



RURAL DEVELOPMENT AND FOOD SECURITY FORUM 2019 PROCEEDINGS

DECEMBER 2020

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6 ADB Avenue, Mandaluyong City, 1550 Metro Manila, Philippines
Tel +63 2 8632 4444; Fax +63 2 8636 2444.
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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.

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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



Multiplier effect. Helping farmers increase their income has a multiplier effect on the rest of the economy.

Closing Session

Akmal Siddiq, ADB: We would like to bring some of the lessons together in this session and helping me do this are my colleagues from the operations departments. I will now invite them to join me for this session: Donneth Walton, director, Environment, Natural Resources and Agriculture Division, Central and West Asia Department; Mio Oka, director, Environment, Natural Resources and Agriculture Division, South Asia Department; Jiangfeng Zhang, director, Environment, Natural Resources and Agriculture Division, Southeast Asia Department; Suzanne Robertson, principal natural resources and agriculture specialist, Environment, Natural Resources and Agriculture Division, East Asia Department; and Martin Lemoine, head, Agribusiness Team, Private Sector Operations Department.

We set out our forum to discuss the transformative changes in rural development and food security and I would like to hear your expectations from the forum, and how far you were successful in discussing the burning questions in our sector—what are some of the takeaways. I must add that we were aware of the challenges in the sector. Many of us work very closely in the sector and are knowledgeable about what works and what does not work. But the effort really was to see if there are opportunities to do things differently and maybe try out new ideas. Let us start our discussion.

Martin Lemoine, ADB: From my perspective, what I found successful in this forum is that there was a great share of private sector participation in the panel discussions. I think this dialogue between private sector companies and governments, who have been traditionally coming to ADB, has been very fruitful. To me that was the most interesting part. Also, we had people from different parts of the private sector. We had finance sector and agribusiness companies. We tend to be working in silos sometimes and that it is an eye opener for others to hear what others in the value chain are doing. That is my main takeaway from the forum.

Suzanne Kay Robertson, ADB: One of the key benefits we have from this forum is an acknowledgment to a new approach to agriculture. Agriculture is seen as an old sector and we often seem to do the same things same way all the time, which leaves us with the same limited result. I have seen from this forum that we have been able to acknowledge that agriculture is a transforming sector, we do need to think of new approaches in tackling this.

That has come through not only with examples of adoption of technology that can be used in this sector but also at the additional elements like partnership with the private sector. How we can have that integrated approach, which is not only looking at technical issues but also at policy and regulatory frameworks that we need for agriculture to be more efficient and successful. One of the main benefits we will get from this is a platform for knowledge exchange and discussion. This we can achieve to a certain level here in this forum as well as how we take this forward to our DMCs with other development partners like IFAD and FAO. We can build on the discussion that we have started here.

Jiangfeng Zhang, ADB: The key theme of this forum is rural prosperity and nutrition. The theme guides us to two major groups of beneficiaries we need to address from ADB's operational perspective. One is the farmer and the other is the consumer. For farmers, we understand that the key objective is to enhance agriculture productivity and profitability. For consumers, it is important to get quality, safe, and nutritious food at affordable prices—how to help the farmers and consumers to meet these two objectives as sometimes these two objectives may not align with each other—for example on the agri-food prices that farmers receive versus what consumers pay.

Looking from the agriculture value chains perspective, there are three key parts. The first key part is on the production side. It is important to introduce new technologies, provide good infrastructure, new crop varieties that are climate- or disaster-resilient, and good information to farmers. The second key part of the value chain is the postharvesting and marketing side. Most of the food losses happen at the immediate postharvesting stage. It is important to support the postharvesting and marketing side. Enhancing quality and reducing postharvest losses will help farmers secure increased prices of agricultural commodities. As we talked about dysfunctional markets in session 2 of this forum, it became clear that it is important to provide storage facilities, assist the farmers in quality control including simple washing, grading, packaging of the agricultural produce. That is very important. The third important aspect I would like to highlight is the trading part. I am separating trading here from marketing as it requires a different kind of contribution from the private sector. The private sector requires reliable supply of high-quality agricultural products, which links up the private sector closely with farmers. An important point here lies in the traceability of produce, which is important if agricultural commodities are to fetch higher prices in the international markets. It is necessary to make these three parts work together to deliver successful impacts in agriculture. Across all these three key parts of the agriculture value chains are four important elements as highlighted in the forum: technology, infrastructure particularly irrigation, financing, and enabling policy. These are four elements we need to work together with DMC governments to achieve the objective of food security.

Mio Oka, ADB: Yesterday, I moderated the session on Knowledge Sharing among Developing Member Countries. There were presentations from five leading experts from agribusiness and agri-marketing. Their presentations showcased concrete examples from the government and private sector perspectives. We got particularly excited about hearing experience from Singapore on vertical farming. My takeaway from the forum is that our world of agriculture is increasingly becoming borderless.

I can sit here in my office and yet look after my greenhouse in Nagano prefecture in Japan (how much water my plants need) and could be in an urban center to look after my farm on the roof of our building. We even had participation at this forum through Skype. We are becoming borderless and have a lot of technologies available. On the other hand, however, I thought that a forum like this, meeting with you all and sharing and exchanging or experience in person was extremely important. It made me realize that the basics are important. We talked a lot about trading and marketing. But production is important. We need a good seed and that is also important. That made me realize that we may work on new technology, but we cannot forget what we have been doing and what we have been good at. That also needs strengthening and continuation as well.

Donneth Walton, ADB: Unfortunately, I was not able to attend all the sessions. Overall, I think this forum was very much needed. I was happy to see how many participants there were over the 3 days and people are still here at the closing session. So that is very good. First thing for me was that ADB is reengaging in the agriculture and rural development space. For a few years these topics were not a priority. There have been some lessons learned by ADB and I think it is excellent to see our reengagement in this space. Recognizing the importance of the rural economy, in particular, rural–urban linkages, highlights the importance of having economically viable rural hubs, where you have all the provided and not just for the production side but also education and skills development, water and sanitation services, financial services—everything that you need for a rural space to be sustainable and continue to succeed. Rural–urban linkages are important but viable rural spaces are also very important.

One issue for me is that I expected a lot of innovative ideas expounded during the 3 days. However, one point I underscored in the session that I moderated this morning is replicability and scalability of those ideas. How replicable are these ideas for ADB or an international finance institution? How easy would be to take those innovative approaches and scale them out and replicate them with adaptations in the different regions and countries that we work in? Another important issue that came out is the role of the private sector, Martin has alluded to that. Farmers are private sector entities. They are entrepreneurs, small businesses. Many governments do not regard farmers as such, but they are businesses and need to be treated as such. I see a strong role for PPP in targeting farmers and differentiating between services that can be provided by government and private sector and how to get them to work together. There is an important role for government to play in this. And my colleagues have also mentioned this here.

Government is important for setting a conducive policy and regulatory environment to facilitate private sector. That is extremely important. Government can provide various risk-mitigation measures whether it is insurance, guarantee schemes, loans, subsidies, tax exemptions and other incentives to support farmers and rural development; supporting rural infrastructure like irrigation, transportation networks, and information platforms to facilitate digital technologies. These are not easy but there is a role for government partnering with the private sector. Overall the 3-day

forum was encouraging. It is not easy to move forward, but I think this is a very good first step.

Akmal Siddiq, ADB: Thank you all. You have summarized well many of the discussions and takeaways. You brought out very clearly the rural development aspects of the discussions. I attended all the sessions and my experience was that about 85% of the time, discussion was on farming, issues dealing with inputs, irrigation, etc. Firstly, I see farming as a part of the rural economy. If we observe transformation in developed countries as well, rural areas do not just remain farmland. Small towns become centers of economic activity, and much of those activities are related to farming. But the areas do include nonfarm activities as well. Secondly, farmers have seasonality in their labor usage. If you calculate the number of hours farmers spend over a year, there are intensive months as well as slack ones. That provides them a slot of time that can be used for labor-intensive nonfarm activities, whereby industry comes into rural space, rather than promoting rural people to out-migrate to urban and industrial centers. Cities in our region are bursting at the seams. They hardly have any space to absorb in-migration from rural areas. If we want to urbanize Asian economies the governments will have to establish new cities because the current urban centers are running out of space for optimal economic activities. For me that was the missing link. If we had more discussion on fresh ideas you alluded to, we can articulate this concept of developing rural economic hubs as outlined in our operational plan. As you are the leaders of ADB operations, I want to ask you, considering the next 5–10 years, how should ADB's own approach adjust?

Donneth Walton, ADB: I have always taken the position that rural development is a mirror image of urban development. I think in an institution like ADB, we can somehow understand urban development easier than we understand rural development. There needs to be a bit of a mindset change. Rural spaces may need the same services as in urban areas but on a smaller scale as we are dealing with a smaller population and the economic base would be different as agriculture will be an important part of the rural economy. There is a fundamental misunderstanding in an institution like ADB and probably in other institutions as well—when we talk about urban development it is clear what we need to do in the big urban centers. However, rural spaces are also important, and I was mentioning the need for economically viable rural spaces. How do we change that in ADB? We still have our silos, and until something tremendous happens we will continue to have our silos. If we are doing something in rural development, we are very keen to work with the transport or energy teams to work with other sectors. Now, there is the “One ADB” approach, which means sovereign side working with the nonsovereign side but also entails working across sectors. Within our own departments we must think about how we can target a few areas and go fully in to provide different services to ensure that we have an economically viable rural space.

Akmal Siddiq, ADB: These are some of the good ideas that should be part of our discussion and I fully agree with you. We have friends in the urban sector, we have lunch with them but do not really engage with them more seriously on new development paradigms. Suzanne, you work in the PRC where the government has in its current Five-Year Plan set out laudable targets for rural revitalization. Can you

enlighten us on how these initiatives are creative or different and what government expects to achieve?

Suzanne Kay Robertson, ADB: In the PRC there is a new program on Rural Vitalization by which the government has set strategic priorities on how it wants to implement a new approach to rural development. The program starts off with a good basis, which identifies that farming and agriculture alone are not the only ways to do rural development. There are different aspects that need to be considered within this. Agriculture modernization is a key priority, but it is not the only priority. We have talked about rural–urban integration, how to get services into rural areas. Many of these aspects are to be driven from a rural economy perspective targeting more than just agriculture or farming. It is a holistic development process and one of the key elements we in ADB are supporting in the Rural Vitalization program is taking an integrated approach to development. When we are preparing projects, we look at a regional approach to determine the right development agenda for a certain location. Some areas have better rural–urban linkages and there are a lot of advantages we can build on. There are areas that have high value ecological conservation priorities and we need to address those issues. Under the Rural Vitalization program, PRC is taking a geographic and strategic approach to identifying location-specific need without applying a general one-system-fits all approach. This program is challenging but the most interesting aspect is how to do rural development including agricultural modernization using new approaches and initiatives.

Jiangfeng Zhang, ADB: Akmal, I agree with you that farming is just a part of the rural activities. However, we also need to understand that farming is a very important aspect, especially with population growth. I feel it is important to change the mindset of farmers. Farming is not just for producing some products; it needs to be market oriented. What consumers demand from the farmers is important for farmers to understand. Let us also bring the linkage to private sector. As I mentioned earlier, with quality produce, farmers can achieve much better prices. At the same time with new technologies being used, farmers can improve the quality of produce and with linkage to private sector, farmers can become organized in agro-enterprises. On economic architecture or subsidies, we understand that some policies are stimulating the sector, while others may distort the market. From ADB's side, I suggest we should help governments create more enabling policies and environment. For example, early this year, the government in the Philippines has enacted the Rice Tariffication Act to transit from quota-based rice importation system to a tariff system. We understand that at this moment some farmers are suffering because of this policy. The government is looking into initiatives to help farmers move from rice production to crop diversification and stimulate farmers to grow premier quality rice and other high value crops. From ADB side, we can work with governments to stimulate the diversification of the agriculture sector.

Martin Lemoine, ADB: Just to build on that, you are asking, what is there in the future based on what we have learned today. In the coming 5 years I see more integration, which is what Suzanne and Jiangfeng mentioned. I used to look at the sector as distinct segments of a value chain, i.e., agricultural inputs, farming, primary processing, secondary processing, marketing, and distribution. That framework



ADB's assistance to governments. ADB can examine some of the structural constraints and help the government design enabling policies.

does not work in reality as most of our clients are completely integrated along the value chain. They belong to more than one segment and I see that more and more enterprises will integrate and come closer to the farmers. Yesterday, I talked about contract farming. That is one model of integration, but we are increasingly seeing food companies and supermarket chains that own farms. They can ensure complete traceability as products come from their own farms. This is one of the ways the sector will modernize. Integration is one thing that I see in the future.

Akmal Siddiq, ADB: The other point, which left me puzzled, was use of technology. There is a perception that with widespread adoption of communication technology, smartphones, Internet of Things—and there is no doubt that these are powerful tools—issues will be resolved. If we look at rural areas, practically there is not much to offer. If markets are inefficient, dysfunctional, or broken, just bringing in smartphone technology is not going to fix this problem. The markets do not work for a variety of reasons: we launched four policy briefs based on studies in four countries on horticulture crops and the lessons learned are: markets do not work because infrastructure does not exist and cold chain is almost nonexistent. In different countries the level of development is different. Generally, about 10% of perishables are put through the cold chain system. Similarly, we hear about financing, which is not available to majority of the farmers and I would like to hear from you. Donneth you were moderating the session on financing. What is the takeaway from the discussion in that session? How are farmers now able to access financing more with this technical revolution than they were able to do so 5 or 10 years ago?

Donneth Walton, ADB: On accessing finance, and I see Ramon (Union Bank Philippines) is still here, so maybe he can say something about that. The countries are very different. Recently, I was in Tajikistan and we were working on this livestock project. Ideally, we would have liked to pass funds through the banking sector, but the banking sector in that country is totally dysfunctional. As a fiduciary institution, there is no way that ADB would be able to sign off on financing components that

are not fulfilling compliance requirements. So that is a major financial challenge that international finance institutions (ADB, EBRD) had to deal with. We had to come up with innovative approaches, as farmers need access to capital. Some of these approaches included providing matching grants, putting together cooperatives, which later become self-financing. What I heard in the session on financing were some very good ideas, but they did not dig down deep enough. It is difficult to talk about such a subject in an hour and a half. There are still a lot of challenges. Banks regard farming as high risk. The issue and challenge we still face is how to make farmers bankable, how financial institutions can see farmers as small bankable businesses. Banks are out there to make money, so how are they going to lend money to smallholder farmers? I think it is an ongoing dialogue. Some of the approaches discussed this morning were like venture capital. Maybe that can work in some countries but there is a regulatory environment that needs to facilitate that sort of financing support. One has to be creative. It is still important to work with banks and come up with agri-lending products, which makes sense to banks. This is where you may need to have some subsidies kicking in to help banks see opportunities to lend to such clients.

Akmal Siddiq, ADB: Mio, regarding this model of FPO from Maharashtra that was underpinned with some good examples that show how this model is helping thousands of farmers—what is the main difference between the FPO and the classic cooperative model? Why do you think this model has better chances of success in the future? In the early years of the model, a lot of hand holding is done, and support is provided. But do you think this model can be replicated at a larger scale? Does it have potential for a much bigger impact?

Mio Oka, ADB: Yes, because the idea of scaling up and grouping of farmers is similar to that for cooperatives. However, business operations and government commitment are different in the case of FPOs. Compared to cooperatives, FPOs are less politicized, larger in scale, and with the right incentives it can work in a state like Maharashtra. I can see that the central government is fully committed to this vehicle. I am quite certain that the FPO will move. The main difference being that earlier, we just organized a group and imparted skills but now the FPOs are geared toward products. The members in an FPO are all aiming for the same purpose.

Jiangfeng Zhang, ADB: Akmal, on your comment that IT / technology does not help because markets are not working well, I do not see one type of technology working against another. We need all kinds of technologies or infrastructure to support farmers. For example, IT helps farmers get market information. The mobile extension services will help farmers reduce production costs and enhance quality. Yes, the market infrastructure is important. However, other infrastructure is equally important, for example irrigation efficiency and irrigation modernization. I would also like to mention that we should consider how we can use blockchain to support linkage between farmers and private sector (buyers). This is an important aspect and an area we would like to look into.

Suzanne Kay Robertson, ADB: Just coming back on the technology issue. It is often thought that technology of any kind is a solution to every problem we have and that

is not really the case. The technology can be a catalyst for change, but we need to have associated with that all the underlying institutional elements, policies, as well as capacity building, and links in the value chain put together so that this technology can be used efficiently and effectively. That is what we are missing in this story. We roll out technology, but we do not have the adequate support services in place. It is the type of mainstreaming activity that some of these technologies need, either with the public sector or driven by the private sector. But if we do not have all the structure and institutional settings in place, then the technology has limited value. That is something we must work on to ensure that technology and modernization fits the need we have.

Martin Lemoine, ADB: Coming back to the private sector, I believe that the private sector can create a lot of value. I have explained some of the models that can double farmer income, but private sector investments only react to incentives. Firstly, that is where governments must take the lead. If I look at where my clients are based, I see the PRC where government is spending a lot of money in rural areas. Government is putting their money first. If government goes first, private sector will put more. \$1 from government will trigger \$3–\$4 of private sector funding. Secondly, we have a lot of clients in Viet Nam because investors can own 100% FDI in Viet Nam. I do not know why other countries are not open to foreign investments but to me that is an important tool. Thirdly, we have a lot of clients in Singapore because the tax rate for food traders is very low there. An attractive tax policy is a tool that governments should consider if they want more investment in this sector. Finally, we touched upon the issue of land constraint. In the Philippines, the major issue is concerning land aggregation (due to some historical reasons)—that is an issue that government needs to fix because it is not even possible to rent land from someone because if the owner rents out land he/she has to give up part of the ownership to the tenant after 5 years. It is a disincentive to even lease out land. The land issue is critical for agriculture and part of the enabling policies that government should consider if they are serious about attracting investments in the sector.

Akmal Siddiq, ADB: Yes, as you pointed out there are all kinds of structural constraints, which are beyond the scope of any project. But as you said, the other intervention ADB can make is to examine some of these structural constraints and help the government design enabling policies. Let me conclude here with a parting thought: I think this point was put on the table in the very first session by our keynote speaker Mekhala and rightly so. In fact, the freshly minted Nobel laureate, Abhijit Banerjee, was also talking about it a couple of weeks ago. In India, half the population lives in rural areas and if their demand for consumer goods goes down, it pulls the nonfarm sector down. That is a powerful message to planners everywhere, not just in India. You are not just doing a favor to the farmers by helping them increase their incomes. That income has a multiplier effect on the rest of the economy. That is a major lesson we have learned from what is going on in India. On that thought let me, on behalf of SDCC colleagues, sincerely thank all of you. You have worked very hard with our team to put together this forum. Furthermore, the support in the future has to come from operations and you all are very important actors. Let us all give a big hand of applause to our colleagues.



Call for greater investments. It is important to increase the private sector investment projects within the next 5 years from around 10% to at least 30% to help achieve the goals in rural development and food security.

Next Steps and Closing Remarks

Message

Akmal Siddiq, Chief of Rural Development and Food Security (Agriculture) Thematic Group, Sustainable Development and Climate Change Department, ADB

Whatever we have learned from you is highly valuable. Many of the ideas, though not brand new, have some new nuances regarding policies and new concepts. This collective wisdom we have gained is useful and we will take these forum deliberations, recommendations, and compile them for our collective use. That is the first step we will take. Secondly, of course we will engage the governments, our partners, and all of you, and will certainly try to see what collective actions we can take. The third action we propose is to follow up with ideas about PPP and expand this concept. This will require analytical rigor and good concepts to try out these ideas. We will get back to you with a compendium and if you have more ideas, we will seek your guidance. Last but not least, we mentioned a few times during the forum that this particular effort is important because it follows ADB adopting its Strategy 2030. In that strategy, we have seven priority areas and Rural Development and Food Security is operational priority No. 5. We must keep the momentum going and, hopefully, we will be able to hold a forum of this magnitude or scale at least every 2 years. However, that does not mean you have to wait for 2 years to share your creative ideas with us. We will set up other platforms where at a regional or national level we will be in touch with you. Every 2 years, we will make an effort to bring you and our colleagues together under one roof. It will be ADB's pleasure to host you once again in the near future. I would like to thank you all sincerely. I would now like to invite Director General Woonchong Um to deliver the closing remarks.

Closing Remarks

Woochong Um, Director General, Sustainable Development and Climate Change Department, ADB

I love giving closing remarks because I know I am facing people who are truly committed to this cause and stay all the way to the end. You all have heard the substantive discussions, especially the discussion in the last session consisting of all the key people delivering this program. Let me thank and congratulate that group again. Also more importantly the audience and participants who came from within this building and outside. I know they have to travel to come here. This forum is also not happening miraculously. There are a lot of people behind the scenes who are making this happen. I would like to thank all of you.

This is a very important topic for ADB and one of the key things that is different from previous long term strategies is the area of agriculture, food security, and rural development. We have the space for us to thrive, but the challenge is daunting. We need to work with everybody to help us achieve this.

Below are some takeaways from this forum:

- i. We need to continue to focus on smallholders.
- ii. We should invest in infrastructure in rural areas as much as in urban areas.
- iii. Governments should ensure that there is an enabling environment;
- iv. We all have to work collectively in the countries as well as in this building to make sure that there is no urban bias.
- v. Under ADB's Strategy 2030, the role of digital technology is highlighted, and with this new generation it is everywhere. We need to harness potential from AgTech and FinTech as well and all the other digital technologies.
- vi. We have to ensure that women, girls, and youth continue to thrive by creating an enabling environment.
- vii. We cannot forget about climate change challenges that we are facing in all our priority areas, especially in rural development.
- viii. Within the next 5 years we have to increase our private sector investment from around 10% to at least 30%; so, we need to crowd in private resources.

With all these great ideas, we now have enough knowledge to move forward until the next time we meet. We will be interacting with many of you throughout our operations and work.

On behalf of President Nakao, and Vice-President Susantono, I am very happy to bring this forum to a close and thank everyone for being here.

Thank you.

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International Rice Research Institute

Wei Zhang

Senior Research Fellow
International Food Policy Research Institute

Donneth Walton

Director, Environment, Natural Resources & Agriculture Division
Central and West Asia Department, ADB

Jiangfeng Zhang

Director, Environment, Natural Resources & Agriculture Division
Southeast Asia Department, ADB

Martin Lemoine

Head, Agribusiness Investment Team
Private Sector Operations Department, ADB

Mio Oka

Director, Environment, Natural Resources & Agriculture Division
South Asia Department, ADB

Noelle O'Brien

Principal Climate Change Specialist, Energy Division
Pacific Department, ADB

Qingfeng Zhang

Director, Environment, Natural Resources & Agriculture Division
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Akmal Siddiq, Chief of Rural Development and Food Security (Agriculture) Thematic Group, Sustainable Development and Climate Change Department

Cherry Zafaralla, Consultant

Erin Lumanta-Sea, Associate Operations Analyst

Hasan Moinuddin, Consultant

Leah Arboleda, Natural Resources and Agriculture Officer

Lourdes Margarita A. Caballero, Consultant

Javed Mir, Consultant

Jean R. Centeno, Consultant

Jhoanna B. Quimson, Consultant

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Maria Angela M. Banaria, Senior Operations Assistant

Mariel A. Gabriel, Consultant

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Mary Jane L. Romero, Consultant

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Xaira Mariz M. Caparas-Ventura, Consultant

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.



ASIAN DEVELOPMENT BANK

6 ADB Avenue, Mandaluyong City

1550 Metro Manila, Philippines

www.adb.org