



## AGRICULTURE & RURAL DEVELOPMENT DAY 2010

### **There is no climate security without food security and no food security without climate security**

This statement is a summary of Agriculture and Rural Development Day (ARDD) held in parallel to COP16 on Saturday 4<sup>th</sup> December in Cancun. It describes the key issues and outcomes of the Day as well as messages to the UNFCCC on how to take forward agriculture in the negotiations.

#### **A Call for Action on Agriculture and Climate Change**

ARDD was convened by over 19 leading organisations from the UN, governments and development agencies, civil society, farmers groups, research community, private sector and the media to show how agriculture can contribute to a low emission future while adapting to climate change and enhancing food and nutrition security.

More than 400 policymakers (including Ministers and UNFCCC negotiators) farmers, members of civil society, private sector and scientists attended ARDD. The day was hosted by the Mexican Ministry for Agriculture, Livestock, Fisheries, Rural Development and Food (SAGARPA), and the Climate Change Agriculture and Food Security Programme (CCAFS), and the Global Donor Platform for Rural Development (GDPRD).

#### **The Challenge: Feeding 9 billion people by 2050 in an increasingly harsh climate**

Agriculture faces the challenge of nearly doubling food production to feed a population expected to reach 9 billion by mid-century while mitigating emissions and providing a livelihood to 75% of the poor in developing countries. Agriculture will have to adapt to increasingly variable and unpredictable growing conditions. This year we had a glimpse of the future. The Pakistan floods were a major human disaster with a massive impact on agriculture and food production. Mexico experienced the heaviest rainfall in its history in July causing severe floods. In Niger drought and failed harvests put over half the country's population of 14 million at risk from famine. Drought in Russia contributed to higher global food prices. Latest research from IFPRI predicts that without action by 2050 food prices could rise by up to 131% for maize; 78 % for rice, and 67% wheat.

#### **Agriculture emissions and sequestration: Part of the problem and the solution**

Over a third of direct global emissions is due to agriculture and other land use change and are projected to increase in coming decades. However, using our existing knowledge on better land practices and husbandry we know how to sequester carbon into soils and plant biomass. It is estimated that agriculture has the potential to sequester up to 90% of agriculture's total emissions. ARDD heard how Mexico is taking action to achieve a reduction of almost 3 million tons of CO<sub>2</sub> in 2012, for example by promoting sustainable livestock grazing in 5 million hectares coupled with a state of the art monitoring and verification systems.

#### **Agriculture: a driver of deforestation**

Agriculture is one of the main drivers of deforestation in many countries as people convert forests to produce food and other agriculture products. Policies need to be put in place at

the national level that balance food security and rural development, forest management, biodiversity conservation and emission reductions objectives. More attention needs to be given to develop sustainable and productive agriculture systems on existing crop and pasture lands, to help reduce poverty and food insecurity, and the pressure on forests.

### **Climate smart agriculture: Practical solutions for triple wins**

Agriculture offers a route to a green and low carbon economy that achieves growth. ARDD identified practical solutions to achieve triple wins (co-benefits): adaptation, mitigation and food security. For example, enhanced agroforestry schemes in Africa have benefitted the environment, farmers and food security. In Niger over 4.8 million hectares of millet and sorghum are being grown in agro-forests and in Malawi maize yields have increased by up to 280%. Programmes and policies are urgently needed at local, regional and global levels.

### **ARDD 2010 prioritised the following actions:**

#### *Scaling up pro-poor adaptation to ensure food security and rural development*

There is a need to prioritise policies and investments in adaptation to promote resilient agriculture and food security. Policies should support farmers to diversify and build resilience under institutional and climate uncertainty. Adaptation policies must address gender, equity, capacity building and distributional issues and build on local knowledge and emerging research and technologies.

#### *Using climate finance to support land management and agricultural development*

Policy makers cannot afford to neglect agricultural emissions or the potential for carbon sequestration through agriculture. Ground work is needed to develop a framework to build confidence and attract resources. There is a need to use a range of instruments to create incentives for farmers, including insurance, credit and direct and indirect payments. Adaptation and mitigation funding need to be coordinated, especially during implementation. Climate change should be embedded in national and regional agricultural strategies.

#### *Solutions on the farm for agricultural mitigation, carbon sequestration and adaptation*

Policies should ensure multiple benefits and access to markets to increase farmer income while improving mitigation, for example by more efficient use of inputs. There is a need to make research and information available for farmers, for example through improving extension services. Increased investments in climate smart institutions, policies, programmes and incentives should be harmonised at all levels to assist in implementing mitigation and carbon sequestration measures that benefit farmers.

#### *Sustainable agricultural intensification and forestry*

Agricultural intensification alone is not enough; it must be sustainable and should be part of a holistic policy package that focuses on existing agricultural, deforested, and degraded lands. Tenure rights, increased agricultural productivity and improved livelihoods need to be addressed in order to reduce pressure on remaining forests. Successful implementation of REDD+ will depend on managing the linkages across agricultural lands and forests.

#### *Knowledge gaps on agriculture mitigation and adaptation*

There are significant knowledge gaps relating to the synergies and trade-offs between agricultural production, climate change and sustainable economic growth. These include: understanding the impact of climate change on agriculture; the potential of carbon sequestration; and, improved crop varieties for adaptation and mitigation. There is need to

strengthen the capacity of national and regional institutions to achieve climate smart agriculture especially for small holder farmers. Extension services need to be effective, expanded and funded to address the adaptation of livelihoods to climate change and help in the diffusion of technologies to farmers. Adaptation and mitigation to climate change will require funding for interdisciplinary research that draws on the best of traditional knowledge and science to achieve more sustainable food and farming systems.

### **Building the UNFCCC momentum on agriculture and food security**

Since the first ARDD in Copenhagen there has been progress in rising to the challenges of climate change, agriculture and food security. UNFCCC negotiations now recognise the importance of food security, adaptation and productivity enhancements for agriculture, as well as mitigating agriculture's significant emissions. To move forward, the following actions are urgently needed:

- Allocate fast track financing to support agriculture adaptation and mitigation activities.
- Action on food security, nutrition and hunger must be explicitly included in any post 2012 agreements especially within long term cooperative actions (AWG-LCA text).
- A decision to set up an agricultural work program under the Subsidiary Body for Scientific and Technological Advice (SBSTA) is the first step in this direction.
- REDD+ should explicitly recognise the links between agriculture and forestry, and if properly designed it should promote sustainable agriculture intensification and reduce deforestation, while improving rural livelihoods.
- Recognise the synergies and opportunities for adaptation, and mitigation co-benefits.
- New or revised CDM and other mechanisms need to include agriculture and other land use changes.

### **Bridging the gaps and building partnerships**

ARDD demonstrated the value of partnerships between public and private sector, especially farmers, and civil society organisations to take action to: address the drivers of deforestation; promote sustainable agricultural intensification and growth; and, build a fairer and more sustainable world. Building bridges between scientific and traditional knowledge is the essential starting point for success.

*This statement was prepared by the ARDD organising committee as a summary of the day, and delivered during the final session by Lindiwe Majele Sibanda (CEO FANRPAN) on behalf of the committee.*

More information is available at: [www.agricultureday.org](http://www.agricultureday.org)

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