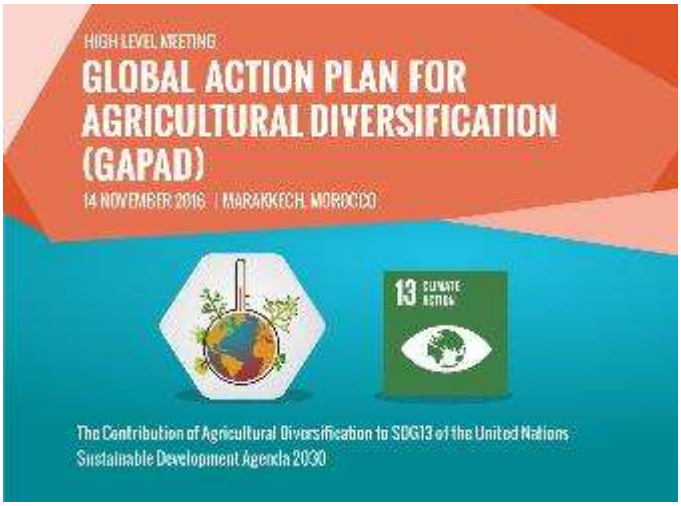

HIGH LEVEL MEETING GLOBAL ACTION PLAN FOR DIVERSIFICATION (GAPAD) FOR SDG 13: CLIMATE ACTION

14 NOVEMBER 2016

MARRAKECH, MOROCCO

Introduction

Global Action Plan on Agricultural Development (GAPAD) High Level Meeting on the Contribution of Agricultural Diversification to Sustainable Development Goal 13 (SDG13) of the United Nations Sustainable Development Agenda 2030 was held on the 14 November 2016 at the Islamic Development Bank Pavilion in Green Zone of the COP22 village.

The event was co-organised by Crops For the Future (CFF) and International Centre for Biosaline Agriculture (ICBA), with support from the Islamic Development Bank (IsDB) and Association of International Research and Development Centres for Agriculture (AIRCA). It was estimated that there were over 60 attendees at the event. The event was graced by the Guest of Honour, The Honourable Dato' Sri Dr. Haji Wan Junaidi Tuanku Jaafar, Minister of Natural Resources and Environment Malaysia. Key senior officials that attended the event include, among others, Dato' Jamal Hassan, the Malaysian Ambassador to Morocco; Dato' Sr. Dr. Azimuddin Bahari, Deputy Secretary General of Ministry of Natural Resources and Environment Malaysia; His Excellency Eng. Hani Salem Sonbol, CEO of International Islamic Trade Finance Corporation (IFTC); Dr. Dennis Rangi, Director General Development, and Dr. Janny Vos, from CABI.

Welcome Remarks

Welcome remarks were made by His Excellency Eng. Hani Salem Sonbol, CEO of International Islamic Trade Finance Corporation (IFTC). In his speech, His Excellency has emphasised on the importance of strong innovations supported by R&D to contribute to collective effort in finding solutions to the climate change problems facing the 21st century. IsDB finances agriculture sector of its member countries and supports research projects in agriculture sector that can transform lives and lead to attain goals of SDA2030. His Excellency

also emphasised that IsDB is also looking forward to work closely with research institutes to transform agriculture sector for better and safe planet.

Overview of GAPAD

Prof. Azam-Ali set the scene by giving a 10-minute presentation on the overview of GAPAD and its role in transforming agriculture for good. He began with the headline news on The Guardian, 14 Nov 2016, that according to the UN, 2016 will very likely be the hottest year on record, which also means 16 of the 17 hottest years on record will have been this century.

According to Prof. Azam-Ali, GAPAD is a timely initiative to address challenges identified in SDA 2030 through the diversification of agricultural species and systems. The goal is for GAPAD to become the globally recognised action plan to help mitigate and adapt to climate challenges by diversifying agriculture systems.

Similar to other GAPAD meetings that have been held throughout 2016, the High Level Meeting for SDG13 aimed to build new knowledge, foster networks and new partnerships among participants and to identify innovative approaches that provide agricultural diversification solutions for GAPAD to help achieve SDG13.

Opening Speech

The event was opened by Guest of Honour, The Honourable Dato' Sri Dr. Haji Wan Junaidi Tuanku Jaafar, Minister of Natural Resources and Environment Malaysia. In his speech, The Hon. Minister has cautioned that countries have no excuse for inaction or complacency over the threat of global warming and they do

not have as much time as they thought. Increases in global temperature will have potentially catastrophic consequences for agriculture, and yet we have little scientific evidence for which crops and cropping systems will suit the volatile climates of the future.

He added that the concentration of carbon dioxide in the atmosphere has reached a record high relative to more than the past half-million years, and has done so at an exceptionally fast rate. It is clear that even if the level of atmospheric carbon dioxide were held at today's levels, the planet will continue warming.

The Hon. Minister said he believes that GAPAD can strengthen global efforts in agriculture to meet the goals of the UN Sustainable Development Agenda 2030, and he reaffirmed that the Government of Malaysia is committed to the noble goals to which GAPAD aspires. To be successful, the minister said, GAPAD must be participatory, open and inclusive and the combined leadership of the broader international community with diverse resources, talents and abilities is also critical to support such a serious undertaking. He encouraged all participants to generate new collaborations and partnerships that drive agricultural diversification, and to identify innovative approaches and strategic initiatives for GAPAD to help achieve SDG13.

Panel Discussion

Following the opening address by the guest of honour was a panel discussion moderated by Dr. Abdullateef Bello, Principal Statistician, IsDB, and the panellists were - Dr. Ismahane Elouafi, Director General of ICBA, Mr. Martial Bernoux, Natural Resources Officer, Climate and Environment, Food and Agriculture Organisation (FAO) and Prof. Sayed Azam-Ali, CEO of CFF.

Dr. Bello commenced the discussion by introducing the event, and invited Prof. Azam-Ali to frame the discussion in the context of GAPAD. Prof. Azam-Ali said that the aim of GAPAD is to remove barriers among research institutes, communities, consortia and any territory to come up with a truly global action to develop plans that allow everybody to play a part. Diversification is indeed a complex agenda, hence GAPAD aims to make it much simpler and to enable its implementation in a collective manner.

Each panellist was then asked to comment on the relevance of their respective institutions in relation to GAPAD. Dr. Elouafi reaffirmed that there are numerous synergies between ICBA and GAPAD. Agricultural biodiversity is key to ICBA's research priority, with focus on marginalised environment where crops are less productive. Innovative agriculture may need new tools, but it is imperative to understand the origins to transform agriculture. She went on to emphasise that diversity is extremely important; and it is imperative to invest in marginalised environments in order to feed 9 billion people by 2050. ICBA's research

activities show the importance of biodiversity of underutilised crops that are resilient to climate change and can thrive in marginalised environments.

Mr. Bernoux highlighted that FAO's main objective is for the world to achieve food security, and feeding the world and meeting the demand in future can only be achieved by ensuring sustainable agriculture. He drew attention to the El Nino phenomenon that happened in 2016 and has caused a myriad of negative impacts and has caused many countries to suffer. There is an urgent need to build system that is resilient and able to adapt: hence the need for diversity of species, seeds and techniques used to grow crops. The world needs to find solutions with farmers, fishermen, and to implement new systems that are resilient. Mr. Bernoux gave an example of an initiative by FAO on water scarcity – which simply means unavailability of water when needed and competing with water that is not available. He also noted that soil diversity is also an important component in the diversification agenda.

Dr. Bello then posed the question on the key pillars of the action plan of GAPAD. Prof. Azam-Ali pointed out that the United Nations had launched the Sustainable Development Agenda 2030 in December 2015. While agriculture relates to the touchpoints of all the 17 Sustainable Development Goals that have been identified, 6 SDGs are the major ones. The goals, targets and milestones are already set through enormous discussions and debates by UN, and the key role of GAPAD stakeholders is to see how agricultural diversification can help to meet the specific targets. Without an action plan, there will not be a platform for each player to join forces and make contribution to these truly ambitious targets.

Prof. Azam-Ali noted that GAPAD is indeed an ambitious plan. However, there is no choice because the SDG1 Zero Poverty by 2030 is a very ambitious goal to achieve. Hence, the response needs to be equally ambitious if the world were to have any chance of meeting

that target. GAPAD is helping to achieve targets that are not set by any single entity but by the world community.

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> ***Prof. Sayed Azam-Ali, CEO of CFF***

At each of the GAPAD SDG meeting, global key opinion leaders were brought together to contribute their expertise and knowledge. At the end of it, GAPAD would have brought together the communities through webinars, engagement with stakeholders, specialists and policymakers, and action plans will be brought in by all the players. GAPAD is not a top-down plan that will be announced with no mechanism than its own to deliver it. Hence, these partnerships need to come together, so the Action Plan, which will be launched next year hopefully in Malaysia, will lead to what are the elements of the plan that people would sign up to.

Dr. Bello then posed the question on how to build resilience. Dr. Elouafi emphasized that the resilience of agriculture needs to be viewed throughout the whole value chain; the farmers, processing, market, has different phase of resilience in the value chain. Taking the instance of resilience in farming, it is to ensure resilience of the farm production to meet the needs for today, tomorrow, next year, and years to come. As an example, the farmers must be able to know whether they are planting the best crops, for example maize, or are they better off to move on to different crops in the event of climate change with increasing temperature to ensure that they are able to sustain the food production. Therefore, resilience is about ensuring sustainable productivity while keeping the ecosystem and soil healthy so the productivity can be sustained over the years.

ICBA has developed good understanding on the complexity of resilience, hence it can provide science-based recommendations to governments, able to alert them and provide sufficient data needed to ensure they are able to produce the crops they need for tomorrow. On the plant breeding side, there is a need for knowledge on the choice of crops in order to get the right crops for the right conditions in the event of climate change. Taking water scarcity as an example, Canada is not water scarce but is now having issues with the production of wheat and canola as they experience two long terms without rain and water. She also

pointed out the importance of monitoring the input used for the soil in fostering resilience. Resilience is about how much we are using and how much we leave for the next generation.

Mr. Bernoux continued the discussion with focus on the ecosystem in terms of climate change and social perspective in the effort of supporting the countries to address food security. Countries need to have good strategies to guide country-level climate action. He highlighted that when FAO analysed the INDCs and NDCs put forward by countries, agriculture was featured as a top agenda by most developing countries. This is a clear signal: the agriculture sectors are central in meeting national mitigation and adaptation goals in response to the climate change. He emphasized the importance of finding concrete solutions that are able to tackle the needs of farmers that can deliver impacts up to country level, although it is not a simple thing to do. Hence, there is a crucial need for engagement platforms such as GAPAD and Global Alliance for Climate-Smart Agriculture to engage with the actors. Having said that, having a platform alone is not enough. These actors also need sufficient resources to implement the actions. Enablers such as the Global Environment Facility (GEF), development banks, public banks, and Green Climate Fund (GCF) must play their roles to facilitate transformative projects and to enable farmers to be in a position to deliver the solutions.

Noting that the climate change imperatives include finance, partnership, and capacity development, Mr. Bello asked each panellist to comment on each imperative and how to move forward to achieve these three elements. Prof. Azam-Ali referred to the earlier side event where UNCTAD and IsDB discussed South-South partnership and NGER principles. He stated that such initiative was particularly important to connect South-South collaboration not only on agriculture and what crops to grow, but also food cultures, traditions that can be shared through reverse linkage. This will encourage partnership and capacity building that can be built around the culture knowledge they can share. He also pointed out IsDB as an ideal mechanism having a role in bringing the linkage together across the world.

Dr. Elouafi made strong emphasis on nutrition to address SDG1: Zero Poverty and SDG2: Zero Hunger. The world is in a state where the issue of malnutrition is as bad as hunger issue, where people are not having anything to eat. She pointed out that most philanthropists have strong concern on children stunting and mortality rates, and one of the reasons that caused these is insufficiency of micronutrients, for example iron, magnesium and zinc. Many players

such as CGIAR are putting a lot of efforts and resources on adding nutrients to major crops. She highlighted that biodiversity can overcome malnutrition as it provides diverse meals on plate and enable the children to get the necessary micronutrients, referring to underutilised crops that have high levels of important micronutrients.

Dr. Elouafi reaffirmed that GAPAD needs the right financing, partnership and capacity building. She pointed out that research institutes still need a lot of financing support from development banks such as IsDB as well as bilateral funding. Many donors are very interested to increase food and nutrition and water security, which actually can be addressed through biodiversity. According to her, ICBA is committed to GAPAD and is supporting other organisations that work on biodiversity. She also noted that partnership is also very important, and GAPAD is providing strong platform of partners, and it needs more partners to join. She said that the massive problems at hand, such as climate change, malnutrition, food and nutritional security, are too big for any individual, institutions, or countries, to deal with alone, and there must be a strong coalition to address these issues. GAPAD has set the right foot by having the much needed coalition and it is hoped that it will grow bigger and stronger.

She added that capacity building is lacking is many of the countries that are facing most of these problems. However, capacity building must not only be for the end users but also the policy makers. The policymakers need to understand the importance of biodiversity in order to take the right actions and make the right policies to implement and to promote at country, regional and global levels.

Mr. Bernoux related his experience of having a meeting with a group of friends from FAO, UNEP, UNDCP, WRI, as well as donors such as GIZ, Canada, EU and IPCC. The main objective of the meeting was to discuss partnerships to increase capacity building to offer countries the right ways of having access to financing. The case in point is that it is impossible for one single agency to deliver and contribute to these global issues. The mitigation community must work with the adaptation community. He also stressed that some financing is not easily accessible by the countries that critically need them. Therefore, there is a need to increase their capacity to access these funds, and this is the capacity needed. He also added that, while there are many good projects with high impacts, it is better to jointly work on these projects in order to get funders to agree to financing.

Q&A Session

Upon the ensuing discussion, Dennis Rangi from CABI offered to give feedback to support the discussion. He highlighted that the GAPAD SDG2 meeting in Nairobi was highly successful in bringing together many key actors. According to him, the key to success in providing solutions to the global issues is partnership. When the key players get together, they gather several years of experience and knowledge, from which can be expanded into bigger solutions. He added that there is also a need to build capacity of institutions, and more importantly to build capacity of the recipients of the issues being discussed. He put forth an example of initiative by CABI where farmers become plant doctors to adapt to climate change. One of the circumstances of climate change is that the insect and plant behaviours will also change. CABI has built the capacity for the farmers and community to be able to respond quickly to these changes or to even detect them at earlier stage.

The next feedback was put forth by Ms. Rachel McDonnell from ICBA. She pointed out that the issues discussed are on global scale, however people are dealing with crops that are locally grown. She posed the question to the panellist on how to take these global initiatives and make it successful at local level.

Mr. Bernoux acknowledged that different countries will have specific needs, therefore countries will have to come together and build partnerships on global initiatives, for instance the Global Soil Partnership. These partnerships will build regional clusters based on the local needs and will enable specific needs and details being captured. To develop plans for the global initiatives.

Prof. Azam-Ali stated that the Research Value Chain starts at genetic resources trough to the market, of which the market has to be the driver otherwise the efforts to conserve germplasm are pointless without end uses and no one to use them. He provided an example

of the use of an application that allows farmers to make the decision why should they change from what they grow to an alternative crop, and the farmers will also be given a choice of crops suitable for their specific location. This tool will allow farmers to make a business decision on marketability of the crops to end users. The tool allows the localisation of the knowledge we have all over the world to be applied for local conditions. The crucial information such as can the farmers grow the crops, what will they produce, what are the outputs, and particularly what are the nutrition and how much income they can generate, can be useful before farmers decide on the crops they plan to grow . This tool will also enable users to share their knowledge with different partners from different parts of the world on the best practice for a particular crop from previous experience elsewhere.

A delegate posed a question on financing for Muslim countries whether IsDB is focusing on using Sudan to feed the Muslim countries. Dr. Bello responded that agriculture is one of the main sectors on which IsDB is focusing its financing. He added that many countries come to IsDB for financial support, and Sudan is welcomed to come forward with proposals to offer their knowledge and technology. IsDB has a programme called reverse linkage to support capacity development among its member countries as well as knowledge and technology transfer, for example Malaysia is providing knowledge transfer on oil palm. IsDB acts as a catalyst to provide financing, and bringing together countries in promoting cooperation.

The next question was from Dr. Janny Vos from CABI, on why diversification is not emphasizing on providing better income for farmers. Referring to CABI's PlantWise programme as an example, she pointed out that CABI received many queries from farmers who are keen to plant vegetables because these crops enable them to generate income and make business sense.

Dr. Elouafi responded to the question that raising the income of farmers is indeed important in the diversification agenda, although perhaps not on the similar scale as expected. She highlighted that globalisation is central to this. The farmers need a set value chain, including easy access to seeds, input, and market. Currently, the access does not exist for vegetables and many underutilised crops such as quinoa. The complete value chain is lacking because the major multinational players such as DuPont and Syngenta, do not provide investment support if the production is less than a million hectare. While many vegetables and cash crops will generate more money, they also need a fully functional system from seed to

market. Hence, these roles can be played by government, private sectors, and small medium enterprises (SMEs) that see the opportunity and to develop the value chain to enable smallholders to get more income.

Prof. Azam-Ali referred to his recent experience of being on a panel discussion together with Monsanto, Bayer, DuPont and Syngenta, and CFF was the only small player. During the panel discussion, he pointed out that these big industry players said the same thing about alternative crops being not big enough and will cause them to have to diversify from their main focus which are the major crops. He then proposed to them to invest on a pre-commercialisation fund that are free from their control to undertake diversification strategy using their platform technology that is applicable without making particular ownership over the crops they can be used for. In addition to these points, Prof. Azam-Ali also pointed out that people tend to make a generic claim that "vegetables are good for you" without having the scientific evidence. Without accurate knowledge about these plants, there is limitation to show their nutrition and what is left after they are cooked and being processed into marketable nutritious products, as a vital scientific evidence to solve the malnutrition issue such as micronutrient deficiency and hidden hunger. Therefore, there is a need for investment to make available all these evidence that are critical to be part of the global food systems.

Dr. Elouafi emphasized that public-private partnerships are vital to ensure the sustainability of the value chain. Giving an example of India which had no seed system 15 years ago, the nation had built the seed sector through the SMEs that started producing vegetables and underutilised crops without relying on the multinational companies. Similarly, ICBA has also experienced bottleneck in terms of seed production in Africa. The success story on the development of the seed sector in India shows that partnerships such as the South-south cooperation is indeed a very important strategy.

Noting that many countries are currently undertaking social reforms and economic diversification, Dr. Bello invited the panellists to give their concluding remarks on where does agricultural diversification fit into this equation. Prof. Azam-Ali highlighted the need for crops for the future that are suitable for the climates as well as communities of the future. Currently, the world's farmers comprise the ageing population. Hence, the diversification strategy for the next generation has to be a practice that is suitable for future generation,

not based on their grandparents' practices. They need to implement diversification because they are going to have to live in the 3 degree hotter world. In his concluding remark, Prof. Azam-Ali stressed that diversification is critical as there is no Planet B, and mankind has to work on Planet A with a plan that sustainable for the future.

Dr. Elouafi pointed out that agriculture provides employment for 60% of world population. The world is observing an increasing trend of migration of the young generation from the rural areas to the city at the first opportunity they get. One of the ways to solve this issue is by creating the opportunity for them to grow and be employed at their own place so they will stay and prosper and will have a better life than the slump of the city. Agriculture is regarded as one of the potential solutions. Dr. Elouafi gave the example of agriculture adaptation in Africa, which is a continent with the youngest population. The young population starts a family and has to work to generate income. Instead of continuing to develop the whole industry at massive scale which would require the young generation to move to the cities, it would be better to provide them with opportunities not only on the production side, but to develop the whole value chain in the rural areas to enable the young generation, including women, to work in the processing level and exposed to high technologies. The market will eventually become international, and this will allow the rural areas to prosper. She added that the young generation is also facing a rising issue of unemployment despite receiving sufficient education. Hence, this new model of transforming agriculture systems could be a part of the solution, whereby technology and innovative agriculture can be incorporated and implemented especially in the post-harvest and processing components.

The final remarks of the session were from Mr. Bernoux who has concurred with comments made by the panellists, and added that these recommendations need to be escalated to the policy level. Agriculture is recognised as a critical solution to address food security. He stated that during the recent meeting of the Subsidiary Body for Scientific and Technological Advice (SBSTA), agriculture was one of the main agenda. The meeting has acknowledged the need to have agriculture as part of the agenda in the observer negotiation that will shape the policy being made. Actions on agriculture will face challenges without proper support and distribution of resources from the policy makers, and agriculture players need to have advocacy strategies to influence policies.

Organised by: CFF Crops For the Future, ICBA

With support from: AIRCA Association of International Research and Development Centers for Agriculture

Programme

High Level Meeting on the Contribution of Agricultural Diversification to SDG13 of the United Nations Sustainable Development Agenda 2030

14 November 2016, Marrakech

Islamic Development Bank Pavilion, Green Zone

1445 Arrival of Participants

1510 Welcome Remarks
by H.E. Eng. Hani Salem Sonbol, Chief Executive Officer of International Islamic Trade Finance Corporation (IFTC)

1520 Transforming Agriculture for Good: The Roles of GAPAD in SDG13 of the UN Sustainable Development Agenda 2030
by Prof. Sayed Azam-Ali, CEO of Crops For the Future (CFF)

1530 Opening Address by Guest of Honour
Dato' Sri Dr. Haji Wan Junaidi Tuanku Jaafar
Malaysian Minister of Natural Resources and Environment

1540 Panel Discussion, moderated by Dr. Abdullateef Bello, Principal Statistician, Islamic Development Bank
Panellists

1. Mr. Martial Bernoux, Natural Resources Officer, Climate and Environment, Food and Agriculture Organisation (FAO)
2. Dr. Ismahane Elouafi, Director General of International Center for Biosaline Agriculture (ICBA)
3. Prof. Sayed Azam-Ali, CEO of Crops For the Future (CFF)

1600 Feedback and discussion

1615 Wrap up and Closing Remarks
by Dr. Shoaib Ismail, Director of Research & Innovation of ICBA

1630 End of meeting
Networking Session