

TRANSFORMING THE RURAL ASIAN ECONOMY: THE UNFINISHED REVOLUTION

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Developing Asia as a whole has taken remarkable strides since the food crises of the 1960s. Improvements in food security, poverty reduction, and per capita income initiated by the Green Revolution have been substantial and lasting. Per capita gross domestic product increased by 190 percent between 1970 and 1995, and calories per person per day by more than 20 percent. In 1975, one out of every two Asians lived in poverty. By 1995 this ratio fell to one in four. The incidence of rural poverty also decreased, from one in two to one in three between 1975 and 1995, and the total number of rural poor fell by 7 percent despite a substantial increase in population.

Although life has improved for most rural Asians, about 670 million still live in poverty, and they must tolerate lower levels of health, education, and general well-being than their urban counterparts. About 2 billion people live in rural Asia. Another 300 million are expected to join their ranks by 2020. The vast majority of these rural inhabitants still rely, directly or indirectly, on agriculture, forestry, or fishing for their livelihoods, a dependence that places enormous pressure on natural resources. The continuing degradation of these resources could well cause social conflict over remaining resources and discontent about the widening gap between urban and rural quality of life. These problems would be particularly severe in South Asia.

MEETING THE CHALLENGES OF THE FUTURE

To complete the economic transformation in rural Asia requires further growth, but growth that is more equitable and environmentally sustainable than it has been in the past. Meeting this challenge will warrant more efficient application of the lessons already learned about agricultural growth, public-sector investment, rural poverty reduction, and natural resource protection (see 2020 Brief 59 for further discussion of these issues). The following six emerging challenges will also need special attention.

Making growth pro-poor. Because the poor live mostly in rural areas and generally depend on the farm sector for their incomes, growth that stems from agricultural productivity and that raises the incomes of small-scale farmers and landless laborers is particularly important in reducing poverty. But growth alone will not rapidly reduce poverty. Policymakers must reach the poor directly, by investing in health, nutrition, and education. In the case of particularly vulnerable or marginalized groups, policymakers can use income transfers or safety nets to help relieve short-term stress. For the poor to participate in growth, land must be distributed relatively equitably; agricultural research must focus on the problems of small farmers as well as large; new technologies must be scale-neutral and profitable for all farm sizes; efficient input, credit, and product markets must ensure that all farms have access to needed

modern farm inputs and receive similar prices for their products; the labor force must be able to migrate or diversify into rural nonfarm activities; and policies must not discriminate against agriculture in general and small farms in particular.

Managing the legacy of the economic crisis. The 1997 economic crisis in East and Southeast Asia caused serious drops in real income and employment. Although recovery has begun, the affected countries will need time to recover from the loss in real income and cuts in government investment in rural growth and safety nets. Governments and donors need to give high priority to restoring investment fundamentals in the crisis economies and strengthening safety nets. Good-governance reforms must seek greater transparency and accountability in public-sector activities and the regulation of financial institutions and corporations to reduce the possibility of future financial crises.

Managing globalization. Globalization offers immense market, technological, and financial opportunities for further economic growth in Asia. Open markets and global integration have already boosted rural growth, but such processes also risk economic losses to superior competitors, instability, and worsening inequality. The solution to these problems lies in creative policies, not in withdrawal into isolation. Competition can be managed, for example, through a phased transition, as many of the Southeast Asian countries have shown. The pace of liberalization should take into account institutional capacities, competitive readiness of agriculture and industry, and the effects on social and political stability. The management of the transition to globalization should favor not only an open economy and growth, but also macroeconomic stability, human capital formation, and poverty reduction.

Revitalizing agricultural research and technology dissemination. New agricultural technologies in Asia are increasingly complex, knowledge-intensive, and location-specific. They require a more decentralized research and extension system and more information and skills for successful adoption than did Green Revolution varieties and fertilizers. Extension and research that is driven by information from the bottom up could help farmers cope with the complexity of the new technologies. The private sector could also help revitalize agricultural research, though with some risks. Governments are making it easier for the private sector to appropriate and use research results and hybrids. And biotechnology innovations are likely to increase private-sector involvement in agricultural research. But the public sector will continue to play an important role in agricultural research because corporations may not want to invest in technologies that governments consider important for equity and poverty alleviation. Moreover, the private sector has generally shown little interest in increasing the yield of key commodities such as wheat or rice varieties adapted to Asian



agroclimatic zones. And it has made virtually no investments in tropical crops, fruits, and vegetables.

Managing land and water scarcity and degradation. Population pressure on the land; agricultural intensification and inappropriate farming practices; and waste disposal from a rapidly growing livestock sector all pose significant threats to the rural environment. But water scarcity and quality are probably the most severe challenges facing developing Asia and will reach crisis levels in many Asian countries in the next decade or two. Water is becoming scarce not only because of growing demand from agriculture, industry, and households, but because the potential for expanding the water supply is diminishing. Deteriorating water quality will further aggravate water shortages. Policies that can improve water management include removal of subsidies and taxes that encourage misuse of resources and establishment of secure property rights. Water users will need to have greater power to make their own decisions regarding water use, and markets will need to send correct signals about the real value of water.

Building good governance and social capital. Asian societies are changing because of rising incomes and globalization. People are demanding greater participation in policy decisions, more democratic and decentralized forms of governance, and more accountability from public agencies. At the same time, the nature of many public goods is changing. The private sector is playing a larger role in agricultural research and the supply of health and education services, and nongovernmental organizations are organizing communities for collective activity and investment. These changes require that the roles of the public and private sectors and civil society be reconfigured to provide public goods and services in a more cost-effective manner and in a way that better meets the needs of rural people. For consumers whose limited purchasing power prevents a satisfactory response from the private sector, governments inevitably will continue to play a large role in meeting basic needs.

ALTERNATIVE SCENARIOS FOR DEVELOPING ASIA

Even though the size of the agricultural sector has declined relative to other sectors during the course of Asia's economic transformation, agricultural output has continued to grow, as it must. Slower agricultural growth could jeopardize food security and increase child malnutrition in many countries, cause significant new unemployment and poverty (particularly in rural areas), and reduce nonagricultural growth.

If, under a pessimistic scenario, governments become even more complacent than they are today about agriculture, invest less in rural areas, and fail to make needed policy reforms,

projections based on IFPRI's IMPACT model show that the number of malnourished children, a good indicator of current and future poverty, will remain virtually unchanged in 2010 from the 1993 level of 140 million. On the other hand, if government policies continue as usual, that number would drop to 113 million children. But if governments become a little less complacent about agriculture and complete economic reforms as well, the number of malnourished children would drop sharply to 76 million, 65 million less than in the pessimistic scenario. South Asian children would suffer most from government complacency. (The publication cited at the end of this brief gives details about the assumptions made in the various scenarios.)

In two decades it is feasible to virtually eradicate poverty and child malnutrition according to the IMPACT model. But to do so, most of the poorest Asian economies would have to grow at rates close to the peaks experienced by the most dynamic economies in the region, agricultural productivity would have to reach the levels achieved during the heyday of the Green Revolution, and Asian governments would have to make significant new investments in agriculture and rural areas and spend 50 percent more annually on social programs. Although, realistically, South Asia would need to take a longer view, China and Southeast Asia could reasonably eradicate child malnutrition by 2020.

CONCLUSIONS

Asian policymakers on the threshold of the 21st century must make major decisions that could delay the completion of the economic transformation in rural areas or hasten it. Although the region's economy has hit a rough spot, governments must not turn away from a market orientation if they are to carry through the transformation. Rather, they should support the private sector where possible and supplement it where its growth is not sufficiently compatible with poverty alleviation and environmental improvement. Good governance is another key to sustained growth. Transparent and responsive governments must increase the level of investment made in rural infrastructure, agricultural research and extension, education, and health, and expand the reach of social safety-net programs. Some countries could meet a significant part of these costs by reducing wasteful public expenditures in rural areas, particularly on input and credit subsidies, and by improving the efficiency of public institutions. Natural resources should be better managed as well. Completion of the rural transformation, radical reduction in poverty, and improvement in food security in rural Asia are attainable if governments resist complacency.

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"A 2020 Vision for Food, Agriculture, and the Environment" is an initiative of the International Food Policy Research Institute (IFPRI) to develop a shared vision and a consensus for action on how to meet future world food needs while reducing poverty and protecting the environment. Through the 2020 Vision initiative, IFPRI is bringing together divergent schools of thought on these issues, generating research, and identifying recommendations. The *2020 Briefs* present information on various aspects of the issues.