

The Right to Food

22 February 2012

India has the largest group of food insecure people in the world. A large proportion of the population in India faces a chronic inability to access basic food, and hunger is widespread; 80% of India's population of 1.2 billion lives on less than 2 dollars a day. India is also home to a large number of the world's energy poor; 855 million people rely on the burning of traditional biomass (for example, garbage, waste, and wood) for cooking, and 400 million have no access to electricity. New uses of biomass energy may be a way to meet rural energy needs and promote local economic development, thus impacting food security at the local level. Understanding the causes of food insecurity in India and working towards reducing it will have a large impact on global food security.

Over the next three years, researchers at the Liu Institute for Global Issues will be working to answer important questions on food security in India, thanks to a \$345,000 grant from the International Development Research Centre (IDRC). The project, titled "The Right to Food: Food Access, Food Subsidy, and Residue-Based Bioenergy Production in India" has two themes: access to food and food subsidy, and the relationship between biofuels, agricultural productivity and food security.

Food Security in India: Efficient Subsidies Using New Technologies

The Indian government offers all kinds of welfare, but because many Indian citizens lack a verifiable identity - no passport, driving licence or proof of address - they struggle to access what is intended for them. To fix this, the Government of India has announced a massive scheme to issue a Unique Identification Number (UID) corresponding to the biometric information for each of its 1.2 billion citizens. The UID will enable a direct transfer of government funds to the individual, bypassing all bureaucracy (the people most often responsible for corruption), and allowing individuals to make needed food or other purchases.

In principle, UIDs should bring about a revolution in the way government food subsidies are delivered in India. The potential rewards are huge, not just in India, but globally - the UID scheme, and other approaches that use new information technologies, may be a way to reduce corruption and dramatically improve food security in developing countries. With the help of the IDRC grant, Milind Kandlikar, Ashok Kotwal and Siwan Anderson will evaluate the benefits to the intended recipients that are evident in pilot regions using UID distribution. This research will lead to policy recommendations on what governments can do to minimize food leakages and corruption, while meeting targets for food access.

Food Insecurity in India: Agricultural Residues, Biofuels and Food Security

There is a large biomass resource base in India that is inefficiently used for household cooking and underutilised for electricity - a critical problem, given the vast number of energy poor in India. Recently, a number of companies have found ways of using agricultural residues (straw, silage, animal slurry) to provide cooking fuels and electricity on a commercial basis. Commercialisation of this resource would represent a major shift in the use of biomass for energy in rural India, which until recently has been focussed on direct burning of self-collected biomass in households. The consequences could be far-reaching – from

reallocation of labour and materials, possible new sources of farm income, changes in food availability and prices, to changes in household energy practices.

These effects will impact local food security, whether positively or negatively, yet they have not been studied at the local level. Prof. Hisham Zerriffi will use the IDRC grant to study the potential for agricultural residue based bioenergy production, the impact that widespread commercialisation of agricultural residues will have on agricultural productivity and food production, and how these changes affect local food security, particularly for the poor.

The partnership will advance the Institute's mandate to bridge academic, policy and practice, and leverage our existing efforts on Food Security – which include a collaboration with the Canadian International Development Agency and the Asian Development Bank. Throughout the project, the researchers will work with Canadian and Indian universities, Canada India Village Aid (CIVA), and development agencies working in India, partnering on outreach and communications activities, as well as research.

Biographies:

Siwan Anderson is an Associate Professor in the Department of Economics at UBC. Her research interests include development economics, applied micro-economics and gender.

Milind Kandlikar is an Associate Professor in the Liu Institute for Global Issues and Institute for Resources, Environment and Sustainability. His research focuses on the intersection of technology innovation, human development and the global environment. His current projects include cross-national comparisons of regulation of agricultural biotechnology; air quality in Indian cities; risks and benefits of nanotechnology; and new technologies for sustainable transportation. He has also published extensively on the science and policy of climate change.

Ashok Kotwal is a Professor in the Department of Economics at UBC. His research interests include: analysis of organizational structures in LDCs, Labour and credit markets in LDCs, Interaction between agriculture and industry, Economic reforms in India and their impact on poverty, Political Economy of developmental policy-making, Social capital and rural economy.

Hisham Zerriffi is an Assistant Professor and the Ivan Head South/North Research Chair in the Liu Institute for Global Issues. Dr. Zerriffi's research is at the intersection of technology, energy and the environment, with a particular focus on rural areas of the developing world. Much of his research focuses on institutional factors impacting the diffusion of new technology, determinants and patterns of household energy choice and welfare implications of rural energy use.