ISLAMIC DEVELOPMENT BANK

Building Resiliency to Climate Change: Innovations and Partnerships for Impact

November 11th, 2016

Marrakech, Morocco

SESSION: SIDE EVENT BY THE ISLAMIC DEVELOPMENT BANK

Title: Building Resiliency to Climate Change: Innovative Approaches and Partnerships
Date: Friday, November 11, 2016
Time/ Duration: 10:30– 12:30 hrs
Venue: Islamic Bank Pavilion at COP22, Marrakech, Morocco

Context: Agriculture is highly exposed to climate change, as farming activities directly depend on climatic conditions. Climate change and climate variability is, indeed, affecting agriculture most and building resiliency its resiliency is a must if agriculture is to play a significant role in the mitigation-adaptation nexus. Nevertheless, it must also be productive in order to feed the rapidly growing global population. This requires increasing access to production inputs (improved seeds, fertilizers within the context of integrated soil fertility management), expand irrigation facilities and harvest rainwater, improve extension and advisory services of climate-smart agriculture, increase access to afford financing, and build human and institutional capacity to innovate solutions to achieve and sustain impact achieved at scale. The application of science and technology that informs and guides public and private investments is an essential part of the solution.

Building resiliency of agriculture to climate change, the topic under discussion in this side event, requires innovations and forging strategic partnerships. It requires supporting countries to roll out significant investments in the agricultural sector, particularly in developing countries that take most of the toll of climate change although they contribute the least. In this regard, the Islamic Development Bank has made significant investment in its 29 member countries to grow agriculture and build its resiliency to climate change and climate variability.

The side event will highlight lessons emerging from some of the countries through a panel of eminent speakers that are engaged directly with farmers and in rural development, and in the research institutions in developing innovations. The discussions will be put into context by two keynote speakers that will bring on board global perspectives on how best we can manage the mitigation-adaptation nexus, and how the application of science and information technology can be used at landscape levels to inform the management of soils and agricultural practices that are appropriate for different agro-ecologies

Goal: The goal of the side event is to provide an opportunity for exchanging knowledge and experiences on practical measures on building the resiliency of agriculture, particularly of smallholder farmers, to climate change and climate variability in developing countries. The eminent keynote and panel speakers will guide this discussion by highlighting

Lessons emerging from large scale country projects that take an integrated rural development approach in building resiliency to climate change

How Islamic micro-financing can deployed at scale to support farmers and associated agribusinesses to grow productive and resilient agriculture and to diversify rural economies, and

Identify areas of policy and institutional support to the countries that could enhance their decisions to invest in appropriate agricultural practices that provide both climate adaptation and mitigation benefits, to the extent possible.

KEY ISSUES/ QUESTIONS:

How can we take proven technologies and innovations for building the resiliency of agriculture to climate change, and in particular that of smallholder farmers in developing countries, to a threshold scale that can enhance food security and incomes?

What are the key take away lessons from the investments of the Islamic Development Bank and its member countries in various projects for growing agricultural productivity and enhancing its resiliency to climate change and climate variability?

What are some appropriate tools for guiding investments in agriculture based on soil and land use capability with a view to reducing both mitigation and adaptation goals of the threat of climate change?

What are some appropriate Islamic Micro-Financing Products that could be brought to wide-scale use by farmers and agribusiness in ways that enhance their resiliency to climate change and climate variability

What policy and institutional development frameworks need to be implemented to ensure the appropriate innovations for building resiliency of smallholder farmers and agribusinesses to climate change are brought to scale and sustained

Outcome Desired: Bring to life practical ways of taking innovations for building the resiliency of agriculture, especially that under smallholder farmers in developing countries, and identify critical roles that can be played by stakeholders in both the public and private sectors.

Organizers: The Islamic Development Bank is grateful for the support of various in organizing this side event: ICBA (International Centre for Bio-Saline Agriculture), leaders of country projects from a few countries, the Global Environment Facility, and the Africa Soil Information Services program of Columbia University, NY

Moderator: Dr. Bashir Jama Adan, Manager, Agriculture and Food Security Division, Islamic Development Bank, Jeddah, Saudi Arabia

Keynote speakers:

1. Dr. Gustavo Fonseca, Director of Programs at the Global Environment Facility, the World Bank, Washington DC, and
2. Dr. Markus Walsh, Africa Soil Information Service (AfSIS), University of Columbia, NY

PANELISTS:

Dr. Ismahane Elouafi,

Director General, International Centre for Bio-Saline Agriculture (ICBA), Dubai, UAE

Ms. Ketty Lamaro,

Undersecretary, Pacification and Development, Office of the Prime Minister, Uganda

Mr. Boukary Sawadogo,

Coordinator, Building Resiliency to Recurrent Droughts in Burkina Faso

Eng. Ammar Ali Mohamed,

Director General for Water Harvesting Administration, Ministry of Water Resources, Irrigation and Electricity. Khartoum, Sudan

Mr. Mohamed Khalid Jawahir,

Micro-Finance Specialist, Agriculture and Rural Development Department, Islamic Development Bank, Jeddah

Program for Side Event on

Building Resiliency to Climate Change: innovations and partnerships for impact

Time	Activity	Facilitator
10:30 - 10.35	Opening remarks – **Session 1: Opening remarks: Prof. Savas Alpay, Group Chief Economist, Islamic Development**	Dr. Abdulateef Bello, Principal Statistician, Chief Economist Complex, Islamic Development Bank
10. 35 – 11.05	Key Note**- Dr. Gustavo Fonseca, Director of Programs at the Global Environment Facility (GEF), Washington DC.** Managing the mitigation-adaptation nexus: how can agriculture in developing countries be managed to get a win-win solution that reduces climate change? **Dr. Markus Walsh**, Africa Soil Information Service (AFSIS), University of Columbia, NY Land degradation, soil health, and adaptation to climate change: what predictive technologies can be deployed in a cost-effective manner to support management decisions by both the public and private sector in developing countries? What would it take to build the necessary human and institutional capacity?	Dr. Bashir Jama Adan, Manager, Agriculture and Food Security Division, Islamic Development Bank

Time	Activity	Facilitator
	Panel Discussions:	
11:05 – 11:25	1) Why investments in integrated water solutions is important for enhancing the adaptation of agriculture in arid and semi-arid regions of developing countries? What are some practical options that can be brought to scale through public-private partnerships? **Dr. Ismahane A. Elouafi, Director General, International Centre for Bio-Saline Agriculture (ICBA), UAE** 2) What are some practical solutions for adapting smallholder agriculture to climate change in West Africa? What works well or not? **Mr. Boukary Sawadogo, Coordinator, Building Resiliency to Recurrent Droughts, Burkina Faso** 3) What are some practical solutions for adapting smallholder agriculture to climate change in the Eastern and Southern Africa region? What works has worked well or not? **Ms. Ketty Lamaro, Under Secretary and Focal Person of Dryland Project, Prime Minister's Office, Uganda** 4) What Islamic Micro-Finance Products can be deployed at scale to enhance the adaption of farmers and agro-pastoralist to climate change? What is required to address the challenges associated with it? **Mohamed Khalid Jawahir, Islamic-Microfinance Specialist, Islamic Development Bank** 5) What practical small-scale water harvesting solutions can be brought to scale to enhance the climate change resiliency of smallholder farmers and agro-pastoralists? How can they be sustainably maintained after project funding ends? **Eng. Ammar Ali Mohamed, Director General for Water Harvesting Administration, Ministry of Water Resources, Irrigation and Electricity. Khartoum, Sudan**	Dr. Bashir Jama Adan, Manager, Agriculture and Food Security Division, Islamic Development Bank
11:25 -12.15	**Plenary discussions: Q&A session**	*Moderator: Dr. Bashir Jama Adan, Islamic Development Bank*
12:15 -12:25	Summary presentation of the key message/ takeaways	*Rapporteur – Rabat Regional Office team*
12:25: 12:30	Vote of Thanks - **Sidi Mohamed Ould Taleb, Director, Rabat Regional Office Islamic Development Bank**	*Moderator: Dr. Bashir Jama Adan, Islamic Development Bank*
12:30	Session Ends: coffee/tea; viewing of posters, books, among others.	

PROFILE OF SPEAKERS

MODERATOR:

Dr. Bashir Jama Adan, *Manager, Agriculture and Food Security Division, Islamic Development Bank, Jeddah, Saudi Arabia*

Dr. Bashir Jama works with the Islamic Development Bank at Jeddah, Saudi Arabia. He is the Manager of the Agriculture and Food Security Division in the Department of Agriculture and Rural Development. Before that, he was the Director for the Soil Health Program (SHP) at the Alliance for a Green Revolution in Africa (AGRA) for nearly 6.5 years. This included a 2-year assignment as the Head of AGRA's regional program in West Africa from its Accra, Ghana, office. As the director of SHP, Dr. Jama was responsible for shaping the content and scope of the program, and guiding investments of the program that had initial target of 13 focal countries. During his last year at AGRA, he led an organization-wide team under the Farmers' Solution unit that was responsible for investments in research and generating innovations. Dr. Jama holds a Ph.D. in Forestry (Agroforestry) from the University of Florida at Gainesville, USA. He has held senior positions with various research and development organizations.

KEYNOTE SPEAKERS:

1. Dr. Gustavo Fonseca, *Director, Global Environment Facility, the World Bank, Washington DC*

Dr. Fonseca is the Director of Programs at the Global Environment Facility (GEF), the largest independent funding mechanism supporting the global commons, housed at the World Bank and serving 155 countries. Responsibilities include overseeing the portfolio of investments in biodiversity, climate change mitigation and adaptation, forests and REDD+, transboundary marine and freshwater conservation, chemicals and sustainable land management. A tenured Professor at the Federal University of Minas Gerais (UFMG) in Brazil, he was the first Executive Director of Center for Applied Biodiversity before becoming the Chief Conservation and Science Officer of Conservation International. He holds a Master's degree in Latin American Studies and a Ph.D. in Forest Management and Conservation from the University of Florida. He published close to 150 publications articles and books, including 15 times in Science, four times in Nature, and twice in PNAS. He received the Oliver Austin Award of the University of Florida's State Museum for outstanding research in the natural sciences, the Environmental Protection Award of Government of the state of Minas Gerais, Brazil, the Distinguished Service Recognition award from the Brazil Biodiversity Fund (Funbio), and the Golden Ark Award, an official order of the Dutch government, the highest environment award of the Netherlands

KEYNOTE SPEAKERS:

2. Dr. Markus Walsh, *Africa Soil Information Service (AfSIS), University of Columbia, NY*

Markus Walsh, is a Senior Research Scientist in Ecosystems and Landscape Ecology at the Agriculture and Food Security Center of the Earth Institute at Columbia University. He holds a PhD in Rangeland Ecology from Texas A&M University and BSc degrees in Animal Science and Agricultural Mechanization from Iowa State University. His research focuses on developing operational tools for diagnosis, mapping and monitoring of the ecological condition of African landscapes with an emphasis on the application of IT and data science in agriculture. He is currently based at the Selian Agricultural Research Institute in Arusha, Tanzania, where he is the chief scientist of the Africa Soil Information Service.

PANELISTS:

Dr. Ismahane Elouafi is Director General of ICBA-Agriculture for Tomorrow since 2012. Before joining ICBA, she was leading the Research and Partnerships Division at the Canadian Food Inspection Agency (CFIA). Ismahane holds a PhD in Genetics (Cordoba University, Spain) and has a passion for Science; its management; and its integration with Policy. Over her 15 years' experience in agricultural research, Dr. Elouafi developed good understanding of Ag-Research, its potentials, and its challenges. She was successful in developing strategic partnerships with governments, institutions, academia, and private organizations in the national and international scientific research arena. Prior to joining ICBA, Ismahane held management positions with CFIA and Agriculture and Agri-Food Canada (AAFC). She also worked as a scientist with CGIAR centers and JIRCAS (Japan International Research Center for Agricultural Sciences).

She is a recipient of many international awards, including the National Reward Medal by His Majesty Mohamed VI, the King of Morocco (2014) and the Excellence in Science award from the Global Thinkers Forum (2014). In 2014 and 2015, the CEO-Middle East Magazine listed Dr. Elouafi among the World's 100 Most Powerful Arab Women; in the Science category. http://www.arabianbusiness.com/the-world-s-100- most-powerful-arab-women-541075.html and Muslim Science ranked Dr. Elouafi among the 20 Most Influential Women in Science in the Islamic World under the Shapers category.

Ms. Ketty Lamaro, Is the Undersecretary, Department of Pacification and Development/ Special Programmes in the Office of the Prime Minister. She coordinates the implementation of special programmes. The special programmes are affirmative interventions that cover the North and Central parts of Uganda.

These affirmative programmes were developed with the aim of bridging the development gaps in these regions as a result of then protracted wars and conflicts. The programmes cover West Nile, Northern Uganda (Acholi), Teso and Karamoja Regions.

The Development interventions in these areas have focused on Restocking, Water for production, Food Security, Peace building, infrastructure development, Agriculture productivity and Resilience to Climate Change among others. Ms. Lemaro has enormous experience in the geo-political development of the drylands of Uganda in particular and those of eastern Africa region in general.

PANELISTS:

Mr. Boukary Sawadogo is the national coordinator of the Building Resilience to Recurring Food Insecurity project in Burkina Faso. He is leading a national team and coordinating with CILSS on issues related to resilience of local communities to food insecurity and climate change. Before that, he was the Director of planning and prospective at the Water Agency of Nakanbé, in Burkina Faso and also worked as head of a local implementation unit under Support to Agricultural Value Chain Project in Burkina Faso. Mr. Sawadogo holds a socio-economic engineering degree from Panafrican Institute for Development/Central Africa in Douala, with a specialization in project management.

Eng. Ammar Mohamed Ali Mukhtar is the General Director of Water Harvesting Administration in Dam Implementation Unit, Ministry of Water Recourses, Irrigation and Electricity. Khartoum, Sudan

Eng. Ammar is leading Water Harvesting five years Plan called "Zero Thirst 2016-2020" in Sudan. The Plan aims to provide water through rainwater harvesting (small dams, Hafirs, and water wells) during the 5 years period. The total budget for this plan is about US$1.09 billion.

Eng. Ammar has been involved in the field of water resources management in last two decades in Sudan and neighbouring countries in Sahel Region of Africa. He focus area is in civil engineering, management as well as supervision (i.e., feasibility studies, detail engineering design, project implementation, technical supervision, Operation and Maintenance, Monitoring and Evaluation). During his work with Dams Implementation Unit, Eng. Ammar was able to participate in the implementation of more than 400 rainwater harvesting structures (Hafirs), 25 small dams and 150 water yards. The total capacity of rainwater harvesting structures of these projects are more than 90 million m3. Eng. Ammar has also extensive experience in Water Harvesting, Hydropower Technology and Dam Safety Management as well as surface water hydrology, hydrological networks in River Nile Basin and its tributaries.

Mr. Khalid Jawahir is a Microfinance Specialist in the Agriculture and Rural Development Department of the Islamic Development Bank and is based in Jeddah, Saudi Arabia. He is currently involved in various projects involving access to finance and capacity building for smallholder farmers, unemployed youth and women entrepreneurs in Senegal, Cote D'Ivoire, Mali and Benin. Khalid holds a master's degree in Islamic Banking and Finance from the International Islamic University Malaysia and is very keen in introducing shariah compliant microfinance to communities and institutions interested in exploring alternatives to conventional finance. Khalid is a team member of the Islamic Microfinance for Poverty Alleviation and Capacity Transfer (IMPACT) program of OIC/IDBG and a co-author of the Islamic Finance Primer published by the Islamic Research and Training Institute (IRTI).


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