

Agricultural Innovation for Food Security and Poverty Reduction in the 21st Century: Issues for Africa and the World

Issues Paper for *State of the World 2011: Innovations that Nourish the Planet*

EXECUTIVE SUMMARY

Food security is rising to the center of global discourse and has become an issue of national policy as well as public concern. Many voices are questioning whether and how the world can feed 9 billion people in 2050. Agricultural development has historically been a major driver of rural poverty reduction, but recent trends—such as slowing productivity growth, further marginalization of poor farmers, and the impacts of climate change—are challenging conventional poverty-reduction strategies that governments have committed to through international efforts such as the United Nations' Millennium Development Goals.

These daunting challenges have led to much “doom-and-gloom,” but they have also mobilized remarkable innovation around the globe, from farmers' fields to national policies, and from agribusiness to NGOs, farmer organizations, government agencies, and the research community.

Worldwatch Institute's *State of the World 2011* (SOW11) report, “Innovations that Nourish the Planet,” seeks to highlight innovations that can address these challenges: innovations that will reduce hunger, improve environmental and agricultural sustainability, improve the lives of women and girls, and be both economically feasible and scalable for farmers and the donor/investment community.

The purpose of this paper is to provide an overview of the issues, numbers, disputes, and approaches so that contributors to SOW11 can share a common framework and consider how the innovations they describe fit into the larger international discourse. The structure is as follows:

- **Section 2** describes diverse perspectives on food security that emphasize global supply chains to feed middle-class populations in cities; smallholder farmers who still supply much of the world; and smallholder farmers who are relatively disengaged in commercial markets.
- **Section 3** discusses the “landscape” of agricultural innovations and lays out three major challenges for SOW11 authors to evaluate.
- **Sections 4, 5, and 6** describe these challenges in greater detail: working around the conflicting policy perspectives on the causes and solutions to hunger and global food security; integrating the food security agenda with the climate and ecosystem restoration agendas; and empowering farmers and communities at risk of food insecurity and hunger.
- **Section 7** proposes some key questions and approaches that SOW11 authors may want to consider to address these challenges.
- **Annex 1** presents some basic facts about food insecurity, agricultural production patterns, and environmental threats and impacts of agriculture that can help put the issues in context.

We suggest that report authors consider the diverse policy paradigms as well as innovations and examples from many different perspectives. We hope that evaluations stem from an evidence base but also explicitly address factors important to groups with varying ideologies. In this way, SOW11 might be framed to improve understanding and communication among the different communities of discourse.