Report: Majority of National Climate Plans Address Agriculture, But Most Lack Funds for Footing the Annual USD 5 Billion Bill To Make Farming Climate-Resilient and Reduce Emissions from Food Production

First-ever analysis of agriculture in national climate plans calls on negotiators to ramp up investments in the sector; plans from world's largest agriculture emitters—U.S., India and China—vague on details

Paris, 6 December 2015 - Countries at the UN climate talks in Paris have made it clear that addressing agriculture in the context of climate change is a priority, according to the first-ever comprehensive analysis of agriculture in the national climate plans submitted to the United Nations in the lead up to the talks. The analysis by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) released at the Global Landscapes Forum reveals that agriculture is discussed in 80% of the so-called Intended Nationally Determined Contributions (INDCs), and points to a major funding gap for implementing most of the proposed actions.

"We're hearing from many countries this week in Paris about their interest in transforming the agricultural sector to be more climate resilient and reduce emissions," said Bruce Campbell, CCAFS Program Director, who co-authored the analysis. "Climate finance needs to include agriculture as a key sector, and support countries to implement the plans they have laid out."

Considerable finance is needed for agricultural adaptation and mitigation by Least Developed Countries (LDCs) – on the order of USD 5 billion annually, according to the study. The estimate is based on the median value of finance requests across INDCs from LDCs for delivering the proposed adaptation and mitigation actions in agriculture: USD 3 billion annually for adaptation and 2 billion annually for mitigation. This sum is much higher than current commitments to climate funds for agriculture and is at least ten percent more per year than multilateral climate funds spent on agricultural projects in the last decade.

However, fewer than 20 countries submitted finance requests, and many of the largest developing economies did not include estimates. "We expect the finance requirements of countries with large economies such as India, to be significantly larger than the average," said Lini Wollenberg, who leads work on low-emissions agricultural development for CCAFS. The authors urgently call for research on the finance needed for adaptation and mitigation options, to enable more countries and funders to develop complete estimates of financial needs.

The authors analysed all of the submitted INDCs to identify and categorise the inclusion of agriculture in their mitigation and adaptation plans; it then calculated the costs of proposed actions. It found that 103 INDCs include agricultural mitigation in their plans, and that of the 113 countries that include adaptation, almost all (102) include agriculture as a priority. Mitigation measures mentioned included reducing emissions from livestock, croplands and grasslands; examples of adaptation measures include protecting livestock, crops and fisheries from the impacts of climate change.

The analysis points to promising options for mitigation in the agricultural, forestry and

land use change sector, which is responsible for about a quarter of all human-made greenhouse gas emissions. While only 9 countries made quantitative estimates for reducing emission from agriculture, those 9 countries aim for substantial reductions of 15% of business as usual emissions.

Since the largest agricultural emitters such as India, China and the United States, were not among the countries that included sector-specific targets, it is impossible to tell whether the ambition of agricultural reductions is sufficient at the global scale to stave off continued global warming.

"We need to know countries' national targets for reducing emissions in agriculture," said Wollenberg. "Without national commitments and some kind of a global target, we are shooting into the dark, a risky tactic when our planet is at stake," she said.

Livestock is the most frequently cited agricultural sub-sectors or mitigation technology, not surprising as livestock contributes about 14.5 percent of global greenhouse gas emissions. However, most country plans offer no specific details on how mitigation will be achieved.

"This could indicate that countries are ready for improved technologies to sustainably reduce emissions from livestock," said Meryl Richards, a CCAFS scientist based at the University of Vermont, who led the analysis. "Reducing emissions should not undermine the important nutritional benefits that livestock provides, particularly to people in developing countries," she added.

Given the fundamental importance of agriculture to health, well-being and income, the authors flag that social equality, human rights and food security are not prominent in the INDCs or even in national and international climate change policies. This includes gender equality issues that are critical in agriculture, according to Sophia Huyer, who leads gender and social inclusion work in the CCAFS program. "Climate change is likely to widen the global gender gap by adding new stresses and barriers on society, and disproportionately affecting the most vulnerable," Huyer said.

While gender is mentioned in over 40 percent of plans, gender references stop short of supporting women to be active players in adaptation and mitigation actions. "We should be seeing much more acknowledgment of women's capacity as farmers and innovators. We know from experience that climate change technologies and practices are adopted more successfully when they are appropriate to women's interests, resources and demands," she said.

The analysis finds that countries emphasize agricultural technologies more than the services and incentives that will ensure uptake and foster resilience. Many countries, like Bangladesh, mention technologies to boost agricultural production under climate change, such as heat and drought tolerant crop varieties. However, this may not be enough to get farmers ready for climate change.

"Even the most improved crop variety cannot contend with unpredictable weather, catastrophic droughts, or floods," said Campbell. "Countries need to think about early

warning systems, insurance products for crops and livestock, and rural radio programs and text messaging to disseminate seasonal forecasts directly to farmers," he explained.

Only 18 submissions included financial mechanisms such as agricultural insurance, credit and micro-finance. Ethiopia stands out for its proposal to develop "insurance systems to enable citizens, especially farmers and pastoralists, to rebuild economic life following exposure to disasters caused by extreme weather events."

He added that while he's encouraged that countries – especially developing countries – take the role of agriculture in climate change mitigation and adaptation seriously, negotiators in Paris will have to take agriculture investment just as seriously to turn these plans into action.

###

Download the analysis:

Agriculture's prominence in the INDCs by Meryl Richards, Thilde B. Bruun, Bruce M. Campbell, Lucy E. Gregersen, Sophia Huyer, Victoria Kuntze, Simone T.N. Madsen, Mads B. Oldvig, Ioannis Vasileiou. http://hdl.handle.net/10568/69115

About CCAFS

The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), led by the International Center for Tropical Agriculture (CIAT), brings together the world's best researchers in agricultural science, development research, climate science and Earth System science, to identify and address the most important interactions, synergies and tradeoffs between climate change, agriculture and food security. www.ccafs.cgiar.org.