



Workshop on **Knowledge-Intensive Agriculture**

*“Leveraging knowledge solutions
for agricultural transformation”*

15-16 June 2017
ADB Headquarters, Manila, Philippines



Context

Agriculture is at a crossroads now. Resource base is shrinking, productivity is declining, and efforts to produce more food are adversely affecting the environment more than ever. It is in this context that development organizations have renewed its pledge to build a hunger-free world within the next 15 years as one of its Sustainable Development Goals (SDG 2). The key question, however, is how to produce more food to achieve SDG 2.

Available evidence suggests that the use of information and communication technologies (ICT), innovative approaches to knowledge sharing and learning, and new knowledge in agriculture play a pivotal role in building a hunger-free world.

However, farmers' lack of access to appropriate knowledge and technology is a main roadblock. The appropriate approach, mechanism, and institution to deliver the knowledge and technology to farmers are yet to be developed. It is in this context that, ADB's Rural Development and Food Security (Agriculture) Thematic Group is organizing a two-day workshop on Knowledge-Intensive Agriculture. The workshop explores ongoing initiatives, current and emerging trends, policy imperatives, and future directions in this area.

Objective

The workshop provides an opportunity for participants to explore, share and leverage on the knowledge solutions (i.e., information and extension services, ICT, high-level technologies, etc.) that can transform agriculture to:

- increase productivity and reduce food loss;
- improve market connectivity and value chain linkages;
- enhance food safety, quality and nutrition; and
- enhance management and climate resilience of natural resources.

Participants

- Government representatives of selected developing member countries
- Think-tanks
- Centers of excellence
- Development partners
- Private sector working in the agriculture sector
- Independent researchers
- ADB staff and partners

Approach

The two-day workshop consists of networking meetings, and six technical sessions. The first session focuses on the agricultural transformation in the post-green revolution era. This is followed by sessions on ADB's ongoing initiatives to promote high-level technologies and climate-smart agriculture, promotion of e-agriculture, public-private partnerships to promote knowledge-intensive agriculture, and sharing of knowledge and experiences by different stakeholders. The last session focuses on next steps and future directions.

Each session has keynote presentations with designated discussants and/or panelists that focus on specific issues and challenges. Every session includes open discussions where participants can share their views, experiences and pose questions.

Sessions

Session 1: Agricultural Transformation: The Evolution of Knowledge-Intensive Agriculture. This session discusses the evolution of the transformation and development of agriculture in the post-green revolution era, specifically:

- the mechanization and immersion of different technologies;
- the extent to which current extractive technologies can support agricultural growth;
- the integration of ICT into agricultural supply chains; and
- the importance of innovative financing such as private-public partnerships to promote knowledge-intensive agriculture.

Session 2: Investment Assessment and Application of High-Level Technology (HLT) for Food Security in Asia and the Pacific. This session presents ADB's technical assistance project which:

- promotes the use of high-level technology in both upstream and downstream agriculture;
- assesses the investment needs and prioritize areas for investment in HLT;
- highlights the importance of investments in education as a prerequisite for knowledge-intensive agriculture.

Session 3: Using ICT for Agricultural Transformation. The use of ICT has helped developing countries leapfrog to modernization amidst the lack of infrastructure and other support systems, and improved agricultural productivity. However, benefits have not been equal for all farmers. The smallholders have yet to benefit from the use of ICT in agriculture (e-agriculture) which presents unexploited avenues for agricultural growth. This session highlights:

- the ways and means to promote e-Agriculture in developing countries which suffers from inadequate infrastructure, digital divide, and lack of information services to farmers and communities; and
- interventions to promote e-Agriculture and lessons learned from its application.

Session 4: Revisiting the Role of Public-Private Partnership. Public-private-farmer partnership is crucial in promoting knowledge-intensive agriculture. A clear and conducive interphase between the private and public sector to promote knowledge-led agricultural growth is yet to emerge. There is no ideal model of government and private sector partnerships developed nor practiced to distribute the gains from the use of innovative technologies. Similarly, a public policy to regulate the price of innovated technologies and inputs is required in the interest of both innovators and users. This session focuses on the synergy between public and private sectors and their complementary roles.

Session 5: Leveraging Project Knowledge and Experiences. Although hunger around the world is a common problem, it has different faces across regions, countries, and even within a country. Knowing these differences and different strategies taken to deal with them is crucially important. This session presents:

- the approach and experiences of different stakeholders from different countries in promoting knowledge-intensive agriculture; and
- ADB operational experiences in the agriculture and natural resources sector.

Session 6: Determining Next Steps and Future Directions. This session discusses:

- next steps and future directions for knowledge-intensive agriculture; and
- recommendations and action items.

Key Outputs

- Current trends and initiatives
- Technical papers and presentations
- Best practice stories
- Actions and recommendations
- Online community

Schedule

15 June 2017	
09:00- 09:30	REGISTRATION AND NETWORKING
09:30 – 09:45	<p>OPENING</p> <p>Introduction: <i>Mahfuz Ahmed, Technical Advisor, Rural Development and Food Security, Asian Development Bank</i></p> <p>Welcome Remarks: <i>Bambang Susantono, Vice-President (Knowledge Management and Sustainable Development), Asian Development Bank</i></p> <p>Introduction of Participants, Speakers and Organizers</p>
09:45- 11:15	<p>SESSION 1: Agricultural Transformation: The Evolution of Knowledge-Intensive Agriculture</p> <p>Session Chair: <i>Amy S.P. Leung, Deputy Director General Concurrently Chief Thematic Officer, Sustainable Development and Climate Change Department, Asian Development Bank</i></p> <p>Keynote Presentation: <i>Mahfuz Ahmed, Technical Advisor, Rural Development and Food Security, Asian Development Bank</i></p> <p>Discussants</p> <ul style="list-style-type: none"> • <i>Jikun Huang, Professor and Director, China Center for Agricultural Policy, Peking University</i> • <i>Akmal Siddiq, Director, Environment, Natural Resources & Agriculture Division, Central and West Asia Department, Asian Development Bank</i> • <i>Roehlano M. Briones, Senior Research Fellow, Philippine Institute of Development Studies</i> <p>Open Discussion</p>
11:15-11:30	NETWORKING BREAK
11:30-13:30	<p>SESSION 2: Investment Assessment and Application of High-Level Technology (HLT) for Food Security in Asia and the Pacific</p> <p>Session Chair: <i>Akmal Siddiq, Director, Environment, Natural Resources & Agriculture Division, Central and West Asia Department, Asian Development Bank</i></p> <p>Keynote Presentation: <i>Sungsup Ra, Director, Human and Social Development Division, South Asia Department, Asian Development Bank</i></p> <p>Presentations</p> <ul style="list-style-type: none"> • <i>Md Abul Basher, Natural Resources and Agriculture Specialist, Rural Development and Food Security, Asian Development Bank</i> • <i>International Food Price Research Institute (IFPRI)</i> • <i>International Rice Research Institute (IRRI)</i> <p>Discussants</p> <ul style="list-style-type: none"> • <i>Takeshi Ueda, Principal Natural Resource and Agriculture Economist, Environment, Natural Resources & Agriculture Division, Southeast Asia Department, Asian Development Bank</i> • <i>Ouk Makara, Director, Cambodian Agricultural Research and Development Institute</i> • <i>Krishna Pada Halder, Chief Scientific Officer, Bangladesh Rice Research Institute</i> <p>Open Discussion</p>
13:30 – 15:00	NETWORKING LUNCH

15:00 – 17:00	<p>SESSION 3: Using ICT for Agricultural Transformation</p> <p>Session Chair: <i>David Shearer, Director, International Partnerships and Program Delivery, WorldFish</i></p> <p>Keynote Presentations</p> <ul style="list-style-type: none"> • Korea’s ICT related Agricultural Projects and Lesson Learned <i>Sanghun Lee, Director, International Trade and Cooperation Department, Korea Agency of Education, Promotion, and Information Services (EPIS)</i> • Data Driven Agriculture-Empowering Smallholders through Technology <i>Vishnu Nair, Regional Director (Asia Pacific) for Pessl Instruments GmbH</i> • ADB Supported E-Agriculture Project: Gansu Agriculture Internet Service System Development <i>Jan Hinrichs, Natural Resources Economist, Environment, Natural Resources & Agriculture Division, East Asia Department, Asian Development Bank</i> <p>Open Discussion</p>
16 June 2017	
08:45- 10:45	<p>SESSION 4: Revisiting the Role of Public-Private Partnership</p> <p>Session Chair: <i>Mahfuz Ahmed, Technical Advisor, Rural Development and Food Security, Asian Development Bank</i></p> <p>Keynote Presentations:</p> <ul style="list-style-type: none"> • The Role of PPPs in Knowledge-Intensive Agriculture <i>Paul P.S. Teng, Principal Officer, National Institute of Education, Singapore</i> • Financing for Agriculture: Role of Public-Private Partnerships <i>Arup Kumar Chatterjee, Principal Financial Sector Specialist, Finance Sector Group, Sustainable Development and Climate Change Department, Asian Development Bank</i> <p>Discussants</p> <ul style="list-style-type: none"> • <i>Qiaoqiao Zhang, Director of Memberships, Centre for Agriculture and Biosciences International (CABI)</i> • <i>Leocadio S. Sebastian, Regional Program Leader for Southeast Asia, CGIAR Research Program for Climate Change, Agriculture and Food Security (CCAFS)</i> • <i>Ram C. Sharma, Regional Coordinator for Central Asia and the Caucasus, International Center for Agricultural Research in the Dry Areas (ICARDA)</i> • <i>Martin Lemoine, Head of Agribusiness, Private Sector Operations Department, ADB</i> • <i>Michiko Katagami, Principal Natural Resources and Agriculture Specialist, Rural Development and Food Security, Asian Development Bank</i> <p>Open Discussion</p>
10:45 – 11:00	NETWORKING BREAK

11:00- 13:00	<p>SESSION 5: Leveraging Project Knowledge and Experiences</p> <p>Session Chair: <i>Jiangfeng Zhang, Director, Environment, Natural Resources & Agriculture Division, Southeast Asia Department, Asian Development Bank</i></p> <p>Panelists: Government Officials</p> <ul style="list-style-type: none"> • <i>Ngin Chhay, Director, Department of Rice Crop, Cambodia</i> • <i>Banshi Sharma, Joint Secretary, Ministry of Livestock Development, Nepal</i> • <i>Ifan Martino, Planner, National Development Planning Board, Indonesia</i> • <i>A.F.M. Alamgir Kabir, Assistant Secretary, Ministry of Agriculture, Bangladesh</i> • <i>Vu Ngoc Chau, Director, Water Efficiency Improvement in Drought Affected Provinces (WEIDAP) Project, Ministry of Agriculture and Rural Development, Viet Nam</i> <p>Panelists: Asian Development Bank Staff</p> <ul style="list-style-type: none"> • <i>Ancha Srinivasan, Principal Climate Change Specialist, Environment, Natural Resources & Agriculture Division, Southeast Asia Department, Asian Development Bank (Climate-Friendly Agribusiness Value Chains Sector Project)</i> • <i>Sanath Ranawana, Senior Natural Resources Economist (Water Efficiency Improvement in Drought Affected Provinces (WEIDAP) Project)</i> • <i>Randall E. Jones, Senior Natural Resource and Agriculture Economist, Environment, Natural Resources & Agriculture Division, South Asia Department, Asian Development Bank (Rural Infrastructure Project in Bangladesh)</i> • <i>Samjhana Shrestha, Senior Economist, Environment, Natural Resources & Agriculture Division, Central and West Asia Department, Asian Development Bank (Achieving Food Security through Climate Resilience Dairy Value Chain Development)</i> <p>Open Discussion</p>
13:00 – 14:30	<p>NETWORKING LUNCH</p>
14:30 – 16:00	<p>SESSION 6: Determining Next Steps and Future Directions</p> <p>Session Chair/Moderator: <i>Fiona Lynn, Director, Agriculture and Food Security Section, Private Sector, Development Finance and Agricultural Development Branch, Department of Foreign Affairs and Trade, Australia</i></p> <p>Panel Discussion</p> <ul style="list-style-type: none"> • <i>Gloria Merry Karolina, Head of Sub Directorate Land Extension & Management, Directorate General of Infrastructure & Facilities, Ministry of Agriculture, Indonesia</i> • <i>David Shearer, Director, International Partnerships and Program Delivery, WorldFish</i> • <i>Biresh Kumar Goswami, Director, BARI, Bangladesh</i> • <i>Paul P.S. Teng, Principal Officer, National Institute of Education, Singapore</i> <p>Open Discussion</p>
16:00 – 16:30	<p>CLOSING</p> <p>Wrap-Up</p> <p><i>Mahfuz Ahmed, Technical Advisor, Rural Development and Food Security, Asian Development Bank</i></p>

Notes

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Contact Us

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*Promoting Sustainable Food Security
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