

OPERATIONAL PLAN FOR AGRICULTURE AND NATURAL RESOURCES

PROMOTING SUSTAINABLE FOOD SECURITY
IN ASIA AND THE PACIFIC IN 2015–2020

December 2015





Rising Demand for Affordable, Nutritious, and Safe Food

Food security is essential for a healthy, active life and improving food security is a major means of achieving and sustaining poverty reduction. The developing member countries of the Asian Development Bank (ADB) in Asia and the Pacific, despite their impressive growth in past decades, are home to two-thirds of the world's hungry and malnourished people, over half a billion persons.

At the same time, their growing economies are resulting in rapidly increasing, middle-class populations whose demands include, among other things, better quality, safer, and more nutritious food than is available. They also demand more land and water for housing and industry, while the economic activities that support them pollute the

land, waterways, and groundwater. Crops are rendered unsafe due to pesticides and other toxins in soils and waterways, and poor handling and storage. Climate change threatens to lower productivity; while rural-urban migration drains the countryside of agricultural labor, particularly of males. These and other socioeconomic factors are increasingly tilting the balance of supply and demand, resulting in rising food prices in the long run.

The future holds higher populations—more consumers—and less land and water to feed them, threatening food security. Innovative ways of providing consumers with adequate, safe, nutritious, and affordable food are needed now to avoid future food crises.

Toward Sustainable Food Security

To meet current and future food demand (>60% increase by 2050), continuous research is needed to develop more productive (higher yielding) crops and livestock varieties that use less natural resources (land and water) and are safe, nutritious, and climate resilient. But that is only the beginning.

Improving the balance of supply and demand requires innovation and expansion along the entire supply chain from farmer to consumer, involving infrastructure and logistics, from irrigation and roads to storage facilities and retail markets. It also requires a quantum increase in the activities of stakeholders, both public and private, that mediate the movement of food from seed producer to food retailer.

In the public sector, these are transport and irrigation facilities, extension services, and public markets on the one hand, and appropriate, properly implemented food safety and quality regulations on the other. The private sector, including seed and farm input suppliers (fertilizers, pesticides, etc.) and those that buy, transport, store, and distribute these products, has an equally critical role.

Surrounding these closely interconnected food chain activities are the critical factors of productivity, quality, connectivity, and natural resources management, as shown in the diagram below. Improvements in all these factors are necessary to optimize food value chains toward sustainable food security.



The Operational Plan for Agriculture and Natural Resources, 2015–2020

ADB has long experience in helping its developing member countries to improve the productivity and sustainability of agriculture, strengthen their natural resources management, and achieve sustainable rural development. In 2009, ADB approved the *Operational Plan for Sustainable Food Security in Asia and the Pacific*. The plan had a multisector approach that emphasized agriculture productivity, market connectivity, and resilience against economic shocks and climate change impacts.

The Operational Plan for Agriculture and Natural Resources: Promoting Sustainable Food Security in Asia and the Pacific in 2015–2020 further capitalizes on the wealth of accumulated agriculture and natural resources (ANR) knowledge in ADB and refines the earlier plan through improved focus and quality of ADB operations in the sector. The new plan has four priority areas of activity corresponding to the critical factors that influence the food value chain, as follows.

1. Increasing Productivity and Reducing Losses of Food. ADB will support ways to improve agriculture productivity from the field to postharvest storage, processing, and distribution; and provide finance for farmers to avail of new technologies. A core element will be climate-smart agriculture by promoting climate-resilient crops, technologies, and land-use practices. Examples of recent projects include upgrading irrigation systems in India that improved paddy yields from 2.4 tons per hectare to 5.9 tons per hectare and thereby increasing farm income by 154%; and in Bangladesh, providing credit and extension services to farmers that led to an increased supply of high-value crops and raised farmers' incomes by up to 56%.



2. Improving Market Connectivity and Value Chain Linkages.

Transport systems, communications, market facilities, and logistics will be supported to enable integration of more producers, agribusinesses, and consumers into national, regional, and global food systems. Recent projects include helping 6,000 unbanked dairy farmers in Pakistan to avail of formal credit and technology to enter urban dairy supply chains with value-added products; and upgrading value chain facilities in Tianjin, People's Republic of China, to extend shelf life and reduce spoilage of traded produce.



3. Enhancing Food Safety, Quality, and Nutrition.

Areas for support will include establishing and enforcing mandatory regulatory systems, investing in safety and quality control infrastructure and facilities to ensure that food produced is safe to the consumer and leads to a nutritionally balanced diet, and training and education, including community outreach programs. In Viet Nam, for example, an ADB project has established a regulatory framework for food safety and is setting up "safe agricultural zones" in 16 provinces over about 180,000 hectares under high-value crops. The scheme is expected to raise productivity by 20%–60% and create more employment opportunities.



4. Enhancing Management and Climate Resilience of Natural Resources.

ADB will support improvement of environmental and resource management through better water resources use and protection, land and watershed restoration, and environmental standards and legislation, with emphasis on climate-smart investment, while helping smallholders to improve natural resources management. A project in Shanxi Province, People's Republic of China, for example, has helped 25,000 farmers to date to move from traditional low-income farming to high-value production using such practices as drip irrigation that can improve environmental sustainability while increasing incomes.



Responding to Country Needs and Building Partnerships

The plan will take an individual country approach to ensure proper understanding of the specific country situation, country ownership, appropriate interventions, and establishment of local and national, as well as regional and global, partnerships. For the plan to be successful, such partnerships are vital: knowledge partnerships with research organizations, for example, to develop and pilot climate-resilient crops and technologies; innovation partnerships with the private sector to make value chains and associated infrastructure more efficient and inclusive; and financing partnerships with key development partners and regional organizations and foundations.

Private sector and civil society partnerships will be promoted in view of their ability to

move faster and with greater outreach than public agencies. The private sector will also be encouraged to assist small farmers in upgrading technologies, marketing crops, and entering value chains through contract farming and rural credit schemes, including microfinance, and other services.

Food security involves various sectors and themes—not limited to agriculture and natural resources, but also water, energy, finance, social, gender, climate change, public-private partnerships, transport, health, and education. Therefore, ADB will continue to take a multisector approach to ensure that its interventions systematically address food security, while expanding its regional cooperation and integration initiatives in ANR.

Financing the Operational Plan for Agriculture and Natural Resources

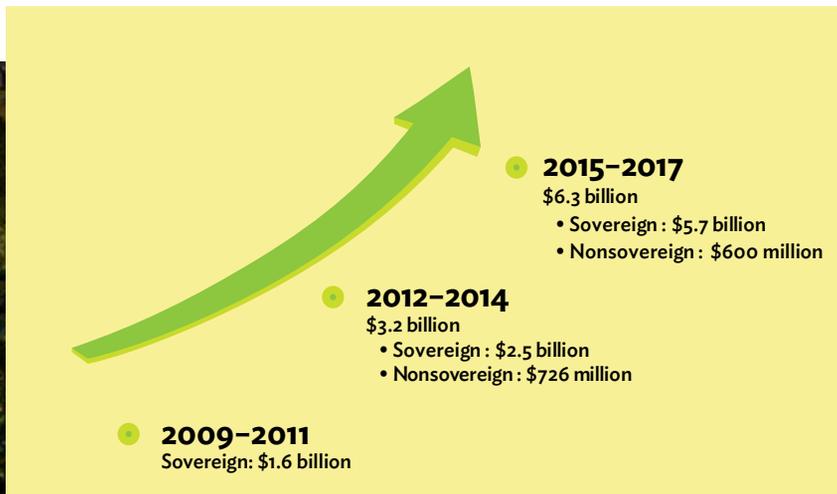
The plan will be financed principally from grants and loans to the respective governments (sovereign operations) and private sector operations. Cofinancing will continue to be sought with other multilateral funds, such as the Green Climate Fund and International Fund for Agricultural Development; bilateral development partners; and the private sector. The ADB Private Sector Operations Department will encourage greater investment from the private sector in ANR and food security, through both financial intermediaries and direct investment in agribusinesses, and with increasing public-private partnership investments.

ADB investment in the ANR sector will continue to increase. Total investment,

which doubled between 2009–2011 and 2012–2014, will double again in 2015–2017, as shown in the figure below. While most investment is in sovereign loans to governments, nonsovereign investment will also be significant.

The plan places high importance on the role of innovations, knowledge solutions, and knowledge sharing in achieving sustainable food security in Asia and the Pacific. To adopt more innovative approaches in ANR operations, ADB will harness successful project knowledge across countries and subregions for scaling up and replication through new projects and technical assistance.

ANR Operations at a Glance: Prospects for Expansion



Through this plan, ADB will help improve access to and quality of adequate, safe, and nutritious food for the poor and vulnerable in Asia and the Pacific.

OPERATIONAL PLAN FOR AGRICULTURE AND NATURAL RESOURCES

Promoting Sustainable Food Security in Asia and the Pacific in 2015–2020

The Operational Plan for Agriculture and Natural Resources: Promoting Sustainable Food Security in Asia and the Pacific in 2015–2020 guides ADB in meeting the recommendations of the midterm review of the ADB Strategy 2020 to provide increased emphasis on food security and agriculture productivity. The plan, which builds on the earlier *Operational Plan for Sustainable Food Security in Asia and the Pacific* (2010–2014), focuses ADB agriculture and natural resources sector operations in four priority areas: (i) increasing the productivity and reducing pre- and postharvest losses of food crops; (ii) improving market connectivity and value chain linkages; (iii) enhancing food safety, quality, and nutrition; and (iv) enhancing management and climate resilience of natural resources. The outcome will be improved focus and quality of ADB agriculture and natural resources operations in meeting developing member country needs toward safe, nutritious, and affordable food for all.

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 reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to the majority of the world's poor. 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.

For more information, please visit

www.adb.org/sectors/agriculture/main

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