
| Access to sanitation total pop (%) | 96          | n/a         |
| Access to sanitation (R) %         | 95          | n/a         |
| Access to Sanitation (U)%          | 98          | n/a         |
| Access to Safe water total pop (%) | 81          | 89          |
| Access to safe water (R) %         | 72          | 88          |
| Access to safe water (U)%          | 89          | 94          |

NATURAL RESOURCE MANAGEMENT

Severe pollution, especially in urban areas, has generated a small but active grass-roots environmental movement. Bangkok's air is among the world's most unhealthy, with dangerously high levels of suspended particulate matter from diesel and two-stroke vehicle engines. In the rural areas, intensive farming and logging have reduced the forest cover to about 20% of the land area, leading to accelerated soil erosion. Soil erosion and river sedimentation are widespread in the key water-sheds in the North.

**Total area:** 514 000 sq km: 38% cultivated, 20% forest

**Population:** 61.66m (end-1999)

#### Main towns: Population in '000 (1990 census)

| Major towns: Population in 1980 (1970 census) |       | Major towns: Population in 1980 (1970 census) |     |
|---|-------|---|-----|
| Bangkok (Metropolitan; capital)               | 5,876 | Nonthaburi                                    | 233 |
| Nakhon Ratchasima                             | 278   | Khon Kaen                                     | 206 |
| Songkhla                                      | 243   | Chiang Mai                                    | 167 |

Language: Thai



## RURAL EDUCATION

The adult literacy rate of 93% is one of the highest in the region, putting Thailand just behind South Korea and Hong Kong, but the proportion of those going on to secondary school remains low. Gross secondary enrolment at 30% of the eligible age group is among the lowest in Southeast Asia. About 80% of the total population has never attended secondary school. At the same time, up to 14% of the college age group is enrolled in a tertiary institution.

### GDP by sector

| <b>% increase</b> | <b>1994</b> | <b>1995</b> | <b>1996</b> |
|-------------------|-------------|-------------|-------------|
| GDP               | 8.2         | 8.1         | 5.2         |
| Agriculture       | 5.1         | 2.4         | 3.7         |
| Industry          | 8.5         | 10.1        | 6.5         |
| Services          | 4.5         | 6.6         | 5.7         |

## THE AGRICULTURAL SECTOR

Once the backbone of the economy, agriculture accounts for only 10% of current-price GDP and the same proportion of export earnings. However, it still employs over 60% of the labor force, and it is thus closely linked with employment and income prospects, which in turn determine domestic demand. Thailand's richest resource area is the Central Plains rice belt. Upland areas are cultivated with maize, cassava, cotton, and pineapple. The 1997/98 crop grew by 3% despite a persistent drought in the northern and northeastern provinces. The 1998/99 crop decreased slightly to 23m tonnes but expanded in 1999/2000 to 24m tonnes. Exports in 1998/99 surpassed the 1995 record of 6.2m tonnes, reaching 6.4m tonnes. Supported by global grain shortages, rice export earnings rose sharply to Bt87bn (US\$2.2bn) in 1998 from Bt66bn (US\$1.7bn) in 1997. Rice prices dropped by 19% in 1999, reducing total earnings. However, the export value of the 1999/2000 harvest amounted to US\$2.5bn, up from US\$2.2bn in 1997/98.

**T**he Northeast, covering one-third of the country's land area and 44 percent of the rural population, is the most populous and poorest region. The poverty rate is 19 percent, and unemployment and underemployment are widespread. While the Northeast has about 40 percent of total agricultural land in Thailand, it contributes less than one-quarter of total agricultural output, reflecting poor soils, erratic rainfall, and seasonal drought and flooding. Despite extensive government efforts to promote multicrop and crop-livestock combinations, monoculture of rice predominates. Low agricultural productivity and low incomes have spurred massive forest encroachment as well as large-scale migration to other regions.

The **North** has one-third of the country's land area and about 21 percent of the population. Income varies greatly, with large pockets of poverty among upland hill tribes. Agriculture is dominated by crop production (77 percent of total regional output). Agricultural activities are concentrated in small inter-mountain basins and narrow river plains. As a result, average farm size is relatively low. Crop productivity is generally high and the rate of forest coverage is relatively good, though encroachment for shifting cultivation remains a problem.

The **South**, with about 14 percent of land area and population, has a well-developed economy. Agriculture accounts for 39 percent of its productive output (including large shares from fisheries and rubber), reflecting good moisture and humidity in the tropical climate. Tourism, mining, and natural gas development have been growing rapidly in the region.

The **Central Region**, comprising the western mountains and southeast coast, is the richest and most densely populated area. It includes about 20 percent of the land area and 17 percent of the population. The economy is diversified among industry (due in large part to the proximity of Bangkok), agriculture (the Chao Phraya Basin has rich soils and good water supply), mining, and commerce. Agriculture accounts only 11 percent of the region's production.

The Government has been committed over the years to the development of village-level infrastructure and has made good progress in developing a network of feeder roads, water supply programs, and village electrification. Community infrastructure needs today include protected water supplies and on-farm irrigation systems.

The rural sector generally also has good access to social services. There have been significant reductions in infant, under-five, and maternal mortality, gains in life expectancy, reductions in the incidence of malnutrition in children, and increased access to health education, contraception, and health services. Many poor rural communities, however, continue to face limited access to primary health care facilities. There is near-universal primary education in Thailand, with high female enrollment rates and good progress in raising secondary enrollment.

The vast majority of the population belong to the same religious and ethnic group, there is relatively little

cultural friction in rural areas. However, there are large populations of ethnic minorities in the hills of the North and West, significant conflicts with the Government over shifting cultivation practices, forest use, and opium cultivation.

Overall, Thailand has a large, dynamic rural sector that has played a key role in the country's economic growth and social development. This dynamism has been nurtured by the market-oriented development strategy that Thailand has followed for the past three decades, which has emphasized the role of the private sector and sound macroeconomic and sectoral management. Unlike many other countries in East Asia, the Government has avoided a strong urban bias in its policies. Nonetheless, the past fifteen years of fast economic growth have spurred an imbalance between rural and urban development. This has arisen from a variety of factors, including:

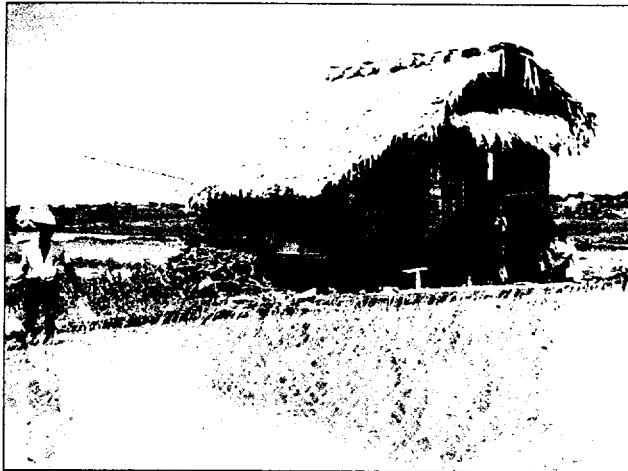
- Poor macroeconomic management of the exchange rate and large capital inflows during the boom economy that fueled an increased demand for labor and capital in urban areas higher than factor market trends would warrant, and undermined agricultural competitiveness;
- High effective rates of domestic industrial protection, which skewed resource allocation away from rural activities to urban activities;
- Underdeveloped legal and regulatory provisions regarding land titling and the use of rural assets as collateral, which constrained rural finance markets; and
- Insufficient public investment in key rural requirements, such as local community development, poverty reduction, and entrepreneurship training.

As a result, the rural sector faces worrisome long-term trends in the pattern, equity, and sustainability of growth that have been heightened by the short-term social and economic impacts of the crisis.

### Key Rural Challenges

Rural poverty remains a problem despite the fact that Thailand's impressive growth has raised incomes for many rural households. According to new poverty lines developed by NESDB, the overall incidence of poverty fell from 33 percent in 1988 to 20 percent in 1992 and to 11 percent in 1996. During this period the number of absolute poor fell by half, from 17.9 to 6.8 million people. But there are problems.

- The incidence of poverty is greatest in rural areas: 15 percent of people living in villages were below the poverty line in 1996, compared to only 6 percent in sanitary districts and 2 percent in municipal areas.
- There are extreme regional disparities: 19 percent of the Northeast lived below the poverty line in 1996, followed by 11 percent in the northern and southern regions and less than 1 percent in the Bangkok municipal area. Since the poorest regions



are also the most populous, the Northeast and North together account for about three-quarters of the total poverty problem in Thailand.

Income inequality is growing, despite the improvement in the incidence of poverty over the past decade. Between 1988 and 1992, the income share of the top 20 percent of households rose from 55 to 59 percent of GDP, while the bottom 20 percent fell from 4.5 to 3.8 percent. Consequently, while Thailand had substantially lower income inequality than other countries in the Region in the mid-1970s, it now is among the most unequal distribution in East Asia.

A 1996 World Bank poverty report indicated that the increase in inequality was largely due to the skewed distribution of formal sector jobs across regions and sectors, and the limited access of the poor to secondary and vocational education.<sup>9</sup> In 1990, more than three-quarters of all workers had only completed primary school, and by 1992, nearly half of the earnings inequality was attributable to differences in education background.

Rural employment is limited, which has spurred a massive out-migration of young workers to urban centers. The average annual migration rate increased from 420,000 workers in 1976-80 (of which 80 percent was seasonal) to 992,000 in 1991-96 (of which 70 percent was permanent). As a result, the number of employed persons in agriculture dropped from 20.5 million in 1989 to 16.9 million in 1995, mainly from the ranks of 12-24 years old. These labor dynamics reflect several factors.

First, the higher wages offered by the fast growing industry and manufacturing sectors in urban areas during the 1990s acted like a magnet for young rural workers (real daily wages in industry rose from 108 baht in 1977 to 207 baht in 1995, whereas real daily wages in agriculture stagnated around 65 baht).

Second, while agriculture still accounts for a large share of employment (39 percent during the dry season and 50 percent during the wet season), its absorptive

capacity is limited due to production constraints, primarily scarce land and water resources.

Third, the growth of rural industry, particularly small and medium enterprises, has been slow as a result of market and policy failures that have promoted industrial concentration in Bangkok Municipal Region.

Thirty-eight million people - 63 percent of Thailand's population - live in rural areas. Farmers inhabit about 92 percent of rural households and engage in crop production and animal husbandry. Paddy rice dominates crop production (accounting for about 35 percent of agricultural GDP), followed by rubber (20 percent), tree crops (15 percent), and vegetables (10 percent). Beef production dominates animal husbandry (about 35 percent of livestock GDP), followed by pigs (25 percent) and geese (20 percent). Agricultural activities account for 11 percent of GDP, 50 percent of total labor, and 25 percent of total export value.

Thailand is unique in that on-farm agriculture accounts for a relatively small share of net income for these households, declining from 54 percent in 1977 to 36 percent in 1995. Other income accrues from either off-farm agricultural activities (such as wage employment on other farms, and rental of land, machinery, and draft animals) or nonfarm activities (such as wage labor, sale of goods and services, and remittances).

The remaining 8 percent of people in rural households are employed in a variety of areas, primarily as low-skilled workers in the industrial, manufacturing, construction, and transport sectors. However, a small share works in professional, technical, administrative, or clerical services. There are significant variations in the structure of production, pattern of income and employment, and the level of development across rural regions. This reflects different physical and environment endowments, socioeconomic conditions, and trends in government expenditures and policies.

After many years of strong growth in both rural and

<sup>9</sup> World Bank, *Thailand: Growth, Poverty and Income Distribution: An Economic Report*, Report No. 15689-TH, 1996.

urban areas, the Thai economy plunged into recession in the second-half of 1997 as a result of weaknesses in the banking system, the relative appreciation of the baht, declining wage competitiveness, external shocks and inappropriate policy responses, and structural weaknesses in key sectors. Domestic demand has collapsed, exports remain sluggish, corporate bankruptcies are increasing, and the financial sector is facing significant restructuring. The dollar purchasing power of the baht has decreased by 40 percent, and high interest rates, designed to stabilize the exchange rate and manage aggregate demand, have constrained investment.

The short-term economic outlook remains grim: GDP declined by 8 percent and private consumption by 11 percent in 1998, with only marginal growth projected for 1999. The latest available unemployment figures showed that 1,463,000 people were unemployed and 989,000 underemployed (working less than 20 hours a week. The unemployed in rural areas increased from 2.4 percent in early 1997 to 5.3 percent in early 1999. The poorest region, the Northeast, was hit the hardest, with an increase from 3.1 to 8.1 percent and a decline in real income of 25 percent.

Increasing unemployment and declining real wages in urban areas have resulted in a remigration back to rural areas, leading to a decline in household remittances, increased pressure on natural resources, and greater competition for agricultural land and limited off-farm employment. The crisis has been particularly harsh on the poor (particularly those receiving state welfare, such as pre-school children, the elderly and infirm, HIV patients), and other vulnerable groups. Since many poor households are net buyers of rice, the increase in domestic food prices (arising from the depreciation of the baht and increased rice exports) have undermined food security and consumption levels. High interest rates and the depreciation of the baht have constrained rural credit and led to reduced consumption of fertilizer and other imported inputs, resulting in lower rice production and increased food insecurity for poor households (output has also been affected by *El Niño*). Reductions in government expenditures for rural infrastructure and social services have constricted rural employment and undermined rural health, education, and poverty reduction objectives.

The crisis precipitated a far-reaching review and restructuring of national economic and political priorities in Thailand. A new constitution was promulgated in October, 1997, that gave unprecedented emphasis to good governance, community empowerment, decentralization, and social and environmental issues. Similarly, the Eighth Plan and public sector investment program was restructured in January 1999 to redress the short-term impacts of the crisis. During the current period of intense national debate there has been renewed focus on the role of the rural sector in Thailand's short-term recovery and medium-term growth. For the first time in many years, there is a consensus among Government officials, the

private sector, and civil society organizations (CSOs) that a new rural development vision and strategy is needed — one that moves Thailand beyond the immediate crisis and lays the foundation for more balanced growth, increased employment and income for the rural poor, and improved natural resource management. Equitable and sustainable rural development in Thailand will depend on five interrelated steps.

First, local community organizations must be strengthened, in order to provide the institutional framework for people-centered rural development and to redress the excessive centralization of political and administrative authority that characterized the past.

The key actions include:

- *Enhancing local participation in government decision making* through development of new community participation mechanisms; significant capacity building, and possibly some restructuring, of Tambon Administrative Organizations and Tambon Councils; intensive training of central and provincial government staff responsible for community development; and strengthening the institutional and regulatory framework for CSOs, including development of a fund to support CSOs, streamlining of NGO registration procedures;
- *Expanding poverty reduction programs in poor communities* through an increase in public expenditures, particularly for primary health, secondary education, and sustainable agriculture; better targeting of poverty-related expenditures at both household and provincial levels; and several key design changes to improve the efficiency and progressivity of rural poverty programs, particularly the Poverty Alleviation Program, Tambon Development Program, and free medical care and school lunch programs;
- *Launching fiscal and administrative decentralization* through enactment of legislation devolving expenditures for local services, after sufficient piloting; expansion of the revenue base of local governments, including reform of existing taxes and improved collection of existing charges and fees; establishment of a Local Government Civil Service Commission, but only after local governments have received extensive capacity building; and preparation of strategic reviews of key rural development ministries to identify functions to be decentralized or privatized; and
- *Establishing a stronger monitoring and evaluation framework* for community development, including better coordination of the various initiatives underway in NESDB, Social Policy Committee, and Social Investment Fund; and improved monitoring of the incidence of rural poverty and the effectiveness of poverty reduction programs.

Second, off-farm employment and rural enterprises must be expanded in order to generate the jobs

necessary to absorb surplus workers and boost incomes, and capture the value-added of local agricultural production. Off-farm employment and creation of new rural enterprises must become the new engine of growth in the future, since the capacity of agriculture to expand is limited.

The key actions include:

- *Creating an enabling environment for rural enterprise growth*, particularly development of new rural industrial estates with supporting infrastructure; promotion of entrepreneurial skills and technology research; establishment of a Fund for Innovation Development;
- *Expanding rural credit for establishment of SMEs and micro-enterprises* through additional capitalization of SIFC; expanded training in risk assessment and credit evaluation for SME financial institutions; and elimination of interest rate subsidies on SME lending;
- *Promoting increased private sector and CSO partnerships* in development of off-farm employment.
- *Strengthening vocational schooling and skills development in rural areas*, including reform of the curriculum of vocational schools; development of industry-managed in-service training; and expansion of rural entrepreneurship development programs;
- *Improving the regulatory framework*, including passage of a new basic framework law for SMEs; rationalization of incentive programs at the Board of Investments and other agencies; review of the current minimum wage framework and labor law; and an increase in urban property tax rates; and
- *Reviewing the institutional framework for industrial development* to reduce duplication of functions, strengthen linkages with the private sector, and devolve functions to provincial and district levels.

Third, rural finance markets must be strengthened in order to increase the financial resources of local communities and channel more funds to productive rural investments.

The key actions include:

- *Transformation of BAAC* into an independent commercial rural bank; elimination of restrictions on lending to nonagricultural activities; elimination of controls on interest rates; elimination of subsidized loans for government projects, except if justified to redress a market failure; and introduction of more diversified savings products;
- *Expanding microfinance* for small farmers and poor households, including consolidation and expansion of government microfinance initiatives under one umbrella program; provision of technical assistance and funding for NGO programs; and introduction of simple means tests to improve targeting to poor households;

- *Improving the policy framework* for efficient intermediation, particularly elimination of government controls on lending and deposit rates;
- *Reduction in the role of government in rural banking*, whose subsidized credit programs face low repayment rates and create distortions in rural resource allocation; and
- *Strengthening financial sector training and supervision*, including development of a supervisory framework for rural state financial institutions at the Bank of Thailand.

Fourth, agricultural productivity must be increased in order to address the food and income requirements of poor households, the raw material needs of the agroprocessing sector, and continued export growth.

The key actions include:

- *More effective management of scarce water resources* through a more participatory and transparent system for allocation of water, including the possible use of formal and tradable use rights; establishing new institutional mechanisms for stakeholder management of water resources at the basin, sub-basin and water user levels; and phased introduction of cost recovery and water pricing policies as part of overall reform;
- *Continued land reform*, including acceleration of land titling, revision of the land tax system, and allocation of land and secure use rights to households who currently farm in national forest reserves;
- *Greater focus on sustainable agricultural production*, with an emphasis on food security for poor households and integrated farming systems that diversify production risk and protect the environment;
- *Reduced government intervention in production decisions*;
- *Refocusing the role of government* to essential public goods, particularly research and extension, redressing information asymmetry in commodity markets, and enforcing compliance with health, safety, and quality standards;
- *Review and revision of the role of MOAC*, particularly devolution of functions to provincial and district offices, and privatization of commercial SOEs; and
- *Fine-tuning of the policy framework*, particularly phasing out of the few remaining subsidies on certain types of fertilizers and seeds; rationalization of pesticide policies; elimination of price support programs (particularly for sugar) and greater reliance on development of futures markets for major commodities; and elimination of the few remaining retail price controls.

Fifth, the management of natural resources must be improved in order to ensure the sustainability of rural development.

The key actions include:

- *Enhanced conservation of forests and biodiversity* through more effective enforcement of the logging ban; more frequent monitoring of changes in forest cover; participation of local communities and CSOs in preparation and implementation of management plans; and full financing of recurrent costs through user and service concession fees;
- *Increased watershed management* to protect headwaters and reduce soil erosion through formal demarcation of watersheds and preparation of management plans in consultation with local communities and CSOs; rehabilitation of denuded steep slopes; participation of local communities in watershed protection; and support for new technologies to establish sustainable upland farming systems;
- *Improved management of coastal resources* to reduce social conflicts and environmental degradation through strengthening the regulatory framework; replanting converted mangrove areas and banning further conversion; and refocusing research and extension on sustainable aquaculture practices; and
- *Enhanced management of capture fisheries* to control overharvesting and the loss of resource rents, through updating maximum sustainable yield estimates for major fishing areas and species; establishing a framework that integrates government, private sector, and fishing communities; reducing the level of fishing; and significant increases in license fees and other charges.



## *Special Topics*



# Initiatives for Irrigation Reform

*[Note: This brief does not include water resources management improvement activities, which are integral to sustaining irrigated agriculture. It is limited to reforms in the institutions that deliver irrigation and drainage services.]*

## CHINA

*The Challenge.* Feeding China's vast and growing population is a major challenge. Although China is approximately self-sufficient in grains now, annual consumption is expected to grow from about 480 mt to around 700 mt by 2020. Almost all of the future increase in grain production will be on irrigated lands. The key issues are how to pay for irrigation and drainage investments and operation and maintenance; achieve more efficient management of irrigation systems; increase local participation and "ownership"; and design, build, operate, and maintain irrigation systems to higher standards.

*Strategic Approach.* Since 1995, the country's irrigation program has incorporated improved financial sustainability through the SIDD approach (Self-Financing Irrigation and Drainage District), water supply companies (WSCs) serve water user associations (WUAs). WSCs are supposed to be operationally and financially autonomous companies owned and regulated by the government. The basic cost recovery approach in Bank-financed projects since 1995 has been to require WUAs to collect water fees sufficient to cover at least operation and maintenance costs and half of the capital costs financed by the loan.

WUAs at lower levels have generally been financially viable, but prospects for the financial sustainability are less than promising because of low tariffs fixed by the government, and because there is questionable legal authority for WSCs to be tax exempt. Another approach that has been introduced in some provinces allows for private sector participation through auction, contract, or lease of minor irrigation facilities to individuals or groups. This approach has not been evaluated, but field reports are mixed and, as currently implemented, it leaves out farmer participation and has no provision for regulatory protection of farmers. Recently the establishment of WUAs was declared to be national policy.

## INDONESIA

*The Challenges.* Indonesia is the only major country in the EAP region that depends significantly on rice imports. Given the shortage of capital in Indonesia due to the economic crisis, the country cannot afford to increase rice production through further expansion of irrigation schemes. Deferred maintenance is also a longstanding and severe problem. In 1987, the GOI adopted an irrigation operations and maintenance policy (IOMP) to ad-



*Terracing to prevent soil erosion.*

dress the irrigation sustainability problem that includes: (i) ensuring needs-based budgets; (ii) direct operation and maintenance cost recovery from irrigators through irrigation service fees; and (iii) formation of WUAs to enable selective IMT on less than 500 ha. This policy was not successful because it was inconsistent with the government's former policy of discouraging decentralization. Fees were collected by the bureaucracy without transparency, accountability, or stakeholder involvement. Even in areas where the fee was collected, this did not lead to better maintenance or operation, nor did it lower the unofficial fee that farmers had to pay for water.

*Strategic Approach.* After the demise of the Suharto government in 1998, the new government issued a policy which calls for (a) establishment of WUAs, WUA associations, and WUA federations to manage public irrigation schemes at the secondary level; (b) transforming the role of the newly decentralized provincial and district irrigation agencies to bulk water supply, operation and maintenance of major headworks and canals, and sup-

port of WUAs; (c) introduction of a fee to be collected and retained by WUAs for operation and maintenance funding; and (d) matching government funds for rehabilitation of irrigation schemes managed by WUAs. The requisite legal, regulatory, and administrative reforms are supported by the Bank through Water Resources Sector Adjustment Loan (1999-2001). An intensive piloting and demonstration of the WUA arrangement is being implemented under the reformulated Java Irrigation and Water Management Project. To date, approximately 7,500 WUAs are operational, though some have yet to become as legal bodies. Some 300 WUA Associations and 80 WUA Federations are operational at a higher level of aggregation (primary canal level) but have different tasks. Experience so far is encouraging, and the project is being extended to other regions.

Currently a new program is under preparation to set up and support the arrangements for full-fledged WUA-based irrigation operation. This will involve: (1) re-definition of the tasks of irrigation departments; (2) innovative financing mechanisms in which locally generated funds are complemented with funds from government and loans from an irrigation development fund; (3) arrangements to make irrigation services more compatible with local strategies for rural income generation; and (4) extensive capacity building of both WUAs and government staff.

## THE PHILIPPINES

**Challenges.** There are two types of public irrigation systems in the Philippines, smaller communal irrigation systems (CIS), and larger national irrigation systems (NIS). Most of the CIS and all of the NIS were built by the National Irrigation Administration (NIA). The NIA charter was amended in 1975 to authorize recovery of the full cost of construction (or a portion thereof) and full operation and maintenance costs through irrigation service fees (ISF). The NIA has been

generally successful in an Irrigation Management Transfer (IMT) for the CIS, and is considered a pioneer in this field. Efforts to reform the NIS, however, have floundered, and NIA has been unable to fulfill its responsibilities as a financially and operationally autonomous irrigation agency. The NIS are typically not well-operated or maintained and do not provide full coverage. Meanwhile, the NIA is in constant financial difficulty because it does not establish its own ISF rates and cannot compel farmers to pay irrigation fees.

**Strategic Approach.** The basic approach to NIS reform is to downsize NIA and give its functions at lower levels to WUAs. As a first step, a new water distribution infrastructure is being constructed to reduce the cost of operations. WUAs will then be organized to take over NIA's role, with the WUAs maintaining part of service fees and transmitting the rest to NIA to operate headwork and main canals. The Bank is advocating a change from the uniform national fee to system-specific tariffs and the establishment of earmarked WUA operation and maintenance funds to discourage the deferral of maintenance. The Bank is also advocating payments to encourage early personal retirement within NIA in order to counter agency resistance to the transfer of responsibilities.

## THAILAND

There are no active Bank-financed irrigation projects in Thailand. A project currently under preparation 'Natural Resources Management Project I' (NRMP-I) will include the following: development and implementation of a new basin-wide institutional structure for water management; dam safety management; groundwater management improvement; and irrigation management modernization. The management modernization component has three elements: an institutional reform program for irrigation water management and capacity building; adjustments in operating strategies, existing technologies, and major infrastructure facilities; and improvement and/or additional provision of structures and facilities essential to improved water management and delivery services within the institutional framework formulated above, for a pilot area of about 150,000 ha.

## VIETNAM

**Challenges.** The Government of Vietnam finances the construction and rehabilitation of water resources infrastructure with grants, while the country's 61 provinces have operation and maintenance responsibility for irrigation and drainage schemes. Management is typically done through irrigation management companies (IMCs), which are state-owned enterprises owned and regulated by provincial governments. Although IMCs are supposed to be autonomous, self-financing companies, they do not generate enough revenue to cover operation and management costs. As a result, poor operation and deferred

**Table 13: Summary of EAP Irrigation and Drainage Project Components**

| Component  | Number | Costs     |
|--|--------|-----------|
| Investments in I&D infrastructure                                    | 18     | \$2,500 m |
| Capacity building/ institutional development for Irrigation Agencies | 6      | \$46 m    |
| Capacity Building/ Institutional Development for Irrigation Agencies | 10     | \$81 m    |

maintenance are systemic problems. The policy of complete grant financing for capital works encourages the deferred maintenance and does little to promote cost-effective investment decisions. The IMCs deliver water to villages (called communes), which then distribute water to the farmers. This system generally works well, except where a canal passes through more than one commune.

*Strategic Approach.* The Bank (and other donors, in-

cluding ADB) is working with the government to establish a system whereby only IMCs with sound management will get financing for rehabilitation. The Bank is also encouraging Vietnam to change its financing policy to grants in combination with concessionary loans in order to induce greater cost-effectiveness and encourage maintenance. WUAs that operate along hydraulic boundaries are being encouraged to serve more than one commune, thus reducing per capita costs.

**Table 14: Major I&D Projects, By Country**

| Country     | Number of Projects | Project Costs | Bank Loan/Credit |
|-------------|--------------------|---------------|------------------|
| China       | 6                  | \$1,914 m     | \$844 m          |
| Indonesia   | 2                  | \$410 m       | \$183 m          |
| Vietnam     | 2                  | \$284 m       | \$202 m          |
| Philippines | 2                  | \$154 m       | \$102 m          |
| Thailand    | —                  | —             | —                |

**Table 15: Bank-Client Dialogue on Irrigation Reforms**

| Issue                          | China       | Indonesia    | Philippines | Thailand | Vietnam  |
|--------------------------------|-------------|--------------|-------------|----------|----------|
| Grain Self-sufficiency?        | Approximate | Net Importer | Approximate | Exporter | Exporter |
| Bank-Client Country Dialogues? |             |              |             |          |          |
| Capital Cost Recovery?         | •           |              | ?           |          | ?        |
| O&M Cost Recovery              | •           | ?            | •           |          | ?        |
| WUA Formation                  | •           | ?            | ?           |          | ?        |
| Irrigation Agency Reform       | ?           | ?            | ?           |          | ?        |

Well-Developed: •

Incipient: ?

# Initiatives in Watershed Management

EAPRD has about 10 operations with watershed management components under preparation or being implemented. These projects focus on a range of improvements in natural resource management, chiefly soil and water, with the objective of reversing or curtailing environmental degradation, while bringing about increased agricultural production and rural incomes. Another objective of most projects is to control siltation/sedimentation of major waterways, dams and other water-related infrastructure.

Modes of country participation in these activities are quite varied. In China these projects rely on existing institutional structures within local county, township, and village governments to identify, coordinate, and implement watershed management needs. Farmer beneficiaries generally participate in project design, implementation, and financing, contributing about half of the costs. In general, the Chinese projects are successful and sustainable.

In Indonesia, community participation in watershed projects has followed more traditional lines, with extension staff spending considerable time persuading farmers of the merits of different technologies, and assisting them in the planning and implementation of subproject activities. Financial participation by beneficiaries is variable in Indonesia.

In the Philippines, Bank projects have supported the development of a comprehensive approach to watershed management including formulation of a national strategy, review of the legal framework, definition of requirements for policy and institutional changes, and preparation of a long-term investment program. Philippine projects are community driven and participatory, and have attempted to achieve sustainability through the establishment of watershed management funds. One

project in preparation in the Philippines is intended to carry out watershed management within a river basin framework and institutional structure.

EAP projects incorporate water, soil management, and vegetation strategies and make considerable use of physical structures, such as terracing, gully plugging, and other sediment control measures. Terracing in China has been particularly successful by enabling farmers to make impressive improvements in agricultural yields and to increase cultivation of cash crops. Afforestation has also been extensively used in China, with management of small plantations being contracted out to individual households. In other Southeast Asia countries, terracing and afforestation have been less common, emphasis has been placed on a combination of vegetation techniques, particularly the planting of grasses and multipurpose leguminous shrubs. GIS technology has been used widely in China for land planning purposes, with few problems being reported.

EAPRD has not yet formally adopted a watershed management strategy. Preliminary discussions point to the adoption of the following strategic options.

*Integration with River Basin Management.* Watershed management does not necessarily need to be carried out within the context of river basin management. Environmentally sustainable development and use of land and water resources can be carried out on a community-by-community basis. Good management practices can be implemented that will benefit local areas as well as the river basins. When watershed management can be planned and implemented within the context of integrated management at the river basin level, including both technical and institutional aspects, consideration should be given to the effects of watershed management on downstream



Slash and burn farming.

sedimentation and on changes in the hydrologic regime, especially peak flows, groundwater recharge, and baseflow drain-out. Watershed management operations should be emphasized in river basins where other aspects of integrated water resources management are being implemented.

**Participation and Sustainability.** Watershed management projects should be prepared and implemented with the direct participation of communities and farmers. Participation should include consultation and agreement on both water control and institutional mechanisms. Sustainability of operations needs to be achieved through a high degree of beneficiary participation and financing, through ensuring demand-driven operations, and through the setting-up and strengthening of permanent institutional and financing mechanisms.

Sustainability also hinges on strong support from local government entities and communities.

**Technology.** The technologies used in watershed management operations should be farmer friendly and respond to farmers' needs. Decisions on technology should be made through participation process.

**Training and Demonstration.** Watershed management operations should include a significant training and demonstration component. This should be directed toward farmers and local communities and institutions.

**Poverty Focus.** Sustainable development and use of land and water resources is critical for long-term poverty alleviation. This should be a specific focus of watershed management operations coupled with assurances that the poorest and most vulnerable will receive proportionally greater benefits.



## Appendix



### Annex 1a: Rural and Urban Population Growth (Annual %)

|             | 1994 R | 1994 U | 1995 R | 1995 U | 1996 R | 1996 U | 1997 R | 1997 U | 1998 R | 1998 U |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Cambodia    | 2.8    | 5.5    | 2.8    | 5.4    | 2.1    | 4.9    | 2.0    | 4.7    | 1.9    | 4.6    |
| China       | -0.1   | 4.0    | -0.1   | 3.9    | 0.3    | 2.6    | 0.3    | 2.5    | 0.2    | 2.5    |
| Indonesia   | 0.1    | 4.6    | 0.1    | 4.5    | 0.0    | 4.6    | -0.1   | 4.5    | -0.1   | 4.4    |
| Lao PDR     | 2.1    | 5.3    | 2.0    | 5.2    | 1.9    | 5.3    | 1.9    | 5.2    | 1.8    | 5.1    |
| Malaysia    | 0.8    | 4.0    | 0.8    | 4.0    | 0.9    | 3.9    | 0.9    | 3.9    | 0.7    | 3.7    |
| Mongolia    | 0.6    | 2.9    | 0.6    | 2.9    | 0.5    | 2.8    | 0.4    | 2.6    | 0.2    | 2.5    |
| PNG         | 2.1    | 3.6    | 2.1    | 3.6    | 2.0    | 4.0    | 1.9    | 4.0    | 1.9    | 3.9    |
| Philippines | 0.1    | 4.3    | 0.1    | 4.3    | 0.3    | 4.0    | 0.2    | 3.9    | 0.1    | 3.8    |
| Thailand    | 0.8    | 2.4    | 0.8    | 2.5    | 0.6    | 2.6    | 0.6    | 2.6    | 0.6    | 2.5    |
| Vietnam     | 2.0    | 1.6    | 1.9    | 1.5    | 1.7    | 2.1    | 1.5    | 1.9    | 1.3    | 1.7    |

Key= R stands for Rural and U stands for Urban

Sources: WDI, SIMA 2000

### Annex 1b: Agriculture Growth, Annual %

|             | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|-------------|------|------|------|------|------|------|------|------|------|------|
| Cambodia    | 1    | 7    | 2    | -1   | 0    | 6    | 2    | 1    | 0    | n/a  |
| China       | 7    | 2    | 5    | 5    | 5    | 5    | 5    | 4    | 4    | 3    |
| Indonesia   | 3    | 3    | 6    | 2    | 1    | 4    | 3    | 1    | 1    | n/a  |
| Lao PDR     | 9    | -2   | 8    | 3    | 8    | 3    | 2    | 7    | 4    | n/a  |
| Malaysia    | 0    | 0    | 5    | 4    | -1   | 1    | 2    | 0    | -5   | 2    |
| Mongolia    | -1   | -15  | 10   | -3   | 3    | 10   | 5    | 5    | 3    | n/a  |
| PNG         | 2    | -3   | 6    | 10   | 5    | 2    | 6    | -4   | -6   | 1    |
| Philippines | 0    | 1    | 0    | 2    | 3    | 1    | 4    | 3    | -7   | 6    |
| Thailand    | -5   | 7    | 5    | -1   | 5    | 3    | 4    | 0    | -1   | n/a  |
| Vietnam     | 1    | 2    | 7    | 4    | 7    | 5    | 4    | 4    | 4    | n/a  |

Sources: WDI, 2000

## Annex 2: Social Indicators in East Asia

|  | Cambodia | China           | Indonesia | Korea | Lao PDR           | Malaysia | Mongolia          | Philippines     | Thailand          | Vietnam           |
|--|----------|-----------------|-----------|-------|-------------------|----------|-------------------|-----------------|-------------------|-------------------|
| Number of People under Poverty Line (Rural %) 1998       | 40.1     | 4.6             | 22        | n/a   | 53.0 <sup>c</sup> | 0.9      | 33.1 <sup>d</sup> | 51.2            | 15.5 <sup>b</sup> | 57.2 <sup>c</sup> |
| Life Expectancy at Birth (1998)                          | 54       | 70              | 65        | 72    | 54                | 72       | 66                | 69              | 72                | 68                |
| Secondary Net enrollment % 1997                          | 39       | 70              | 56        | 100   | 63                | 64       | 56                | 78              | 48                | 55                |
| Female adult illiteracyrate % of aged 15 and over (1998) | 80       | 25              | 20        | n/a   | 70                | 18       | 49                | 5               | 7                 | 9                 |
| Access to sanitation (Rural)                             | n/a      | 21 <sup>e</sup> | 45        | 100   | 2                 | 89       | 100 <sup>a</sup>  | 57 <sup>a</sup> | 96 <sup>e</sup>   | 21 <sup>e</sup>   |
| Access to safe water (Rural)                             | 12       | 90 <sup>e</sup> | 56        | 100   | 36                | 80       | n/a               | 68/a            | 72                | 66 <sup>b</sup>   |
| Inequality   | n/a      | n/a             | 0.342     | 0.336 | n/a               | 0.485    | n/a               | 0.429           | 0.462             | n/a               |
| Unemployment rate (1997)                                 | n/a      | n/a             | 4.7       | 3.1   | n/a               | 2.7      | n/a               | n/a             | 2.7               | n/a               |

Source: WDI

<sup>a</sup> 1988

<sup>b</sup> 1991

<sup>c</sup> 1993

<sup>d</sup> 1995

<sup>e</sup> 1990-96 national

## Annex 3a: Rice Production Growth, Asia 1967-1997

|                | Production Growth (% per year)     |           |           | Yield Growth (% per year)           |           |           | Yields (mt/ha) |      |      |
|----------------|------------------------------------|-----------|-----------|-------------------------------------|-----------|-----------|----------------|------|------|
|                | 1967-9882                          | 1982-1990 | 1990-1997 | 1967-1982                           | 1982-1990 | 1990-1997 | 1982           | 1990 | 1997 |
| China          | 3.4                                | 1.8       | 1         | 2.8                                 | 2.1       | 1.6       | 3.2            | 3.7  | 4.2  |
| India          | 2.7                                | 4.2       | 1.7       | 2                                   | 3.4       | 1.3       | 1.3            | 1.7  | 1.9  |
| Southeast Asia | 3.9                                | .5        | 2.7       | 3.1                                 | 1.8       | 1.2       | 1.8            | 2    | 2.2  |
| All Asia       | 3.2                                | 2.5       | 1.5       | 2.5                                 | 2.1       | 1.1       | 2              | 2.4  | 2.6  |
|                | Per capita production (% per year) |           |           | Per Capita Area Growth (% per year) |           |           |                |      |      |
|                | 1967-1982                          | 1982-1990 | 1990-1997 | 1990-1997                           | 1967-1982 | 1982-1990 | 1990-1997      |      |      |
| China          | 1.5                                | 0.3       | -0.1      | -0.1                                | -1.4      | -1.7      | -1.7           |      |      |
| India          | 0.5                                | 2.1       | -0.1      | -0.1                                | -1.5      | -1.4      | -1.4           |      |      |
| Southeast Asia | 1.5                                | 0.5       | 1         | 1                                   | -1.5      | -1.3      | -0.2           |      |      |
| All Asia       | n/a                                | n/a       | n/a       | n/a                                 | n/a       | n/a       | n/a            |      |      |

Sources: IFPRI October 2000

### Annex 3b: Maize Production Growth, Asia 1967-1997

|                | Production Growth (%/year) |           |           | Yield Growth (%/year) |           |           | Yield (mt/ha) |      |      |
|----------------|----------------------------|-----------|-----------|-----------------------|-----------|-----------|---------------|------|------|
|                | 1967-1982                  | 1982-1990 | 1990-1997 | 1967-1982             | 1982-1990 | 1990-1997 | 1982          | 1990 | 1997 |
| China          | 5.1                        | 4.9       | 4.1       | 4.1                   | 3.4       | 1.9       | 3.3           | 4.3  | 5    |
| India          | 1.6                        | 2.8       | 2.2       | 1.1                   | 2.7       | 1.6       | 1.2           | 1.5  | 1.7  |
| Southeast Asia | 4.1                        | 4.1       | 3.2       | 2.6                   | 2.7       | 4         | 1.5           | 1.8  | 2.4  |
| All Asia       | 4.5                        | 4.6       | 3.4       | 3.4                   | 3.3       | 2.3       | 2.5           | 3.2  | 3.8  |

Source: FAO October 2000

### Annex 3c: Per Capita Cereal Consumption (kg/cap), Asia 1967-97

|              | China |      |      |      | Southeast Asia |      |      |      |
|--------------|-------|------|------|------|----------------|------|------|------|
|              | 1967  | 1982 | 1990 | 1997 | 1967           | 1982 | 1990 | 1997 |
| Wheat        | 42    | 81   | 94   | 96   | 6              | 10   | 11   | 16   |
| Maize        | 38    | 65   | 78   | 100  | 20             | 27   | 38   | 47   |
| Other Grains | 29    | 19   | 13   | 12   | 1              | 1    | 2    | 2    |
| Rice         | 80    | 102  | 105  | 106  | 129            | 154  | 161  | 166  |

Source: FAO October 2000

### Annex 3d: Per Capita Cereal Production and Annual Growth Compared with Other Regions

|                | Per capita Production |       |       | Annual Growth Rate (%) |         |           |           |
|----------------|-----------------------|-------|-------|------------------------|---------|-----------|-----------|
|                | 1967                  | 1982  | 1990  | 1997                   | 1967-82 | 1982-1990 | 1990-1997 |
| Latin America  | 225.3                 | 262   | 222.1 | 253.4                  | 1       | -2        | 1.9       |
| S-S Africa     | 127.9                 | 110.8 | 122.3 | 124.6                  | -1      | 1.2       | 0.3       |
| N. Africa      | 255.8                 | 231.5 | 245.5 | 245.6                  | -0.7    | 0.7       | 0         |
| South Asia     | 146                   | 171.3 | 182.1 | 182.6                  | 1.1     | 0.8       | 0         |
| Southeast Asia | 157.8                 | 198.8 | 210.1 | 226.3                  | 1.6     | 0.7       | 1.1       |
| East Asia      | 188.7                 | 248.7 | 276.5 | 295.8                  | 1.9     | 1.3       | 1         |
| All Asia       | 163.6                 | 206.9 | 224.4 | 236.4                  | 1.6     | 1         | 0.7       |
| Developed      | 564.6                 | 670.4 | 680.3 | 660.1                  | 1.2     | 0.2       | -0.4      |
| Developing     | 80                    | 102   | 105   | 106                    | 129     | 154       | 161       |

Source: FAOSTAT data

### Annex 3e: Net Cereal Trade (million mt), 1967-1997

|                | Per Capita Production |       |       |       |
|----------------|-----------------------|-------|-------|-------|
|                | 1967                  | 1982  | 1990  | 1997  |
| Latin America  | 3.1                   | -3.5  | -11.4 | -14.5 |
| S-S Africa     | -1.5                  | -8.3  | -8.1  | -12   |
| N. Africa      | -5.9                  | -28.9 | -38.7 | -44.3 |
| South Asia     | -11.6                 | -2.9  | -3.2  | -1.7  |
| Southeast Asia | -0.1                  | 0.8   | 0.1   | -5.5  |
| East Asia      | -5.8                  | -25.9 | -26.3 | -20.9 |
| All Asia       | -17.4                 | -28   | -29.4 | -28   |
| Developed      | -21.7                 | -68.7 | -87.6 | -98.8 |
| Developing     | 24.6                  | 73.8  | 93.2  | 105.9 |

Source: FAO October 2000

### Annex 3f: Cereal Demand Growth (%/year) Various Cereals, 1967-97

|                | Wheat Demand Growth |           |           | Maize Demand Growth |           | Rice Demand Growth |      |      |      |
|----------------|---------------------|-----------|-----------|---------------------|-----------|--------------------|------|------|------|
|                | 1967-1982           | 1982-1990 | 1990-1997 | 1967-1982           | 1982-1990 | 1990-1997          | 1982 | 1990 | 1997 |
| Latin America  | 3.4                 | 0.8       | 2.3       | 3.6                 | 2.3       | 4                  | 3.5  | 2    | 1.7  |
| S-S Africa     | 6.2                 | 1.7       | 5.6       | 2.9                 | 5.3       | 2.7                | 5.1  | 3.3  | 2.9  |
| N. Africa      | 4.6                 | 3.1       | 1.9       | 6.1                 | 4.7       | 3.9                | 4.6  | 3.3  | 4.6  |
| South Asia     | 4.9                 | 3.8       | 3.4       | 1.3                 | 3.1       | 2.5                | 2.8  | 3.4  | 1.8  |
| Southeast Asia | 6.2                 | 3.2       | 6.9       | 4.4                 | 6.4       | 4.7                | 3.6  | 2.6  | 2.1  |
| East Asia      | 6.5                 | 3.5       | 1.3       | 6.1                 | 4.1       | 4.3                | 3.5  | 1.8  | 1    |
| Developed      | 1.6                 | 1.5       | -0.9      | 2.8                 | 0.8       | 1.1                | 0.7  | 0.5  | 0.6  |
| Developing     | 5.2                 | 3.1       | 2.3       | 4.5                 | 3.8       | 4                  | 3.4  | 2.5  | 1.6  |

Source: FAO October 2000

### Annex 4: Food Security in East Asia

| Countries   | Daily per capita supply of calories<br>1970 | Daily per capita supply of calories<br>1995 | Daily per capita supply of protein<br>change 1994-95 (%) | Food production per capita index<br>(1980=100)<br>1998 | Food aid in Cereals (thousands of metric tons) 1994-95 |       |
|-------------|---|---|--|--|--|-------|
|             |   |   |  |  | Food import as % of merchandise import 1993            | 1993  |
| Cambodia    | 2059  | 1996  | -8.33  | 132.21   | n/a  | 63.72 |
| China       | 2000  | 2708  | 47.92  | 214.53   | 2.90   | n/a   |
| Indonesia   | 1859  | 2699  | 61.11  | 84.00  | n/a  | 2.60  |
| Lao PDR     | 2154  | 2105  | -1.79  | 99.47  | n/a  | 9.61  |
| Malaysia    | 2518  | 2765  | 27.45  | 149.38   | n/a  | 0.32  |
| Mongolia    | 2279  | 1895  | -21.95   | 63.04  | n/a  | 11.71 |
| Philippines | 1670  | 2319  | 29.55  | 94.33  | 7.80   | 44.27 |
| Thailand    | 2148  | 2247  | 1.96   | 105.69   | 4.70   | 2.75  |
| Vietnam     | 2122  | 2438  | 9.80   | 149.12   | n/a  | 63.66 |

Source: UNDP HDRO 2000

### Annex 5: Number of Illiterate Adults (15+) in the Asia and Pacific Region

|              | Male              | Female             | Both Sexes         | Illiterate Females as % of Illiterate Males |
|--------------|-------------------|--------------------|--------------------|---|
| Cambodia     | 1,287,000         | 1,970,000          | 3,257,000          | 153   |
| China        | 71,588,000        | 150,774,000        | 222,362,000        | 211   |
| Indonesia    | 7,170,000         | 15,238,000         | 22,408,000         | 213   |
| Korea, Rep   | 162,500           | 975,000            | 1,137,500          | 600   |
| Lao PDR      | 97,000            | 285,000            | 382,000            | 294   |
| Malaysia     | 807,000           | 1,661,000          | 2,468,000          | 206   |
| Myanmar      | 1,432,000         | 3,719,000          | 5,151,000          | 260   |
| PNG          | 449,000           | 692,000            | 1,141,000          | 154   |
| Philippines  | 1,929,000         | 2,080,000          | 4,009,000          | 108   |
| Singapore    | 86,500            | 265,000            | 351,500            | 306   |
| Thailand     | 760,000           | 1,861,000          | 2,621,000          | 245   |
| Vietnam      | 1,579,000         | 3,461,000          | 5,058,000          | 217   |
| <b>TOTAL</b> | <b>87,365,000</b> | <b>182,981,000</b> | <b>270,346,000</b> | <b>209</b>                                  |

Source: UNICEF/East Asia and Pacific 1996

### Annex 6a: Global Rural Space<sup>2</sup> Portfolio (IBRD/IDA loans and credits), FY99-2000, \$ million

|        | i) RURAL SPACE |       |               |       |                   |       |            |       |                               |       |                        |        |                              |      |
|--------|----------------|-------|---------------|-------|-------------------|-------|------------|-------|-------------------------------|-------|------------------------|--------|------------------------------|------|
|        | Ag.+3          |       | Beyond Age +3 |       | Total Rural Space |       | Urban Only |       | No Direct Rural <sup>••</sup> |       | All Banks Grand Total% |        | Rural Space as of total bank |      |
| Region | 1999           | 2000  | 1999          | 2000  | 1999              | 2000  | 1999       | 2000  | 1999                          | 2000  | 1999                   | 2000   | 1999                         | 2000 |
| AFR    | 187            | 223   | 382           | 550   | 569               | 773   | 232        | 170   | 1,195                         | 1,153 | 1,996                  | 2,096  | 29                           | 37   |
| EAP    | 938            | 493   | 636           | 552   | 1,574             | 1,045 | 888        | 724   | 7,305                         | 1,211 | 9,767                  | 2,980  | 16                           | 35   |
| ECA    | 271            | 290   | 409           | 309   | 680               | 599   | 397        | 85    | 4,183                         | 2,528 | 5,260                  | 3,042  | 13                           | 20   |
| LCR    | 803            | 263   | 502           | 161   | 1,305             | 424   | 1,078      | 488   | 5,308                         | 3,112 | 7,691                  | 4,024  | 17                           | 11   |
| MNA    | 454            | 153   | 87            | 206   | 541               | 359   | 216        | 273   | 837                           | 288   | 1,594                  | 920    | 34                           | 39   |
| SAR    | 607            | 72    | 511           | 808   | 1,118             | 880   | 612        | 11    | 665                           | 1,222 | 2,395                  | 2,113  | 47                           | 42   |
| Total  | 3,260          | 1,494 | 2,526         | 2,586 | 5,786             | 4,080 | 3,423      | 1,581 | 19,494                        | 9,514 | 28,703                 | 15,175 | 20                           | 27   |

•Excluding Supplemental Projects

•• includes misc. non-rural ("urban" and "no direct rural") components of projects with components in rural space.

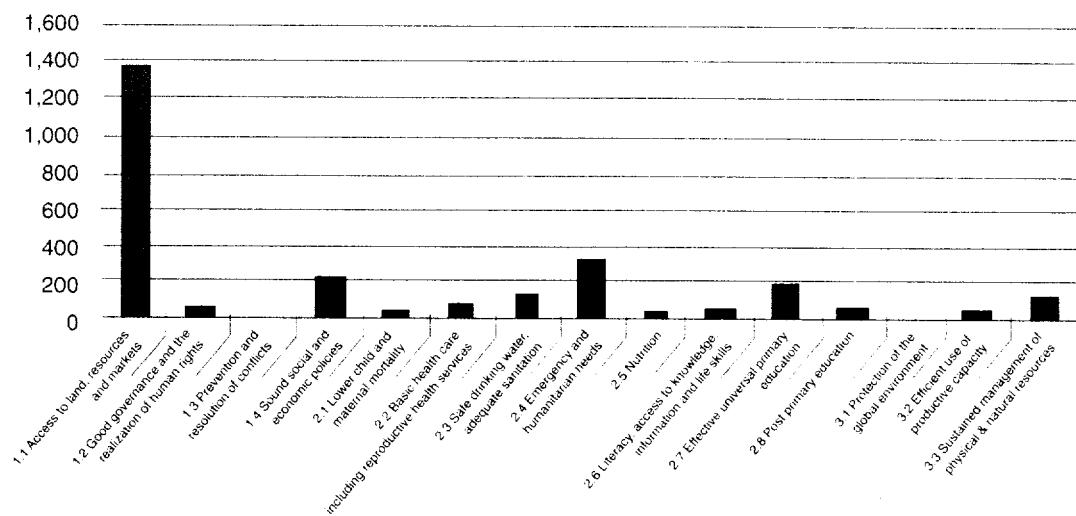
## Annex 6b: East Asia Rural Space Portfolio

|                                 | FY99 | FY00 |
|---------------------------------|------|------|
| Ag. +3 % increase               |      | -47% |
| Beyond Ag. +3 % increase        |      | -13% |
| Total Rural Space % increase    |      | -34% |
| All Bank grand total % increase |      | -69% |
| Rural space as % of total bank  | 16%  | 35%  |

## Annex 6c: Number of Projects and Lending in Rural Space by Region and Envisaged 'Outcome Domain' (\$m); Combined FY1999 and 2000

|  | Region |      |      |      |     |       | Grand Total (\$m) |
|--|--------|------|------|------|-----|-------|-------------------|
|  | AFR    | EAP  | ECA  | LCR  | MNA | SAR   |                   |
| Total number of projects reviewed  | 68     | 41   | 57   | 48   | 18  | 30    | 262               |
| Total IBRD/IDA (\$m)   | 1340   | 2620 | 1271 | 1713 | 901 | 2159  | 10,004            |
| Outcome 1:<br>Policies and actions which promote sustainable livelihoods           | 848    | 1617 | 725  | 1100 | 631 | 939   | 5,860             |
| Outcome 2:<br>Better education, health and opportunities for poor people           | 466    | 855  | 461  | 402  | 249 | 1,021 | 3,454             |
| Outcome 3:<br>Protection and better management of natural and physical environment | 26     | 148  | 85   | 211  | 21  | 199   | 690               |

## Annex 6d: EAP Breakdown of Outcome Domains



## Annex 6e: EASRD Portfolio Analysis

### Breakdown of Rural Sector Portfolio, by Country, FY00

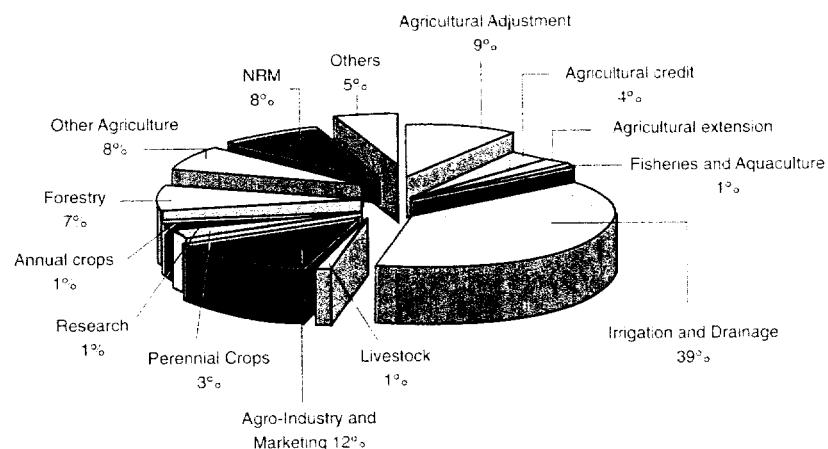
|             | Number of projects | Share of the total portfolio % | Value of projects US\$m | Share of the total portfolio value % |
|-------------|--------------------|--------------------------------|-------------------------|--------------------------------------|
| Cambodia    | 4                  | 5.7                            | 38.7                    | 0.5                                  |
| China       | 31                 | 44.3                           | 5795.9                  | 74.9                                 |
| East Timor  | 1                  | 1.4                            | 6.8                     | 0.1                                  |
| Indonesia   | 13                 | 18.6                           | 723.4                   | 9.3                                  |
| Lao PDR     | 3                  | 4.3                            | 31.4                    | 0.4                                  |
| Mongolia    | 1                  | 1.4                            | 10                      | 0.1                                  |
| PNG         | 2                  | 2.9                            | 32                      | 0.4                                  |
| Philippines | 8                  | 11.4                           | 539.5                   | 7.0                                  |
| Thailand    | 1                  | 1.4                            | 118.1                   | 1.5                                  |
| Vietnam     | 6                  | 8.6                            | 443.9                   | 5.7                                  |
| Total       | 70                 | 100                            | 7739.7                  | 100                                  |

Sources: SAP data as of 06.30.00

### Annex 6f: Breakdown of Rural Sector Portfolio, by Sector, FY00

|                                | Number of projects | Share of the total portfolio % (value) |
|--------------------------------|--------------------|--|
| <b>Agricultural Adjustment</b> | 6                  | 9%                                     |
| Agricultural credit            | 2                  | 4%                                     |
| Agricultural Extension         | 1                  | 1%                                     |
| Fisheries and Aquaculture      | 1                  | 1%                                     |
| Irrigation and Drainage        | 16                 | 38%                                    |
| Livestock                      | 1                  | 1%                                     |
| Agro-Industry & Marketing      | 5                  | 12%                                    |
| Perennial Crops                | 1                  | 3%                                     |
| Annual crops                   | 2                  | 1%                                     |
| Research                       | 1                  | 1%                                     |
| Forestry                       | 5                  | 7%                                     |
| Other Agriculture              | 12                 | 8%                                     |
| NRM                            | 16                 | 8%                                     |
| Others                         | 16                 | 5%                                     |
|                                | 75                 | 100                                    |

### Annex 6g: ESRD Portfolio, by Sector FY00



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