



## Adaptation of African Agriculture: From Science to Action

### Outcome statement

23 November 2016

#### Background

The relationship between agriculture and climate change is complex. It is often said: “Agriculture is part of the cause of climate change, but it is also part of the solution”. This complex relationship raises the need to shift agricultural production to simultaneously enhance its resilience to climate impacts and mitigate agriculture’s negative environmental impacts, while ensuring that food security is not compromised.

The Paris Agreement has opened the door for action by including reference to food security, and the international community has acknowledged that urgent attention is needed to address the future of those who are on the frontline of climate change threats and impacts.

African Countries have presented their *Intended Nationally Determined Contributions (INDCs)*; Agriculture is well represented in their commitments; almost all African countries include agriculture in adaptation priorities. This underscores the importance of agriculture for African economies and societies. The willingness by countries to address agriculture and food security in the context of climate change could be a game changer for the 230 million people still suffering from chronic hunger and the 80 percent of Africa’s poor who live in rural areas and earn their income from agriculture.

Global warming and more extreme weather are pressing problems, putting food security at risk. The 2015 Paris Agreement aims to limit the increase in global average temperatures to “well below two degrees C” and to pursue efforts to limit it to 1.5 degrees C. Analyses by the United Nations Environment Programme (UNEP) show that even in a situation where temperature increase is limited to two degrees C, Africa will have to meet adaptation costs in the range of US\$ 7-15 billion per year across all sectors, by 2020. But only around US\$1-2 billion per year is available now. And even if these costs were met up until 2020, financing in Africa would need to increase further by 7% each year after 2020 to meet adaptation needs. Agriculture will be a key sector for adaptation. For example UNEP estimates that in Sub-Saharan Africa, the agriculture sector is among those sectors with the highest adaptation costs. Furthermore, CCAFS analyses show that if the 2 degrees C goal of the Paris Agreement is to be met, then 1 Gigatonne carbon dioxide equivalent per year reduction will need to occur in the agriculture sector by 2030, whereas current known mitigation interventions can only contribute 21-40% of this goal.

In this context, the “Adaptation of African Agriculture: from science to action” event focused on the implementation of the Adaptation of African Agriculture initiative (“AAA”), launched by the Moroccan Government to transform African Agriculture.

The event was shaped around the AAA initiative, and was opened by Dr Mohammed Saddiki Secretary General of the Moroccan Ministry of Agriculture, followed by Ms Maria Helena Semedo, Deputy Director-General of the Food and Agriculture Organization of the United Nations, and Ms Margarita Astralaga, Director of the Environment and Climate Division of the International Fund for Agricultural Development (IFAD), on behalf of the IFAD President. The event focused on agriculture in Africa, and challenges and opportunities under a changing climate, with emphasis on three areas:

- **Sustainable and resilient soil management**, including increasing soil organic matter, increasing soil fertility, enhancing soil diversity, effective use of indigenous knowledge, and creating the supporting data and tools to implement interventions. Building capacity for the use of data and tools, and to measure the performance of interventions will also be an area of focus.
- **Improved agricultural water management**, by tailoring interventions to local contexts, ensuring community ownership of projects, increasing the reach of irrigation, capacity development of extension services, improving water storage systems, and utilization of indigenous knowledge. Addressing the water-energy-food nexus at local, national and regional level will be an area of emphasis, to ensure coherence between policies and efforts.
- **Climate risk management**, including capacity building for extension services and meteorological services, identifying and addressing knowledge gaps, building trust among farmers and other stakeholders for new innovations, engaging private and public sector actors, and investing in better data.

### Priorities for collective actions

Within the three pillars of the AAA initiative, the participants of the *Adaptation in African Agriculture: From Science to Action* event identified the following cross cutting priorities for action:

#### **Mobilize investments for transformative change**

The case for investments in agriculture under climate change is stronger than ever, underpinned by robust financial analysis. However, although such a compelling case exist, investments are limited by **availability** and **access** to finance. Efforts to increase the available finance and to ensure that finance is easily accessible, is a priority. At the same time, African countries should be supported in developing national investment plans for climate action.

#### **Build capacity of African countries for adaptation in agriculture**

As greater amounts of investments are mobilized into the sector, capacity to ensure effective use needs to be enhanced. While the Paris Agreement will put in place an enhanced capacity building framework, regional efforts can complement this. In addition to mechanisms of North-South

exchange, South-South exchanges are also crucial in building capacity, to enable farmers and the agri-food system to simultaneously increase productivity, improve resilience and manage natural resources more sustainably, thereby contributing to national, regional and global food security and nutrition.

### **Support technology transfer and innovation**

A number of technological innovations are available which can help transform African agriculture. Further efforts are needed to develop technologies, but efforts should also support the identification of the most suitable ones for different contexts, and also to build institutional capacity and policy frameworks to enable technology adoption and scaling up, to enable African agriculture to leap frog the agriculture development pathway, and transition into a sustainable and resilient system meeting regional and global food security goals.

### **Support implementation of the Paris Agreement**

The Paris Agreement has been adopted earlier than anticipated. This means that essential guidance for implementation is still under development. In the meantime, countries need to submit their second set of NDCs in 2020, which leaves just 4 years to start implementation, and generate lessons from efforts, to determine the second NDCs in 2020. So, expedited efforts are needed to begin implementation of NDCs, a collaborative approach, which involves countries, farmers, development agencies, scientists and investors is needed to get this started.

### **Measure and monitor progress**

The Paris Agreement's success will be measured through an enhanced transparency and accountability framework, which will enable countries and observers to monitor how commitments are being met. Essential in these efforts are indicators to measure adaptation, building upon the work of the agriculture research for development community over the years.

### **Event outcomes**

The following recommendations were discussed at the *Adaptation in African Agriculture: From Science to Action* event.

- Support the “Adaptation of African Agriculture Initiative”, enabling farmers and the agri-food system to simultaneously increase productivity, improve resilience and manage natural resources more sustainably, thereby contributing to national, regional and global food security and nutrition;
- Support the adoption of integrated policies to foster sustainable management of soil fertility, water, forest and biodiversity, to promote economic and environmental performance and preservation and restoration of ecosystems as well as to enable effective agricultural adaptation to climate change;

- Foster greater resilience of farmers, particularly smallholders to risk, empowering them to cope with more frequent, unpredictable weather related shocks through access to insurance and productivity safety nets for vulnerable populations;
- Support African governments to develop country investment plans that reflect a stronger, collective voice for Adaptation of African Agriculture in international climate policy processes;
- Provide significant finance and easier access to climate funds and other innovative financial mechanisms to help African countries implement their agricultural adaptation programs;
- Prioritise technological, policy and institutional innovations to enable African agriculture to leap frog the agriculture development pathway, and transition into a sustainable and resilient system meeting regional and global food security goals.

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