

RURAL DEVELOPMENT AND FOOD SECURITY FORUM 2019 PROCEEDINGS

DECEMBER 2020



ASIAN DEVELOPMENT BANK

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Notes: ADB President Takehiko Nakao stepped down as President on 16 January 2020. In this publication, "\$" refers to United States dollars. ADB recognizes "China" as the People's Republic of China. All photos are by ADB. Cover design by Rodel Valenzuela.

Abbreviations

ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
AWD	alternate wet and drying system
CIRAD	French Center for Research and Agricultural Development
CO ₂	carbon dioxide
DMC	developing member country
DSR	directly seeded rice
EBRD	European Bank for Reconstruction and Development
EU	European Union
FAO	Food and Agriculture Organization
FDI	foreign direct investment
FPC	farmer-producer company
FPO	farmer-producer organization
GDP	gross domestic product
GIS	geographic information system
GMS	Greater Mekong Subregion
IAEA	International Atomic Energy Agency
ICT	information and communication technology
IFPRI	International Food Policy Research Institute
IRDP	Integrated rural development program

IRRI	International Rice Research Institute
IT	information technology
KMUTT	King Mongkut University of Technology, Thonburi
LAO PDR	Lao People's Democratic Republic
NATCO	National Confederation of Cooperatives in the Philippines
NGO	nongovernment organization
OECD	Organization for Economic Cooperation and Development
O&M	operation and maintenance
OTOP	One Tambon One Product
PGP	Carrageenan plant promoter
PNRI	Philippine Nuclear Research Institute
PRC	People's Republic of China
PPP	public-private partnership
PSOD	Private Sector Operations Department
RDFS	Rural Development and Food Security
R&D	research and development
SDG	Sustainable Development Goal
SME	small and medium-sized enterprises
STEAM	Science and Technology, Engineering, Arts and Mathematics
UK	United Kingdom
UNCDF	United Nations Capital Development Fund
US	United States
USAID	United States Agency for International Development
WHO	World Health Organization



Sharing best practices. The Rural Development and Food Security Forum served as venue to discuss how to address the farming crisis and malnutrition, and learn about transformative technologies for rural prosperity.

Introduction

The Asian Development Bank (ADB), partnering with the International Food Policy Research Institute (IFPRI) and the International Rice Research Institute, hosted the 2019 Rural Development and Food Security (RDFS) Forum,¹ with the theme "Transformative Changes for Rural Prosperity and Nutritious Food" on 28–30 October 2020 at the ADB headquarters in Manila, Philippines. More than 350 participants, including officials from ADB's developing member countries (DMCs), multilateral organizations, academics, farmers, and youth attended the forum. The RDFS Forum 2019 was a call to action for DMC governments to provide leadership to generate rural prosperity and effective stewardship of land and water (fresh and marine) resources to provide sufficient, safe, nutritious, and affordable food.

ADB's new corporate Strategy 2030 promotes rural development and food security as one of its seven operational priorities. ADB will incorporate climate-smart technologies and enabling policies into its operations; catalyze public and private sector investments for rural development; and promote transformative changes to make farming profitable, gender-responsive, highly productive, and attractive to youth. ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. In 2019, ADB committed \$21.64 billion in loans and grants to support our DMCs. ADB's Strategy 2030, which is aligned with the global Sustainable Development Goals (SDGs), calls for urgent attention to meeting the challenges of poverty, food insecurity, and rural prosperity in Asia and the Pacific region.

The RDFS Forum 2019 aimed to:

- (i) share and learn best practices, recent trends, and innovations;
- (ii) strategize on how to scale up innovations; and
- (iii) identify ways to strengthen cross-institutional and cross-sector synergies, networks, and partnerships.

¹ The discussions presented in this report took place on 28–30 October 2019. This summary reflects the key issues of the pre-coronavirus disease (COVID-19) food system and has limited coverage on the pandemic impacts on the system and pathways to achieve the Sustainable Development Goals (SDGs). With the theme "Transformative Changes for Rural Prosperity and Nutritious Food," the discussions focused on three issues:

- (i) farming crisis, with emphasis on transforming unprofitable farming to profitable farming with livable incomes by strengthening agricultural supply and value chains;
- (ii) malnutrition that still significantly impacts Asia and the Pacific, with emphasis on meeting the malnutrition and food safety challenges to achieve ADB's Strategy 2030 and commitments to SDGs, particularly SDG 2: Zero Hunger;² and
- (iii) transformative policies and technologies for rural prosperity that help overcome structural constraints. These include small farm size and holdings and poor physical and market infrastructure. Policies and technologies that focus on rural prosperity enable rural areas to become spaces of economic development, give impetus to growth, modernized agriculture, and nonfarm goods and services.

The forum outcome and outputs will inform the implementation of ADB's Strategy 2030 OP5: Operational Plan for Rural Development and Food Security, 2019–2024. ADB's Strategy 2030 calls for renewed focus of ADB operations in three areas:

- accelerated rural development to focus on improved rural services, increased private sector investments, and more jobs in the rural areas;
- efficient agricultural value chains to produce and distribute food efficiently from farms to consumers, reduce postharvest losses, improve farmers' profitability, and provide sufficient, safe, nutritious, and affordable food; and
- resilient food systems to ensure food security by sustainably producing more with less resources while addressing malnutrition, and nature-based green recovery effectively combined with climate-smart practices.

The forum had eight plenary sessions. There were no breakout sessions because all the topics are important for all participants to attend, reflect on, and propose the way forward. Information and communication technology (ICT) in the form of the Event App was used to engage participants in real time. Participants used it to ask questions and share insights and recommendations. This Highlights and Takeaways report documents key messages from the RDFS Forum 2019.

The COVID-19 pandemic in early 2020 will have profound impacts on the development and investment planning priorities and approaches. Not all implications of the COVID-19 pandemic on agriculture, food security, and rural development

Nearly 392.3 million people were severely food insecure in Asia during 2017–2019, while 303.5 million alone were from South Asia. Women aged 15–49 years that met the Minimum Dietary Diversity for Women – MDD-W during the same period were 50% in Nepal and 80% Tajikistan. Globally, less than one in three children aged 6–23 months (29%) met the minimum dietary diversity; the same share in South Asia accounts for 20%. Also see Food and Agriculture Organization of the United Nations (FAO), The International Fund for Agricultural Development (IFAD), United Nations Children's Fund (UNICEF), United Nations World Food Programme (WFP), and World Health Organization (WHO). 2020. The State of Food Security and Nutrition in the World 2020: *Transforming Food Systems for Affordable Healthy Diets*. Rome, FAO.

are yet fully understood and further studies are needed. However, a few points of significance in a post-COVID-19 era include:

- Food security of the urban poor, and daily laborers in particular, is suffering a severe blow due to the pandemic. This needs urgent attention as urban poor, migrant labor, and self-reliant microentrepreneurs (hawkers, petty traders, street vendors) need a minimum intake of nutritious food to survive. They now face disruptions in production supply and distribution chains. These are the most vulnerable groups of the population that need targeted and efficient measures to enhance food security. This has to be independent of what they may earn as daily wages have been wiped out under lockdown situations. There is great uncertainty about these sources of livelihoods reemerging sufficiently in a post-2020 period. ADB has provided unconditional cash transfers and in-kind support to the poor and vulnerable. Emergency assistance during the pandemic included strengthening public health preparedness, procurement of medical equipment, and supplies and medicine.
- Smallholders are the other major vulnerable group, who in the pre-COVID-19 period were already facing existential problems due to high production costs, price volatilities, and climate change-exacerbated droughts and floods. During the pandemic, and in the post-2020 period, smallholders will continue to have limited access to credit, markets, and assured buying prices of the intermediaries or wholesale brokers. It is important to revisit the suggestion of a minimum farmer income for small and marginal farmers to survive in times of crises and enable them to continue to produce for their own consumption and the markets. It is important to note that pre-COVID-19, remittances (domestic and foreign) provided a major safety net for the rural poor in times of crises. The COVID-19 pandemic, however, led to a sharp drop in remittances. Global remittances are projected to decline sharply by about 20% in 2020 due to the economic crisis induced by the COVID-19 pandemic and shutdown. Flows are expected to fall across all regions, most notably in Europe and Central Asia (27.5%), South Asia (22.1%), and East Asia and the Pacific (13%).³
- The COVID-19 pandemic has brought into sharp focus the issues of inefficient markets. The needs of smallholders for basic market infrastructure (hard and soft), including storage facilities to secure short-, medium-, and long term supply and value chains that can self-isolate and/or self-sustain in times of major disruptions—natural and/or human induced—should be addressed. Many food value chains in DMCs remain informal and lengthy with many handling agents involved, limiting marketable trading volumes, crop quality, and profitability of smallholder farmers. Farmer organizations can play an important role in addressing this structural issue by improving input/output aggregation and empowering smallholders vis-à-vis the supply and value chain transactional actors. Digitization can play an enabling role in facilitating these changes at scale and in a cost-effective manner. Farmer associations and organizations should be provided assistance so that they can establish

³ World Bank. 2020. <u>World Bank Predicts Sharpest Decline of Remittances in Recent History</u> (No: 2020/175/SPJ). Press Release. April 22.

and manage local market infrastructure such as storage and cold storage facilities. Complementary advisory services on marketing and price volatility management will be critical for smallholders to move toward sustainable livelihoods in the post-2020 era.

- Production and supply of safe and nutritious food are of great importance as avoidance of epidemics and pandemics are intrinsically connected with sale and consumption of safe, nutritious, and quality food. Food safety has become a basic public health and livelihoods issue in both rural and urban areas. Moreover, as the COVID-19 pandemic has disproportionately affected the rural and urban poor, food and nutritional security must be increased, and investments in food safety are a must. This pandemic redefined the food safety challenge. Apart from the safety of food at the point of consumption, other critical factors for maintaining food supply chains are packaging and no-contact delivery, essential food production, and availability of distribution workers. Under the One Health approach, food cold chains and logistics system can in the near future potentially play an important role in the effective distribution of COVID-19 vaccines.
- The COVID-19 pandemic has further exacerbated the pre-existing policy, structural, and market inefficiencies. It is imperative digital technologies are brought to bear to overcome these chronic and persistent constraints. Opportunities for using digital technologies in agriculture, telemedicine, and education (both in terms of working from home as well as remote consultation and teaching via internet) have underlined a post-COVID-19 change in how people in the corporate world and in the health and education sectors may work in the future.
- Post COVID-19, pressure on the rural sector to supply adequate food and nutrition will persist. Despite economy-wide income losses, it is still possible for food demand to remain relatively high due to shifting consumption preference for food (especially nutritious food) compared to non-food items. Hence, policies and strategies should support agricultural finance, technology (including rapid digitalization of value chain), logistics, infrastructure, and transport for a two-way movement of inputs and services and outputs. Investment in data infrastructure may play an important role in improving access to key social services for rural populations. Hence, digital connectivity between urban and rural areas and investments in peri-urban and rural areas are a way forward to reduce the rural-urban divide and distress.



Proactive assistance. President Nakao stressed ADB's commitment to assist DMCs to increase agricultural productivity and profitability, enhance food safety, and improve climate resilience.

Welcome Remarks

Excellencies, Distinguished Guests, Participants, Ladies and Gentlemen:

I am honored to welcome you all to the Rural Development and Food Security Forum 2019. I am encouraged to see strong participation of our member governments, partner agencies, academic and research institutions, the private sector, and civil society. I am particularly pleased to see farmers, especially female farmers and youth from India, Indonesia, Nepal, and the Philippines.

The last time we organized a food security forum was in June 2016. Now with Rural Development and Food Security as one of the seven operational priorities of ADB's Strategy 2030, we need to deepen and accelerate our knowledge-sharing efforts with key stakeholders around the world.

In the last 40 years, the Asia and Pacific region has made tremendous progress in reducing poverty and achieving food security. When ADB opened for business in 1966, agriculture was among its top priorities, since many parts of the region were facing food shortages and even the risk of starvation.

On the poverty front, in 2010, Asia and the Pacific achieved Millennium Development Goal 1 - Eradication of Extreme Poverty and Hunger—5 years ahead of schedule. Extreme poverty, defined as \$1.90 per day threshold, has declined in developing Asia from 69% in 1980 to about 7% in 2015. The agriculture sector has played a pivotal role in delivering these developmental outcomes.

Similarly, the food security situation in the region has shown remarkable improvement in the last 4 decades. Most countries in Asia including Bangladesh and India are selfsufficient in food. This progress was largely driven by the green revolution technologies that put high-yielding seed varieties in the hands of our farmers, accompanied by investments in rural roads and irrigation, and agricultural extension. The region's share in global food production, crops, and livestock has increased.

Despite this great progress, there are still more than 300 million people living below the poverty line. An additional 900 million people who live on less than \$3.20 per day are

constantly at risk of being pushed back into extreme poverty of below \$1.90 per day. Moreover, poverty incidence continues to be higher in rural areas than in urban areas.

In many parts of the region, farmers are unable to make a livable income. Agriculture endures many risks, including weather, diseases, and financial risks. But market risk is the most devastating to farmers' income. Prices of most farming products vary widely within a year, as well as year-on-year. Market infrastructure and related policies and regulatory frameworks in most DMCs require significant improvements.

Cold chain infrastructure is practically nonexistent in most DMCs. This results in postharvest losses of 30%–40%, lowering the quality of produce, and generating worm and bacteria contamination. This issue is especially serious for perishables, such as fruits and vegetables.

The continued inability of farmers to generate a livable income risks rolling back many of the poverty reduction gains we have made in the last 4 decades. Further, extreme weather conditions caused by climate change, and degraded farmland and water resources are making our task of finding sustainable solutions even more difficult.

For its part, ADB will proactively assist its DMCs to increase agricultural productivity and profitability, enhance food safety, and improve climate resilience and sustainability. We are committed to supporting our member countries to supply sufficient, nutritious, safe, and affordable food. People also want higher quality food as their incomes increase. Let me share three innovative examples.

In Uzbekistan, ADB's \$280 million project aims at modernizing the country's horticulture wholesale markets by reducing distribution and marketing costs and increasing agribusiness profitability and farmer incomes.

In Cambodia, the Lao People's Democratic Republic, and Myanmar, ADB's Climate-Friendly Agribusiness Value Chain projects are targeting to boost net incomes of rural households by increasing climate resilience of rural roads and irrigation systems, developing cold chains, and promoting bioenergy and solar energy access for agri-processing.

In the People's Republic of China, the Gansu Internet-Plus Agriculture Development Project is supporting farmers' access to high-value e-commerce markets by developing smartphone applications. The project is also introducing sensors to monitor in real-time temperature, moisture, and soil nutrients for smart farming and to support food traceability.

At this forum, in the coming 3 days, I invite you all to share your expertise and wisdom with us, and of course among yourselves to respond to rural development and food security challenges. I am also looking forward to your views on how ADB can make a better contribution to the needs of farmers and rural communities.

Thank you.

Takehiko Nakao President, Asian Development Bank 28 October 2019, ADB headquarters, Manila, Philippines

APPENDIX Program

Day 1: Monday, 28 October 2019 7:00 - 8:30 Arrival and Registration 8:30 - 8:40 Opening Session Welcome Remarks Takehiko Nakao, President, ADB 8:40 - 8:45 Screening of Video 8:45 - 9:00 Session 1: Farming Crisis—The session describes the current challenges of farming and proposes transformative changes in policies and approaches to make farming profitable, highly productive, and attractive to youth in the region. Keynote Address Mekhala Krishnamurthy, Ashoka University, India 9:00 - 10:00 Plenary Session Moderator: Chiara Bronchi, Chief Thematic Officer, Sustainable Development and Climate Change Department ADB

9:00 - 10:00	Plenary Session
	Moderator: Chiara Bronchi, Chief Thematic Officer, Sustainable Development and Climate Change Department, ADB
	Panelists
	 Mekhala Krishnamurthy, Ashoka University, India William Dar, Secretary, Department of Agriculture, Philippines Shenggen Fan, Director General, International Food Policy Research Institute, Washington, DC Akmal Siddiq, Chief of Rural Development and Food Security (Agriculture) Thematic Group, Sustainable Development and Climate Change Department, ADB
10:00 - 10:15	Group Photo: ADB Management, Keynote Speakers, Panelists, Partners, Invited Guests

10:15 – 10:20	Opening of the Technology and Innovation Marketplace —International research institutions, technology firms, banks, and agribusiness firms showcase their modern technologies and services, and best practices to support rural development and food security.
	Remarks Woochong Um, Director General, Sustainable Development and Climate Change Department, ADB
10:20 - 11:00	Coffee Break
11:00 – 11:05	Insights and Recommendations from Session 1 —Insights and recommendations are crowdsourced from all participants via a mobile application.
11:05 – 11:45	Introduction of Exhibitors and Technologies —Exhibitors may present their technologies and innovations during coffee breaks.
	Hasan Moinuddin, Program Specialist (Consultant), Sustainable Development and Climate Change Department, ADB
11:45 – 12:30	Introduction of Guests, Farmers, and Youth — Farmers and youth participants to express their expectations from the Forum or submit a question.
	Akmal Siddiq, Chief of Rural Development and Food Security (Agriculture) Thematic Group, Sustainable Development and Climate Change Department, ADB
12:30 - 14:00	Networking Lunch
14:00 – 14:15	Session 2: Dysfunctional Agriculture Markets and Malnutrition—The session discusses the impacts of dysfunctional agricultural markets on profits, farm productivity, food quality, high prices for consumers, and malnutrition.
	Keynote Address Irakli Loladze, Associate Professor, Bryan College of Health Sciences and Adjunct Faculty, Arizona State University, United States
14:15 – 15:45	Panel Discussion
	Moderator : Jiangfeng Zhang, Director, Environment, Natural Resources & Agriculture Division, Southeast Asia Department, ADB
	 Panelists Martien van Nieuwkoop, Global Director of Agriculture and Food, Sustainable Development Practice Group, The World Bank, Washington, DC Diwakar Gupta, Vice-President, Private Sector and Public-Private Partnerships, ADB

18:30	Networking Dinner
16:15 - 18:00	Discussions at the Technology and Innovation Marketplace
15:50 - 16:15	Coffee Break
15:45 - 15:50	Insights and Recommendations from Session 2 —Insights and recommendations are crowdsourced from all participants via a mobile application.
	 Irakli Loladze, Associate Professor, Bryan College of Health Sciences and Adjunct Faculty, Arizona State University, United States Marco Wopereis, Director General, World Vegetable Center, Taipei,China Anthea Webb, Deputy Regional Director, World Food Programme, Italy Jane Gerardo-Abaya, Director, Department of Technical Cooperation Asia and Pacific Division, International Atomic Energy Agency, Austria Discussants Jonathan Hellin, Sustainable Impact Platform Leader, International Rice Research Institute, Philippines Howarth Bouis, Founder and Former Interim CEO, HarvestPlus, Washington, DC Lee Pai-Po, Deputy Secretary General, International Cooperation and Development Fund, Taipei,China Hean Vanhan, Secretary of State, Ministry of Agriculture, Forestry and Fisheries, Royal Government of Cambodia

8:30 - 8:35	Recap of Day 1 Marzia Mongiorgi-Lorenzo, Principal Country Specialist, PRC Resident Mission, ADB
8:35 – 8:50	Session 3: Rural Distress—The session highlights the imbalance in rural-urban development and its significant negative impacts on national economic growth; rural employment; country's food security and nutrition; and urbanization. Specific recommendations are discussed and finalized for governments to consider for focused rural development.
	Keynote Address Mihir Shah, Distinguished Professor, Shiv Nadar University and Former Member, Planning Commission, Government of India
8:50 – 10:25	Panel Discussion Moderator: Albert Atkinson, Department of Communications, ADB
	 Panelists Mihir Shah, Distinguished Professor, Shiv Nadar University and Former Member, Planning Commission, Government of India

	 Thierry Giordano, Deputy Director, Impact and Marketing of Science Directorate, CIRAD Montserrat López Jerez, Lecturer in Global Economic History, University of St. Andrews, Fife, Scotland David Dawe, Senior Economist, Regional Office for Asia and the Pacific, Food and Agriculture Organization of the United Nations, Thailand Discussants Saulye Janimkhan, Vice-Minister of Food, Agriculture and Light Industry, Mongolia Cesar Jose da Cruz, Secretary General, Ministry of Agriculture and Fisheries, Timor-Leste Duc Chien Dang, Researcher, Head of Division of Commodity Chain and Branding Development, Rural Development Center, Institute of Policy and Strategy for Agriculture and Rural Development, Viet Nam
10:25 - 10:30	Insights and Recommendations from Session 3 —Insights and recommendations are crowdsourced from all participants via a mobile application.
10:30 - 11:00	Coffee Break
11:00 - 12:00	Publications Launch Opening Remarks Woochong Um, Director General, Sustainable Development and Climate Change Department, ADB Keynote Address Bambang Susantono, Vice-President, Knowledge Management and Sustainable Development, ADB Special Remarks Matthew Morrell, Director General, International Rice Research Institute, Philippines Presentations • Mark Rosegrant, Research Fellow Emeritus, International Food Policy Research Institute, Washington, DC • Arvind Kumar, Director, South Asia Regional Center, International Rice Research Institute, India • Md. Abul Basher, Natural Resources and Agriculture Specialist, Rural Development and Food Security (Agriculture) Thematic Group, Sustainable Development and Climate Change Department, ADB
	 Ending Hunger in Asia and the Pacific by 2030: An Assessment of Investment Requirements in Agriculture—The report analyzes the impacts of different challenges faced by the agriculture sector in ADB's developing member countries and quantifies the investments required to end hunger in these countries by 2030. Policies to Support Investment Requirements in Indonesia's Food and Agriculture Development for 2020-2045—The report evaluates Indonesia's agricultural investments and policies and presents the pathways to end hunger by 2030 with an appropriate mix of investments in agricultural research and development, irrigation expansion and water use efficiency, and rural infrastructure.

15:30 - 16:00	Coffee Break
15:25 - 15:30	Insights and Recommendations from Session 4 —Insights and recommendations are crowdsourced from all participants via a mobile application.
	 Panelists Donneth A. Walton, Director, Environment, Natural Resources & Agriculture Division, Central and West Asia Department, ADB Qingfeng Zhang, Director, Environment, Natural Resources & Agriculture Division, East Asia Departments, ADB Mio Oka, Director, Environment, Natural Resources & Agriculture Division, South Asia Department, ADB Srinivasan Ancha, Principal Climate Change Specialist, Environment, Natural Resources & Agriculture Division, Southeast Asia Department, ADB Martin Lemoine, Head, Agribusiness Investment Team, Private Sector Operations Department, ADB
13:45 – 15:25	Panel Discussion Moderator: Ramesh Subramaniam, Director General, Southeast Asia Department
13:30 - 13:45	Session 4: ADB Knowledge Sharing and Experience on Climate Change, Gender, High-Level Technology, and Natural Resources Management—The session showcases some of ADB's innovative projects and highlights the lessons learned so that other countries may consider adopting similar approaches and designs for their projects.
12:00 - 13:30	Networking Lunch
	 Rural China—The report evaluates the use of information and communication technologies to improve food production and distribution in the People's Republic of China and identifies the major constraints and enabling factors in the use of such applications. Climate-Smart Practices for Intensive Rice-Based Systems in Bangladesh, Cambodia, and Nepal—The study captures the learning, technologies and outcomes from disseminating climate-smart practices and climate-resilient crop varieties for intensive rice-based systems, and water-saving and direct-seed rice technologies to farmers in Bangladesh, Nepal and Cambodia. The report also provides policy recommendations to promote climate-smart agriculture in these countries. Country Briefs on Dysfunctional Horticulture Value Chains and the Need for Modern Marketing Infrastructure for Bangladesh, Nepal, Pakistan and Viet Nam—The briefs present country snapshots of wholesale markets in Bangladesh, Nepal, Pakistan and Viet Nam and offer short- and long term recommendations to transform these into modern wholesale markets.

16:00 - 17:30	 Session 5: Knowledge Sharing among Developing Member Countries — Some countries in the region have adopted creative and out-of-the-box initiatives on public policy for both public and private investments. Discussions focus on what has been done so far, how these can be used by the governments, and further identify ways to promote policy dialogue and reforms, and public-private partnerships. Panel Discussion Moderator: Mio Oka, Director, Environment, Natural Resources & Agriculture Division, South Asia, ADB Panelists India: Farmer-Producer Organization in Maharashtra Anoop Kumar, Principal Secretary for Marketing Department, Maharashtra, India PRC: ADB's framework approach for supporting PRC's rural vitalization strategy Suzanne Kay Robertson, Principal Natural Resources and Agriculture Specialist, Environment, Natural Resources & Agriculture Specialist, Environment, Natural Resources and Agriculture Specialist, Environment, Natural Resources and Agriculture Specialist, Environment, Natural Resources & Agriculture Specialist, Environment, Natural Resources and Agriculture Specialist, Environment, Natural Resources & Agriculture Division, Rast Asia Department, ADB Singapore: Vertical Farming David Tan, Founder and CEO, CrowdFarmX, Singapore Thailand: Food Processing and Supply Chain Management Charoenchai (Charlie) Khompatraporn, Head of Sustainable Technology, Management and Design Research Cluster, King Mongkut's University of Technology Thonburi (KMUTT), Thailand Turkey: Horticulture and Agri-food Business Development Mustafa Erkan, Professor, Department of Horticulture, Akdeniz University, Antalya, Turkey Regional: Private Sector Initiatives in Agriculture Cedric Wijegunawardane, CFO, Silvermill, Sri Lanka 	
17:30 – 17:05	Insights and Recommendations from Session 5 —Insights and recommendations are crowdsourced from all participants via a mobile application.	
Day 3: Wednesday, 30 October 2019		
8:30 - 8:35	Recap of Day 2 Eric Quincieu, Senior Water Resources Specialist, Environment, Natural Resources & Agriculture Division, Southeast Asia, ADB	
8:35 - 8:50	 Session 6: Financing Agripreneurs and Rural SMEs—Banks, venture capital firms, ICT and FinTech companies who have used successful models to serve rural areas will share their business models and success stories. The gaps in public policies and regulatory frameworks are identified and good practices are showcased through examples shared by panelists for policymakers to emulate. Recommendations to further strengthen and expand such services are discussed. Keynote Address David Davies, Founder and Chief Executive Officer, Ag Unity, Australia 	

8:50 - 10:25	Panel Discussion
	Moderator: Donneth A. Walton, Director, Environment, Natural Resources & Agriculture Division, Central and West Asia, ADB
	 Panelists David Davies, Founding Chief Executive Officer, Ag Unity, Australia Anna Charlotte Schou-Zibell, Pacific Liaison and Coordination Office in Australia, ADB Ramon Duarte, Head, Platform Development at UnionBank of the Philippines Anil Kumar, Samunnati Finance (Financial Intermediary), India Hemendra Mathur, Venture Partner, Bharat Innovation Fund and Co-founder, ThinkAg, India
	 Discussants Chori Mirzaev, Chairman of the Management Board, Joint-Stock Commercial Bank "Turonbank," Uzbekistan Subhadeep Sanyal, Partner, Omnivore, India Alex L. J. Shyy, Deputy Secretary General, International Cooperation and Development Fund, Taipei,China
10:25 - 10:30	Insights and Recommendations from Session 6 —Insights and recommendations are crowdsourced from all participants via a mobile application.
10:30 - 11:00	Coffee Break Venue: Auditorium Hallway
11:00 - 12:30	Session 7: Voices from the Field-Farmers' Roundtable Discussion—Smallholders and commercial farmers share their experiences firsthand with policymakers and other stakeholders, while expressing the concerns and aspirations of their communities at the international level.
	Panel Discussion
	Moderator: Carolyn Dedolph Cabrera, Principal IT Specialist (Business Change Management), Office of Information Systems and Technology, ADB
	 Panelists Jit Kumari Yogi (Farmer), Bardiya, Nepal Indra Gunawan (Farmer), Member of Mekar Tani II, Indonesia Paulina de Afria (Farmer), Nueva Ecija, Philippines Jose Romeo Ebron, Cooperative Development Program Manager, Asian Farmers' Association for Sustainable Rural Development, Philippines Sehar Iqbal, Executive Director, Sajid Iqbal Foundation, Kedia Farming, India Ganpat R. Parthe, Ankur Farm (Organic Strawberry Farm), India
	 Discussants Marites Alin Castre (Farmer), Nueva Ecija, Philippines Bektashev Jakhongir Rakhimovich, Manager, "Baht Imkon Rivoj Chorvasi" (Private Farm), Uzbekistan

	 Amarjit Jagap, Director, Farm Green Horizon (Pomegranate), India Patrick Renucci, Co-Founder, Chen Yi Agventures, Philippines Vanchin Tsogt-Ochir, Mongolian Rural Development and Relief Association NGO, Mongolia Mariano da Costa Alves, Coffee Farmer, Timor-Leste
12:30 - 14:00	Networking Lunch
14:00 - 14:05	Insights and Recommendations from Session 7 —Insights and recommendations are crowdsourced from all participants via a mobile application.
14:05 - 14:20	 Session 8: Voices from the Field-Youth Perspectives—In this session, the youth representatives explain the challenges they face in taking up farming fulltime, and other non-farm employment opportunities that can be developed in the rural areas. Potential solutions and constraining factors as well as enabling policies for sustainable rural development and job creation are also discussed. Keynote Address Sara Savastano, Director, Research and Impact Assessment Division, International Fund for Agriculture Development
14:20 - 15:50	 Panel Discussion Moderator: Amir Jilani, Young Professional, ADB Panelists Reginald Lee, GrowAsia, Singapore Christine Jodloman, Founder, Palay and Food Secure Philippines Cherrys Abrigo, Founder, Sierreza, Philippines Enzo Pinga, Farmer and CEO, Earthbeat Farms, Philippines Charlene Tan, Founder, Good Food Community, Philippines Fatima de Moniz Soares, Timor-Leste William Lucht, Youth for Asia, NGO and Civil Society Center, Sustainable Development and Climate Change Department, ADB Discussants Matthias Leitner, Young Professional, Environment, Natural Resources & Agriculture Division, Southeast Asia Department, ADB Jules Hugot, Young Professional, Private Sector Operations Department, ADB
15:50 – 15:55	Insights and Recommendations from Session 8 —Insights and recommendations are crowdsourced from all participants via a mobile application.
15:55 - 16:25	Coffee Break

16:25 - 17:15	Closing Session
	Moderator: Akmal Siddiq, Chief of Rural Development and Food Security (Agriculture) Thematic Group, Sustainable Development and Climate Change Department, ADB
	 Insights Donneth A. Walton, Director, Environment, Natural Resources & Agriculture Division, Central and West Asia Department, ADB
	 Mio Oka, Director, Environment, Natural Resources & Agriculture Division, South Asia Department, ADB
	• Jiangfeng Zhang, Director, Environment, Natural Resources & Agriculture Division, Southeast Asia Department, ADB
	• Suzanne Kay Robertson, Principal Natural Resources and Agriculture Specialist, Environment, Natural Resources & Agriculture Division, East Asia Department, ADB
	 Martin Lemoine, Head, Agribusiness Investment Team, Private Sector Operations Department, ADB
17:15 – 17:20	Forum Highlights and Next Steps Acknowledgment of Partners and Organizers
	Akmal Siddiq, Chief of Rural Development and Food Security (Agriculture) Thematic Group, Sustainable Development and Climate Change Department, ADB
17:20 - 17:30	Closing Remarks Woochong Um, Director General, Sustainable Development and Climate Change Department, ADB
17:30	Networking and Departure

Rural Development and Food Security Forum 2019 Proceedings

Smart rural development, effective agricultural policies, and efficient regulations are critical to ensure a sufficient, safe, nutritious, and affordable supply of food to Asia and the Pacific's growing population. Toward this end, the Asian Development Bank hosted the Rural Development and Food Security Forum 2019 to prompt governments in the region to provide the leadership and transformative change needed to generate rural prosperity and effective stewardship of land and water resources. Among the topics discussed were the farm income crisis, food insecurity and malnutrition, and rural distress and prosperity challenges. This report captures the stories and on-the-ground experiences of farmers, entrepreneurs and young agripreneurs to help prompt leaders to provide active leadership, effective resource stewardship, and promote transformative changes in rural development and food security.

About the Asian Development Bank

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members —49 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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