Press Release

For more information, please contact:
Daniel Burnett, d.burnett@cgiar.org, +1 (202) 627-4311

Report: bioenergy can support food security

Study challenges "fuel vs. food" argument that biofuels contribute to global hunger

June 14, 2016, Washington, D.C.—Energy and food security can be simultaneously improved through well-designed biofuel and bioenergy development programs, according to a report released today by a team of experts from 10 institutions. The report confronts some of the public's misconceptions about the food security impacts of biofuels, and offers clarity on the source of these perceptions.

One of the key goals of the report, "Reconciling Food Security and Bioenergy: Priorities for Action," is to point out that food and energy security are complementary goals, as embodied in the United Nations-led 2030 Sustainable Development Goals (SDGs), and as also reflected in the Paris Agreement under the UN Framework Convention on Climate Change (UNFCCC). The authors outline a number of ways in which development-focused efforts to promote food security and secure clean and reliable sources of energy for local populations can align in a synergistic way.

The report identifies science-based steps to ensure that biofuels, food crops and natural resources can be managed sustainably together. Published in the journal Global Change Biology Bioenergy, the report is the final knowledge product generated by an international and multidisciplinary collaboration that was initiated at an international conference on Biofuels and Food Security, hosted by the International Food Policy Research Institute in November 2014.

"This report has helped crystallize the dialogue we had at the 2014 conference, and has summarized our collective knowledge and understanding of how the goals of promoting access to clean and reliable energy can go hand-in-hand with efforts to alleviate poverty and eradicate hunger," said IFPRI Senior Research Fellow Siwa Msangi, who chaired the conference and is a co-author on the report. "The messages in the report resonate with IFPRI's recently launched 2016 Global Food Policy Report, which devotes a chapter to energy and food security."

The report stresses that context matters greatly for understanding food security, and in determining the effect that energy policies (or other factors) might have on it. The effects of bioenergy policies on food security could be strongly positive, if designed in the right way, and could help attract the kind of investments in agriculture that are sorely lacking in many of the developing countries that currently experience high-levels of hunger and poverty. The report also stresses that food and bioenergy don't

necessarily compete for land, and that land is often not the most critical factor affecting food security. The authors of the report put forward these messages to challenge many of the arguments that have demonized the role of biofuels and bioenergy, within the “fuel vs. food” debate.

According to Keith Kline, the lead author of the study, and a researcher at the Oak Ridge National Laboratories (ORNL) Climate Change Science Institute, “it is a mistake to ignore local costs and benefits of biofuels based on generalized assertions or global models. Reliable information about the actual local effects is essential, but has been lacking in food-biofuel-climate debates.”

"Many negative views about food security and biofuels are based on the misinterpretation of terms and modeling,” said co-author Jorge Antonio Hilbert of the Instituto de Ingeniería Rural INTA in Buenos Aires, Argentina.

The report contains a number of conclusions that point to how bioenergy can promote food security. A key message relates to how infrastructure and marketing improvements can make agricultural markets work better, and simultaneously enhance the viability of bioenergy projects. Another major message relates to how flex crops could be promoted, that provide food in addition to other valuable co-products or uses that can contribute directly to bioenergy production.

A significant share of a country’s energy can be provided by biomass while also enhancing food production, according to the report. Glaucia Souza of the University of Sao Paulo noted that “Brazil’s sugarcane ethanol program has demonstrated through a 40-year process of continuous monitoring, learning and adaptation that it is possible to couple increased incentives for land restoration and ecosystem services with enhanced food security and poverty reduction.”

Joining ORNL and IFPRI in preparing the report were researchers from the Centre for Environmental Policy, Imperial College London, UK; University of São Paulo and the São Paulo Research Foundation Bioenergy Program BIOEN, Brazil; Delft University of Technology and the University of Twente, The Netherlands; Institute of Rural Engineering, National Institute of Agricultural Technology, Argentina; Stockholm Environment Institute Africa Centre, Nairobi, Kenya; BEE Holdings, Tampico, Mexico; and the World Bank.

The research report is available at http://onlinelibrary.wiley.com/doi/10.1111/gcbb.12366/full

###

The International Food Policy Research Institute (IFPRI) seeks sustainable solutions for ending hunger and poverty. IFPRI was established in 1975 to identify and analyze alternative national and international strategies and policies for meeting the food needs of the developing world, with particular emphasis on low-income countries and on the poorer groups in those countries. www.ifpri.org.