Climate Change and biofuels to cause further hunger in Africa

Embargoed until 13.15 pm (EDT) 8 May 2008

An additional 35 to 170 million people could be undernourished in the second half of the century because of climate change with 17 to 50 million of these in Sub-Saharan Africa. Climate change is expected to cause significant declines in crop and pasture production in over a third of the countries in Sub-Saharan Africa according to new research from the International Institute for Applied Systems Analysis (IIASA).

The research will be presented today at a side event at the UN Commission on Sustainable Development in New York. Findings show how more than 10% of land in Sub-Saharan Africa is at risk of being lost for maize, the most important staple food crop, production due to environmental constraints induced by climate change. Many of the affected countries are already food insecure and poor, with low capacity to finance food imports, and their situation has been worsened substantially by current inadequate and uncoordinated policies toward tackling climate change, namely using crop land to grow biofuels with environmental risks and only modest greenhouse gas benefits.

“The absurd biofuel policy has contributed to the doubling of staple food prices in the last two years,” says Mahendra Shah, Senior Scientist from the study which was carried out by the Land Use Change and Agriculture Program at IIASA. “Price rises do not cause hunger in developed countries where on average people spend less than 15% of their consumption expenditure on food. But in many developing countries over 70% of the household budget is for food.”

The IIASA research highlights how the fragility of Africa’s agro-ecosystems makes it vulnerable to changes in climate. By the 2080s, arid and semi-arid areas in Africa will have increased by 5-8%. In contrast climate change is likely to favor areas such as North America with increases in land suitable for cereal production.

In terms of crop production, Africa will bear the brunt of the impacts of climate change. Yet the continent has contributed very little to the problem. Sub-Saharan Africa with about 10% of the world’s population currently contributes some 2.4% of CO₂ emissions and its share over the last 50 years of the world’s cumulative CO₂ emissions is less than 2%.

The food insecurity in sub Saharan Africa is high on the world development agenda. For example in 2005 the G8 summit with great fanfare announced a new aid and development deal for Africa. And yet a year latter instead of increasing aid by a promised 10%, the reality turned out to be one where aid declined by more than 10%. In spite of ample economic evidence that developed country agricultural subsidy polices harm the plight of poorest agriculturist in developing countries, any hope of these policy reforms remain elusive.

The current biofuel polices in these same countries has put many developing countries on the brink of a food crisis. More than a hundred million people have been added in just 2 to 3 years to the chronically hungry 820 million people in the developing world. For over five decades the world community has failed to deliver on the universal human right to food, endorsed repeatedly at world summits and conferences. And the tragedy is that the worst of food insecurity is yet to come due to climate change in the 21st century.
The side event, ‘Food Security and Sustainable Agriculture the Challenges of Climate Change in Sub-Saharan Africa’ has been organized by the following partners:

- International Institute for Applied Systems Analysis, Laxenburg, Austria
- African Economic Research Consortium, Nairobi, Kenya
- Food and Agriculture Organization of the United Nations, Rome, Italy
- Ministry of Agriculture, Forestry, Environment and Water Management, Government of Austria, Vienna, Austria

Contacts:
For further information and a copy of the research paper, ‘Food Security and Sustainable Agriculture the Challenges of Climate Change in Sub-Saharan Africa’ please contact:

- Mahendra Shah, Senior Scientist, IIASA on shah@iiasa.ac.at or +43 676 471 8731
- Guenther Fischer, Program Leader, IIASA on fisher@iiasa.ac.at or +43 2236 807 292
- Nina Drinkovic, Communications Officer, IIASA on drinkov@iiasa.ac.at or +43 (0) 2236 807477
- Iain Stewart, Head of Communications, IIASA on stewart@iiasa.ac.at or +43 (0) 2236 807433

Notes to the editor:
1. The following speakers will give presentations at the side event:

   - Mahendra Shah, Senior Scientist, Land Use Change and Agriculture Program, IIASA
   - Olu Ajakaiye, Director of Research, AERC, Kenya
   - Peter Holmgren, Director, Climate Change and Bio-energy Division
   - Sally Bunning, Natural Resources and Environment Department, FAO, Italy
   - Elfriede-Anna More, Director of International Environmental Affairs,
   - Ministry of Agriculture, Forestry, Environment and Water Management, Austria

2. About IIASA:
IIASA is an independent, interdisciplinary research institution, which specializes in natural and social scientific research methods and models valued by policy makers and the scientific community worldwide. IIASA is an international institution, with member organizations in 18 countries. More at www.iiasa.ac.at