

# Operational Plan for **SUSTAINABLE FOOD SECURITY** in Asia and the Pacific

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# Abbreviations

| ADB     | Asian Development Bank                                                                                |
|---------|-------------------------------------------------------------------------------------------------------|
| ANRR    | agriculture and natural resources research                                                            |
| ARD     | agriculture and rural development                                                                     |
| CoP     | community of practice                                                                                 |
| DMC     | developing member country                                                                             |
| FAO     | Food and Agriculture Organization                                                                     |
| IFAD    | International Fund for Agriculture and Development                                                    |
| MOU     | memorandum of understanding                                                                           |
| RSDD–AR | Regional and Sustainable Development Department–Agriculture, Rural Development and Food Security Unit |
| UNDP    | United Nations Development Programme                                                                  |
| WFP     | World Food Programme                                                                                  |

### **Executive Summary**

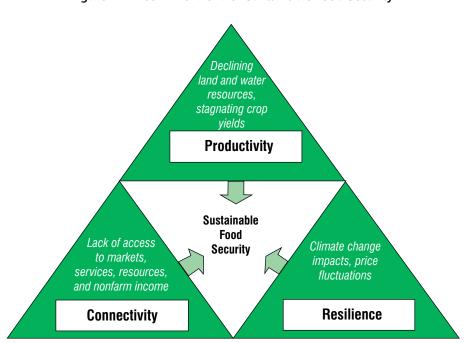
This paper lays out the operational plan of the Asian Development Bank (ADB) to help Asia and the Pacific achieve sustainable food security. The operational plan is based on the premise that the region's long-term food security is at risk. This is due to high vulnerability in the global and regional food supply and market systems, projected increases in food demand, sustainability concerns from land and water constraints, and unfolding climate change impacts. ADB recognizes sustainable food security as a crucial element of its long-term strategic framework, Strategy 2020 (ADB 2008a) in freeing Asia from poverty. The operational plan thus accords priority to achieving sustainable food security in Asia and the Pacific. The goal is to improve the availability of, and access to, adequate and safe food in a sustainable manner, especially for the large number of poor, women, and other vulnerable groups in the region.

Many of ADB's operations in the five core and three other areas of operations in Strategy 2020<sup>1</sup> have significant positive impacts in addressing food security concerns. These include the development of infrastructure (transport, energy, and irrigation), finance sector development (small and medium-sized enterprise development and micro credit), and regional cooperation and integration (trade facilitation). While their impacts on economic growth are often well documented, the direct and indirect contributions of these operations toward improving food supply and market systems remain largely unrecognized. The operational plan thus intends to clarify direct and indirect contributions of ADB's core and other areas of operations in helping the region achieve sustainable food security. The plan also aims to increase the impacts of ADB's multisector operations on food security, particularly for the poor and disadvantaged, through greater synergy and value addition.

The operational plan identifies ADB's role and contributions in addressing the three binding constraints to achieving the goal of sustainable food security, which are (i) stagnating food productivity and production; (ii) lack of access to rural finance, infrastructure, technology, markets, and nonfarm income opportunities; and (iii) threat of climate change and volatility of food prices. In addressing these constraints, the operational plan focuses on three areas of influence—productivity, connectivity, and resilience (Figure 1).

The interventions in these areas of influence will help developing member countries (DMCs) strengthen inclusive food and agriculture value chains that enable integration of production, processing, markets, and distribution networks; and promote improved farm and nonfarm employment opportunities, increased incomes, and better living standards of the poor, women, and other vulnerable groups.

The five core areas of operation are infrastructure, environment, regional cooperation and integration, finance sector development, and education. The three other areas of operation are health, agriculture, and disaster and emergency assistance.



#### Figure 1: Three Dimensions of Sustainable Food Security

Source: Regional and Sustainable Development Department–Agriculture, Rural Development and Food Security Unit.

To help achieve higher impacts of ADB's multisector operations and to achieve sustainable food security in Asia and the Pacific, the operational plan aims to maintain the level of ADB's sustainable food security engagement at about \$2 billion annually from 2010 to 2012. To realize this target, the following measures will be implemented:

- (i) Adopt a multisector approach to address the key constraints to food security, particularly those affecting the poor, women, and other vulnerable groups, using and seeking greater synergy in the lending and nonlending instruments of Strategy 2020's main areas of operation.
- (ii) Expand and deepen partnerships on sustainable food security with other donors and specialized agencies—such as, but not limited to, the Food and Agriculture Organization; International Fund for Agricultural Development; World Food Programme; international, regional, and national agricultural research institutions; civil society organizations; and the private sector.
- (iii) Continue to align ADB's operations in agriculture and rural development with greater focus and selectivity to support and enhance the impacts in ADB's core areas of operations to food security.
- (iv) Increase support for agricultural and natural resources research with a focus on the specific and prioritized needs of Asia and the Pacific, through a programmatic approach over a longer-term research duration.
- (v) Invest in collaborative learning and knowledge development for sustainable food security through the strengthening of the community of practice (CoP) on agriculture and food security, inter-CoP networking, and collaborative work with the external partners.

**Executive Summary** 

# Introduction

This paper lays out the operational plan of the Asian Development Bank (ADB) for ensuring sustainable food security in Asia and the Pacific. The goal of the operational plan is to improve the availability of, and access to, adequate and safe food in a sustainable manner, especially for the large number of poor and vulnerable people in the region.

The operational plan is guided by ADB's long-term development framework, Strategy 2020 (ADB 2008a). Launched in April 2008 as a paramount strategic document, Strategy 2020 sets out the long-term strategic directions for planning and financing of ADB operations. It focuses on three complementary strategic agendas: inclusive growth, environmentally sustainable growth, and regional integration. In pursuit of these agendas, Strategy 2020 requires ADB to devote the majority of its financial and institutional resources to five core areas of specialization: infrastructure, environment, regional cooperation and integration, finance sector development, and education. In addition, Strategy 2020 identifies the other areas of operation—health, agriculture, and disaster and emergency assistance—where ADB's presence is needed on a limited scale. To pursue these three strategic agendas, Strategy 2020 places emphasis on five drivers of change: private sector development, good governance and capacity development, gender equity, knowledge solutions, and partnerships.

# Food Security Challenge

**Recent developments.** In 2007–2008, global food stocks went down to low levels not seen since the 1990s. At the same time, world cereal prices also peaked in April 2008, rising by 87% over their May 2007 index, leading food prices to jump by almost 50% over the same 12-month period (Food and Agriculture Organization [FAO] 2009a). The surge in food prices, coupled with the global economic slowdown in 2008–2009, is expected to move an additional 100 million people into hunger in 2009, thus pushing the number of undernourished people in the world beyond the 1 billion mark. Nearly two-thirds of the world's hungry people reside in Asia and the Pacific (FAO 2008). Overall, the sudden food price increase was a serious setback to the attainment of the Millennium Development Goals, especially those related to poverty and hunger reduction, child mortality, maternal health, and basic education.

The impact of the food price hike is particularly significant in the rural areas, where 75% of poor households reside and where a large number of poor households are net buyers of food. At the same time, rapid urbanization and growth of cities in the developing world have created widespread and increasing urban poverty. Collectively, the poor in rural and urban areas alike spend more than half of their income on food, with nearly one-fifth of them spending more than 70% on food. More than 80% of the vulnerable groups lack access to social protection systems and effective food safety nets.

The unprecedented global food and energy price surge in 2007–2008 exposed the vulnerabilities not only of households but also of governments and the international system to food and nutrition insecurity. Distortions in the food supply-and-demand situation worsened as governments of developing member countries (DMCs) introduced export restrictions, food price controls, and food self-sufficiency programs. Confidence in the global food market wavered as market speculation fuelled further price surges. While the global economic slowdown and bumper food production in some countries have brought down cereal prices in 2009, the prices remain 85% higher than they were in 2003 (FAO 2009a). Volatile energy prices and climate change could exert renewed upward pressure on food prices. Their combined adverse effects on the poverty situation and the overall economic health of developing countries will be large and will carry long-term implications.

**Long-term food security outlook.** In the future, the global demand for food, particularly cereals, is forecast to grow, driven mainly by the demand from developing countries. More than 60% of total cereal demand by developing countries will still come from South and East Asia by 2030. From 1999 to 2030, demand for food cereals will increase by 1.6% in South Asia and by 1.2% in East Asia. Global production will need to increase by 40% by 2030 to keep pace with global demand (FAO 2009c). Investment requirements for a more efficient and effective food supply will be huge,<sup>2</sup> considering the decades of underinvestment in the agriculture sector. Achieving food

<sup>&</sup>lt;sup>2</sup> Estimates of agriculture investment requirements (comprising agricultural research and development, irrigation, and rural roads) for the region just to meet the Millennium Development Goal of halving the proportion of poor and hungry people by 2015 in 2008 range between \$7.2 billion and \$11.9 billion annually (Fan and Rosegrant 2008).

security, however, will be more difficult than in the past, due to ongoing and unfolding challenges from increasing competition for land and water, tapering growth of food crops production and productivity, and climate change.

Particularly worrisome is the growing shortage of water, the global demand for which is estimated to double by 2050. Presently, around 35% of the world population is facing water shortages. In Asia, which houses 60% of the world population, the amount of water received from precipitation is less than 40% of the total available. Asia is facing acute water shortage, with available freshwater being unevenly distributed. To grow more food with less water in the region, the productivity of water will need to be improved substantially, through (i) investing in modern irrigation infrastructure, (ii) adopting enabling policies that correctly price the opportunity cost of scarce water, and (iii) strengthening institutions for more efficient and sustainable management of water.

The prospects of farmers' inability to meet the ever-rising demand for food in developing countries are becoming high in the face of climate change and variability and the associated increase in disaster risks (Box 1). Agriculture is most vulnerable, both in terms of food production and as a livelihood source, particularly for poor people and smallholders. Developing countries in Asia, particularly in South and Southeast Asia, are likely to face the highest reductions in agricultural potential due to climate change, with significant impacts on food crops production and food security (ADB 2009), hence, the imperative of finding adaptation measures that are effective and sustainable.

At the same time, Asia is a major greenhouse gas emitter, mainly through agriculture. Asia's agricultural emissions were 16% of the world's total greenhouse gas emissions in 2005, making the sector second only to energy as the leading contributor to global warming (World Resources Institute 2009). As much as 75% of this was from developing economies, with Asian countries accounting for 37% of the total world emissions from agricultural production.

#### Box 1: Predicting the Impacts of Climate Change

A recent Asian Development Bank study projects that climate change will adversely affect wheat production in South Asia by 2030, and rice production in Southeast Asia, particularly in the Greater Mekong Subregion (ADB 2009b). The study also predicts that climate change will have a strong effect on food prices: rice, wheat, and soybeans could increase by 10%–50%, while the price of maize is expected to double by 2050.

Climate change will also increase extreme weather events—such as floods, droughts, and typhoons—which will have serious consequences for agriculture, food, and forestry production. This is of particular concern to Asia, as it is the most disaster-afflicted area in the world—of the 10 countries with greatest economic losses to extreme weather, five are in Asia (Bangladesh, the People's Republic of China, India, Indonesia, and Pakistan). Between 1975 and 2006, 89% of people affected by natural disasters in the world were in Asia (Sanker, Nakano, and Shiomi 2007).

Using three indicators of vulnerability (exposure, sensitivity, and adaptive capacity), the most vulnerable countries in the region are Afghanistan, Bangladesh, Cambodia, India, the Lao People's Democratic Republic, Myanmar, and Nepal. These are the countries that will need targeted assistance (ADB 2009b).

Source: ADB 2009b.

Developing countries in Asia have high potential for low-cost mitigation in the agriculture sector, especially through soil carbon sequestration. Strategies for reducing emission in agriculture have significant synergy with adaptation, as timely and effective mitigation reduces the difficulty and cost of required adaptation in the rural sector, produces co-benefits especially in terms of improved soil and water quality, and leverages available investment funding for mitigation.

**Food security and Asia's growth scenario.** Despite recent gains in poverty reduction, rural Asia remains home to the largest proportion of the world's poor people. The approach to address food security is inextricably linked to reducing poverty. Traditionally, poverty has been presumed to be worse in the rural areas. The profile of the rural poor, however, is fast changing. Throughout Asia, the share of nonfarm income in total income of the rural poor is increasing, while the share of agricultural wage income remains low and is declining. Within farm income, the share from food crop production is in decline, while that from non-food crop production is increasing. At the same time, the dramatic growth of cities in the developing world, particularly in Asia, is creating a new challenge of rapidly widespread and increasing urban poverty. As Asia's economy is transformed, it must address the increasing demand for food by the economy as a whole, as well as by the poor in the rural and urban areas.

Food Security Challenge

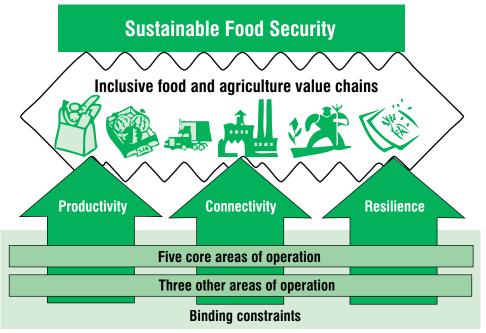
# The Approach to Sustainable Food Security

**Goal.** The operational plan identifies sustainable food security in Asia and the Pacific as one of the crucial elements underpinning the Strategy 2020 agenda, particularly in reducing poverty and supporting Asia's successful economic transformation in the coming decades. Accordingly, the operational plan calls for ADB to accord priority to the region's sustainable food security concerns in its operations. Food security exists when all people, at all times, have physical, social, and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO 1996).<sup>3</sup> In addition, the operational plan recognizes that food security needs to withstand increasing scarcity of water and the impacts of climate change. The operational plan thus defines the goal of sustainable food security as the improved availability of, and access to, adequate and safe food for Asia's poor and vulnerable people in a sustainable manner.

**Binding constraints.** There are three binding constraints to achieving the goal of sustainable food security: (i) stagnating food productivity and production, particularly in relation to growing land and water shortage; (ii) lack of access to rural finance, infrastructure, technology, markets and distribution networks, and nonfarm income opportunities; and (iii) threat of climate change and price volatility. In addressing these constraints, the operational plan sets out three corresponding pillars: (i) enhancing the productivity of food and agriculture and the related rural economy; (ii) improving connectivity among producers, particularly small households and farm households headed by women, food and agriculture industries, markets, and consumers—particularly poor urban and rural food purchasers; and (iii) improving the resilience of the agriculture and rural sectors against the impacts of climate change and associated climate variability and food price volatility. Strategic and well-balanced interventions in these areas of influence will nurture the growth of competitive and dynamic agriculture sectors that are fully integrated with domestic and international consumer markets, as well as with other nonfarm sectors, assuring small farmers, women, and other vulnerable people a share of full and fair benefits.

**ADB's multisector food security engagement.** It should be noted that many of ADB's core and other areas of operations have made significant contributions to addressing food security constraints. Investments in irrigation development and/or modernization, improved management of natural resources, and enhanced access to financial services and products are good examples of ADB's core operations that address productivity constraints. Similarly, investments in transport infrastructure, trade facilitation, and promotion of small and/or medium-sized rural enterprises help address connectivity constraints significantly, while investments in disaster risk management (e.g., flood dikes), food safety nets, nutrition, and vocational training address the resilience constraints. While the development impacts of many of these core operations are well

<sup>&</sup>lt;sup>3</sup> Food security is different from self-sufficiency. Food security means that food is accessed through the cheapest and most efficient sources, i.e., domestic and/or international markets. In contrast, self-sufficiency relies mainly on domestic production, which is encouraged through access by farmers to subsidized inputs and credit, combined with export restrictions and use of nontariff barriers.



#### Figure 2: Inclusive Food and Agriculture Value Chain for Sustainable Food Security

documented in terms of their intended direct goals—such as economic growth—their impacts and contributions toward helping developing member countries (DMCs) achieve sustainable food security are largely unrecognized. Given the mounting food security challenge, ADB needs to clarify and define the direct and indirect contributions and impacts of ADB's multisector operations in achieving sustainable food security, with a view to mainstreaming food security objective.

**Inclusive food and agriculture value chain.** ADB's multisector food security engagement can be significantly enhanced by increasing synergy and value addition in the backward and forward linkages along the food and agriculture value chain, with particular attention to small farmers and other vulnerable groups.<sup>4</sup> Such strategic interventions will help DMCs develop inclusive food and agriculture value chains that the operational plan espouses as a pathway to transforming Asia's rural and agriculture sector, thereby achieving sustainable food security (Figure 2). Such value chains will allow efficient integration of food and agriculture production, with processing and marketing at the country and regional and/or subregional levels. With special emphasis on the poor and vulnerable groups that remain excluded from greater participation in economic activities, the value chains will also allow small producers adequate and fair access to inputs, markets, technologies, and information, and provide diverse incomes and job opportunities. Development of efficient and inclusive value chains will also enhance urban–rural linkage, allowing supply of safe and affordable food to increasing numbers of urban poor people.<sup>5</sup>

Source: Regional and Sustainable Development Department-Agriculture, Rural Development and Food Security Unit.

<sup>&</sup>lt;sup>4</sup> A good example is found in the recent special evaluation study on ADB's Contribution to Inclusive Development through Assistance for Rural Roads (ADB 2009a). The study found that most of the road corridors had weak backward and forward linkages, with very little progress in adding value to agricultural production. Constraints such as the lack of storage, efficient transport services, and marketing systems prevented ethnic minorities and poor households and households headed by women from taking advantage of economic opportunities brought about by road projects.

<sup>&</sup>lt;sup>5</sup> In the 1960s, 2 inhabitants in 10 in Asia lived in cities, whereas it is estimated that close to 60% of the population will be living in urban areas by 2025. Supplying the growing cities with adequate and affordable food is a major challenge, requiring massive investments in food distribution, storage, and marketing facilities.

The operational plan thus calls for the adoption of a multisector approach to developing inclusive food and agriculture value-chain networks, involving the economic and social sectors,<sup>6</sup> engaging rural and urban economies, and linking the value chains to domestic and international consumer markets. Examples of opportunities that ADB could seize through its multisector operations are shown in Table 1.

| Operation Areas                         | Main Contributions                                                                                                                                                                                                                                                                                                                          |  |  |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Infrastructure                          | <ul> <li>Improved water productivity (irrigation, drainage, and water storage).</li> <li>Improved access to public infrastructure services (rural roads, rural electrification, market infrastructure, and rural town development).</li> <li>Increased resilience against natural disasters (flood and drought risk management).</li> </ul> |  |  |
| Environment                             | <ul> <li>Improved management of natural resources (integrated water resources management).</li> <li>Scaled-up mitigation and adaptation to climate change (biogas and/or rural renewable energy, and natural resource management).</li> </ul>                                                                                               |  |  |
| Regional cooperation and/or integration | <ul> <li>Enhanced food and agriculture trade, and food safety and standards.</li> <li>Enhanced regional food security (regional emergency food reserve system).</li> <li>Improved management of cross-border water resources.</li> <li>Improved regional disaster risk management.</li> </ul>                                               |  |  |
| Finance                                 | <ul> <li>Improved access to finance (micro credit and rural finance services).</li> <li>Enhanced rural enterprise development.</li> <li>Improved resilience against emergencies (risk insurance and safety net).</li> </ul>                                                                                                                 |  |  |
| Education                               | Enhanced skills (vocational training).                                                                                                                                                                                                                                                                                                      |  |  |
| Agriculture                             | <ul> <li>Improved small farmers' access to markets (food and agricultural value chain facilitation).</li> <li>Enhanced agricultural research to develop and disseminate innovative agricultural knowledge and technology.</li> </ul>                                                                                                        |  |  |
| Health                                  | • Improved nutrition status of women, children, and the poor.                                                                                                                                                                                                                                                                               |  |  |
| Disaster and emergency assistance       | Enhanced early warning and information systems.                                                                                                                                                                                                                                                                                             |  |  |

#### Table 1: ADB's Multisector Engagement for Sustainable Food Security

Source: Regional and Sustainable Development Department-Agriculture, Rural Development and Food Security Unit.

**Complementarity with development partners.** Interventions in agriculture and rural development (ARD)—particularly in enhancing primary production and facilitating backward and forward linkages of agricultural production to markets—are crucial for ADB to bring synergy and value addition to its multisector food security engagement. Constraints to primary production, such as inadequate farming skills and knowledge, inefficient agricultural advisory (extension) services, and skewed land distribution, remain significant challenges to achieving sustainable

<sup>&</sup>lt;sup>6</sup> The economic sectors, as defined in gross domestic product, include agriculture (crop, livestock, and fisheries), industry (mainly manufacturing such as food manufacturing and processing industries), electricity and water, and services (such as financial, wholesale and retail, transport, and marketing). The social sectors are education and health.

food security. The operational plan recognizes that these areas are not within ADB's comparative strengths, and suggests that stronger collaboration with specialized agencies be sought, such as with the International Fund for Agricultural Development (IFAD), United Nations Food and Agriculture Organization (FAO) and World Food Programme (WFP), and other donor partners, which can complement ADB's main operations.

**Selectivity in ADB's ARD engagement.** Even with stronger partnership with other specialized agencies and donor partners, the operational plan envisages that ADB's engagement in ARD will still be necessary on a selective basis. ADB's ARD engagement may be required in DMCs where ADB's other main areas of operations leave crucial gaps in addressing the countries' food security challenges, particularly in backward and/or forward linkages for inclusive value chains. ADB should be engaged in ARD where such gaps cannot be readily filled by complementary activities of other development partners and donors, or where ADB has clear comparative advantage. The specific areas of ARD interventions for ADB may vary, depending on the country's level of economic development.

**Lessons from ARD experience.** Where ADB's engagement in ARD is necessary, such operations ought to fully reflect the lessons emanating from experiences. Evaluation studies found the performance of the agriculture and natural resources sector portfolio less successful than other sectors due to weak up-front sector analysis, overly ambitious scope and design, inadequate economic analysis, lack of due diligence work on institutions to be engaged, and diffused efforts due to project coverage of widely dispersed sites (Box 2). ADB's ARD engagement needs to reflect these lessons fully, and should continue learning in order to achieve larger and more sustainable impacts.

**Enhanced support for agricultural research.** Apart from selective project-level interventions, the operational plan recommends that ADB enhance its support for agricultural and natural resources research (ANRR). Agriculture knowledge and technologies have contributed to substantial increases in food and agricultural production in the past, and will continue to be vital for achieving sustainable food security especially for the poor and vulnerable groups, given increasing demand for food, feed, and fuel amid a rapidly declining resource base and growing threat of climate change. Since 1979, ADB has supported ANRR through a series of regional technical assistance projects. Past evaluation of such ADB support found that it produced significant and tangible dividends over a wide range of rural and nonrural beneficiaries throughout Asia and the Pacific (ADB 2000, 2008b). These studies also note that the short time frame of traditional technical assistance projects inhibits the development of knowledge solutions that require long gestation periods to produce the desired results. Accordingly, ADB will address the need for long-term, programmatic development of directed knowledge products in partnership with selected international agriculture research centers,<sup>7</sup> that have established strong working relationships with Asia's major national agriculture centers.

**Drivers of change.** In pursuit of sustainable food security in Asia, the operational plan emphasizes the five drivers of change that should lead to improvements and greater impacts. **Expanded partnership with the private sector** will be actively sought to attract more direct

The Approach to Sustainable Food Security

<sup>&</sup>lt;sup>7</sup> Most of ADB's past and ongoing ANRR regional technical assistance projects are implemented in partnership with international agricultural research centers. Of the more than 15 international agricultural research centers, only a few have a strong presence on issues related to food security in Asia. These include the International Rice Research Institute, International Water Management Institute, and the International Crop Research Institute for Semi-Arid Tropics. These three were involved in 10 out of the 13 ANRR regional technical assistance projects that ADB has approved since 1996. In addition, ADB has also frequently partnered with the International Food Policy Research Institute in developing major knowledge products on Asia's agriculture and food security.

investments in productivity enhancement, agro-processing, agro-retailing and other nonfarm rural business. **Good governance and capacity building** will be supported through policy reforms and actions to address institutional weaknesses that constrain DMCs from effecting sustainable food security, in such areas as improving the investment climate, enhancing food and agricultural trade, and removing barriers to participation by the poor and vulnerable groups. **Gender equity** will be promoted, particularly in ensuring access to resources, technologies, and other services for farm households headed by women and improving women's access to safe and adequate food and nutrition. **Knowledge solutions** will be emphasized in meeting DMCs' knowledge needs through policy research for food security, and developing and disseminating innovative farm technologies for climate change mitigation and adaptation. Finally, **partnership** with a more diverse group of institutions will be actively sought in striving for sustainable food security.

#### Box 2: Lessons from ADB's Agriculture Sector Operations

Agriculture is an underlying element of growth, but igniting growth that is inclusive of rural areas and people has proven difficult. An evaluation of the agriculture and natural resources operations of the Asian Development Bank (ADB) showed that from 2001 to 2008, only 56% of agriculture projects were rated "generally successful," 35% were "partly successful," and 9% "unsuccessful." These results are lower when compared with the ratings of ADB-wide operations where 71% are "generally successful," and 5% are "unsuccessful." (Independent Evaluation Department database, ADB).

In response to this weak performance, various studies identified main lessons. While capacity of government agencies in the sector was often weak, there was not enough emphasis on developing institutional capacity. Projects that were focused on approaches addressing supply-side issues resulted in misreading of the market demand for higher value and niche products. Projects with strong government-driven approaches compromised sustainability, as solutions were not very relevant to local problems, and lacked ownership by stakeholders. Many projects that have characteristics of public goods and do not, or only partially, generate revenues failed to include analyses of the impacts on the fiscal condition of governments.

Despite the uncertainties often associated with agriculture sector projects, over optimism continued to show up in project economic analysis. Cost-benefit analyses of proposed agriculture projects often report "robust" economic returns, but analysis of completed projects shows much lower rates of return, clearly suggesting the need for improving analysis of economic context at the project preparatory phase. Such improvement is most crucial in up-front sector analysis that informs current development problems and needs, and guides design and the feasibility analysis to find out how rural areas and people link to the economy. Another improvement is needed in analyzing the cost of transformation to address coordination problems, such as opportunism and rent-seeking behaviors that represent significant costs and risks for achieving the intended benefits.

Assessments of the economic analysis of ADB operations stress that doing "the right things" to support agriculture and rural development in "the right ways" can improve relevance and feasibility of projects. One way of improving effectiveness of projects is to give sufficient up-front attention to identifying and diagnosing problems as the basis for solutions. In addition, monitoring and evaluation of response and outcomes during implementation is another important key to inform decision making and fine tune design during implementation.

Source: Bolt 2005.

# Implementation

Level of ADB's food security engagement. The operational plan envisages ADB's multisector engagement for sustainable food security at \$2 billion annually for the 2010–2012 period. The operational plan not only aspires to increase ADB investments in food security but also seeks to enhance impacts of ADB engagement. To make this happen, regional departments are required to mainstream and synergize their relevant core and other areas of operations, and to maximize their direct and indirect impacts on sustainable food security, according to the priorities and specific food security targets embedded in the country and/or regional cooperation partnership strategy for developing member countries.

**Monitoring ADB's food security interventions.** ADB's engagement in sustainable food security will be monitored by the Agriculture, Rural Development and Food Security (AR) Unit of the Regional and Sustainable Development Department (RSDD), based on a comprehensive database of ADB's multisector food security engagement, while progress, performance, and immediate impacts of individual projects and programs will be tracked according to the strategic results framework (Table 2). Given the wide range of food security engagement across various multisector operations, RSDD and regional departments will jointly develop a more detailed and comprehensive set of outcome and output indicators.

**ADB's ARD engagement.** Regional departments should continue operations in ARD, where ADB's presence in the sector is justified on the basis of clients' demand, ADB's comparative strengths, and absence of complementary donor programs. ADB's agriculture sector operations shall be sharply focused on value addition to main areas of operation toward sustainable food security, particularly in strengthening backward and forward linkages along food and agriculture value chains, and in ensuring food security for the poor and vulnerable, and their increased participation in economic activities.

**Strengthening staff skills and institutional capacity.** To ensure that the focus of ADB's food security engagement is relevant and has high impacts, ADB's staff skills and knowledge need to be collectively strengthened. Regional departments will need to encourage staff to reflect on past lessons and continue learning new lessons in project preparation and administration. In addition, RSDD will strengthen its support for the members of the community of practice (CoP) for Agriculture, Rural Development, and Food Security (ARDFS), particularly in sharing good practices, innovative approaches and designs, and projects. The CoP members should also have increased opportunities to participate in external knowledge development opportunities. Given the multisector nature of, and interdisciplinary requirements for, attaining food security, RSDD will actively pursue networking and collaboration of the ARDFS CoP with other CoPs, such as infrastructure, water, health, education, finance, and others.

Strengthening partnerships with other donors and agencies. Regional departments are required to strengthen collaboration and dialogue with other donors in formulating their food security engagement in the respective DMCs, to ensure their sharp focus according to ADB's comparative strengths. At the corporate level, the RSDD-AR Unit will act as a focal point of collaboration with specialized organizations, like FAO, IFAD, and WFP. The RSDD-AR will

promote and deepen the strategic partnership with these partners, in consultation with regional departments and other departments and/or offices, through regular conferences and the preparation of joint work plans.

#### Table 2: Strategic Results Framework of ADB's Sustainable Food Security Engagement

**Impact:** Improved availability of, and access to, adequate and safe food for Asia's poor and vulnerable in a sustainable manner

| Outcome: Inclusive food and agriculture value chains |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Outputs                                              | Output indicators                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Key activities                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Assumptions and risks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |
| Improved<br>productivity                             | <ul> <li>Coverage of<br/>productive rural<br/>infrastructure.</li> <li>Coverage of micro<br/>credit and other rural<br/>finance services.</li> </ul>                                                                                                                                                                                                                                                                                                                   | <ul> <li>Mainstream ADB's food security engagement in its core operations.</li> <li>Strengthen dialogue with DMCs to identify key food security agenda that ADB should engage in.</li> <li>Strengthen partnership with other development agencies to generate synergies in achieving sustainable food security.</li> <li>Enhance food security engagement at regional and subregional levels.</li> <li>Promote the development and sharing of knowledge.</li> </ul> | <ul> <li>Assumptions         <ul> <li>DMCs and regional departments see clear value addition in mainstreaming food security in core operations.</li> <li>Other development partners are willing to collaborate with ADB, and can agree on a common strategy to achieve sustainable food security.</li> <li>Incentives are available for regional food security cooperation.</li> </ul> </li> <li>Risks         <ul> <li>Support in terms of staff skills and resources may not be adequate for mainstreaming food security in the core operations.</li> <li>Staff incentives may not be adequate for knowledge development and sharing.</li> </ul> </li> </ul> |  |  |
| Enhanced<br>connectivity                             | <ul> <li>Coverage of rural<br/>transport and/or<br/>market infrastructure.</li> <li>Extent of agriculture<br/>trade facilitation.</li> </ul>                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
| Improved<br>resilience                               | <ul> <li>Coverage of disaster<br/>risk management<br/>infrastructure.</li> <li>Adequacy and<br/>effectiveness of<br/>regional food security<br/>regime.</li> <li>Extent of improvement<br/>in natural resource<br/>management.</li> <li>Extent of climate<br/>change mitigation and<br/>adaptation measures<br/>actually implemented.</li> <li>Extent of the poor,<br/>women, and other<br/>vulnerable groups<br/>covered under the<br/>food safety network</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
| Enhanced<br>knowledge and<br>technology              | <ul> <li>Improved DMC<br/>policies and<br/>institutional<br/>framework.</li> <li>Extent of innovative<br/>knowledge and<br/>technology<br/>disseminated to male<br/>and female small<br/>farmers.</li> </ul>                                                                                                                                                                                                                                                           | <ul> <li>Enhance and bring<br/>greater focus to<br/>ADB's support for<br/>agricultural research<br/>in the region's priority<br/>food security agenda.</li> <li>Enhance collaboration<br/>with other partners for<br/>effective knowledge<br/>creation and<br/>dissemination.</li> </ul>                                                                                                                                                                            | Assumption<br>• Asia and the Pacific<br>have common<br>priority knowledge<br>and technology<br>needs, and major<br>breakthrough in<br>food security can<br>be achieved by<br>addressing them.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |

ADB = Asian Development Bank, DMC = developing member country.

Source: Regional and Sustainable Development Department-Agriculture, Rural Development and Food Security Unit.

# Recommendations

In recognition of Asia and the Pacific's sustainable food security as the underlying element for the Strategy 2020 agenda, it is recommended that the Asian Development Bank (ADB) introduce the following medium-term measures during 2010–2012 (refer to Table 3 for the Action Plan):

- Adopt a multisector approach to address the key constraints to sustainable food security, particularly those affecting the poor, women, and other vulnerable groups against emerging challenges, such as climate change impacts in Asia and the Pacific. To do so, it will mainstream and seek synergies in the lending and nonlending instruments of Strategy 2020's main areas of operation to address the most important constraints to sustainable food security.
- Expand and deepen ADB partnership on sustainable food security with other donors and specialized agencies—such as, but not limited to, FAO, IFAD, WFP, and other international, regional, and national agricultural research institutions—as well as civil society organizations and the private sector at both sector and project levels.
- 3. Continue to align ADB operations in agriculture and rural development on a selective basis and with greater focus to support and enhance the impacts of its multisector food security engagement made through ADB's core areas of operation.
- 4. Increase support for agriculture and natural resources research (ANRR) with focus on the specific and prioritized needs of Asia and the Pacific, through a programmatic approach over a longer-term research duration.
- 5. Invest in collaborative learning and knowledge development for sustainable food security, through the strengthening of the Agriculture, Rural Development, and Food Security Community of Practice (ARDFS CoP), inter-CoP networking, and collaborative work with external partners.

#### Table 3: Agriculture and Rural Development Operational Plan for Sustainable Food Security in Asia and the Pacific Action Plan

| Activities                                                                                             | Time frame           | Note                                                                                                                                                      |  |  |  |  |
|--------------------------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Monitoring of ADB's food security engagement                                                           |                      |                                                                                                                                                           |  |  |  |  |
| Developing monitoring system                                                                           | January 2010         | By a task force comprised of RSDD and regional departments.                                                                                               |  |  |  |  |
| Reporting the monitoring results                                                                       | 2011                 | As biannual sector report<br>initially, and progressively<br>integrated into ADB-wide<br>development effectiveness<br>review process.                     |  |  |  |  |
| Partnership development                                                                                |                      |                                                                                                                                                           |  |  |  |  |
| MOU with IFAD                                                                                          | Signing in June 2010 | Draft MOU with IFAD in advance<br>stage. Signing of MOUs will be<br>done at the regional investment<br>forum on food security at ADB<br>(see date below). |  |  |  |  |
| MOU with FAO                                                                                           | Signing in June 2010 |                                                                                                                                                           |  |  |  |  |
| Enhancing ADB's support for agricultural research                                                      |                      |                                                                                                                                                           |  |  |  |  |
| Development of a 10-year<br>strategic action plan in support<br>of agricultural research               | December 2010        | The plan is also expected to<br>support the implementation of<br>the ongoing reform of CGIAR.                                                             |  |  |  |  |
| First agricultural research<br>regional technical assistance<br>project based on long-term<br>strategy | August 2010          |                                                                                                                                                           |  |  |  |  |
| Development and sharing of knowledge                                                                   |                      |                                                                                                                                                           |  |  |  |  |
| Regional investment forum on food security                                                             | July 2010            | Being prepared jointly with FAO<br>and IFAD. Conference to take<br>place at ADB headquarters.                                                             |  |  |  |  |
| In-house policy research                                                                               | Starting in 2009     | Some in-house research already<br>underway in several regional<br>departments.                                                                            |  |  |  |  |
| CoP participation in external events                                                                   | Starting in 2009     | Agriculture risk management<br>network workshop in<br>Switzerland, October 2009.                                                                          |  |  |  |  |
|                                                                                                        |                      | Others to be identified.                                                                                                                                  |  |  |  |  |

ADB = Asian Development Bank, CGIAR = Consultative Group on International Agricultural Research, CoP = community of practice, FAO = Food and Agriculture Organization, IFAD = International Fund for Agriculture and Development, MOU = memorandum of understanding, RSDD = Regional and Sustainable Development Department.

Source: Regional and Sustainable Development Department-Agriculture, Rural Development and Food Security Unit.

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The Strategy 2020 of the Asian Development Bank (ADB) recognizes sustainable food security as a crucial element of its long-term strategic framework. The *Operational Plan for Sustainable Food Security in Asia and the Pacific* identifies ADB's role and contributions in addressing the barriers to achieving the goal of food security by focusing on three areas of influence—productivity, connectivity, and resilience. The plan notes that many of ADB's operations in the core and other areas as specified in Strategy 2020 have significant positive impacts in addressing these food security concerns. The plan aims to increase the impacts of ADB's multisector operations on food security, particularly for the poor and disadvantaged, through greater synergy and value addition.

#### About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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