



**INNOVATIONS** FOR  
**PEACE** AND  
**DEVELOPMENT**

## THE FOOD SECURITY ANNOTATED BIBLIOGRAPHY (FSAB)

compiled by Innovations for Peace and Development (IPD), represents a survey of the food security literature over the last six years. The FSAB comes from a selection of 150 articles, books, conference papers, and other significant documents or multimedia items from 2007-present related to "Food Security and Development". News articles, blog posts, and informal multimedia items are generally excluded unless they are found to have a unique and important contribution to the literature not covered by another related document. Items found to be redundant (i.e. lacking some unique contribution or perspective), are similarly omitted. The "food security and development" topical coverage does not include items with an exclusive focus on the following topics: food aid; food security in the developed world; and discussions of food prices and/or broader macroeconomic trends in agriculture that do not directly tie to a discussion of food security in the development context. Geographic coverage may be any level (global, regional, national, local) but must pertain to the developing world. The FSAB will be relevant for those unfamiliar with food security theory looking for an introductory overview to the field, as well as researchers, policymakers, and practitioners.

## TRENDS

Food security, as defined by the World Health Organization, exists "when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life." Discussion of the four traditional pillars of food security—access, availability, utilization, and stability—is present throughout the selected literature. Other common trends in the FSAB center around sustainably providing enough food for an increasing population with fewer resources, while promoting inclusive growth—and doing this in spite of climate change, conflict, weak governance, and frequently regressive trade policies.

Major contributors to the field include the UN's Food and Agriculture Organization (FAO), the International Fund for Agricultural Development (IFAD) and the World Food

Programme (WFP) which release a yearly *State of Food Insecurity in the World* report that monitors progress towards hunger reduction targets established at the 1996 World Food Summit and reinforced in the Millennium Development Goals; and the International Food and Policy Research Institute (IFPRI), which contributes a vast portfolio of research to promote the development of productive, sustainable and resilient agriculture and food systems, as well as measurements of national, regional, and global hunger in its annual *Global Hunger Index*.

## POPULATION GROWTH

The world's population expected is to grow to 9.7 billion by 2050. *Population and Food Security: Africa's Challenge* highlights how, in sub-Saharan Africa alone, the population will more than double to almost 2 billion. The 2013 *Global Agricultural Productivity (GAP) Report and GAP Index*, published by the Global Harvest Initiative, identifies policies that would support the sustainable intensification of agricultural production, including increased private-sector investment, adoption of new technologies, trade-openness, and coordinated development assistance. Much of the literature in the FSAB stresses that ensuring sustainable livelihoods in spite of population growth will be important for achieving food security in both rural and urban areas. *The Invisible Crisis: Urban Food Security in Southern Africa* discusses some of the challenges for food security in an urban environment, as loss of rural livelihoods continues to fuel urbanization.

## RURAL DEVELOPMENT

Food security literature related to rural development addresses the often conflicting demands of increasing efficiency and productivity in the agricultural sector while ensuring the security and sustainability of livelihoods for rural populations and smallholder farmers. The 2013 *Global Agricultural Productivity (GAP) Report and GAP Index*, published by the Global Harvest Initiative, identifies policies that would support the sustainable intensification of agricultural production. IFPRI's *Genetically Modified Crops in Africa: Economic and Policy Lessons from Countries South of the Sahara*, evaluates the benefits, costs, and risks for African countries of adoption GM crops, examining the potential of biotechnology to increase production yields.

In discussions regarding livelihoods of smallholder farmers, the FAO's *Can the Smallholder Model Deliver Poverty Reduction and Food Security for a Rapidly Growing Population in Africa* explores the possibility of Africa's smallholders replicating the success of the green revolution in Asia; IFPRI's *From Subsistence to Profit: Transforming Smallholder Farms* presents a typology of the diverse livelihood strategies and development pathways for smallholder farmers; and IFAD's *Smallholders, Food Security, and the Environment* illustrates a lack

of investment in small-scale agriculture. Within the literature, this issue is often directly tied to the empowerment of women, who are the primary laborers on small farms. The most recent status report by the Alliance for a Green Revolution in Africa (AGRA), *Focus on Staple Crops*, provides a synthesis of the current status and trends of African agriculture, including a chapter discussing the role of women.

One of the primary threats to smallholder agriculture is large-scale land acquisitions of farmland. The Center for International Forestry Research analyses 353 projects in 32 countries in sub-Saharan Africa to explore the magnitude, distribution and drivers of these large-scale acquisitions in *The Anatomy of Large-Scale Land Acquisitions in Sub-Saharan Africa* and the World Bank's *Securing Africa's Land for Shared Prosperity: A Program to Scale Up Reforms and Investments* synthesizes recent experiences in implementing land governance policies and the reform of land tenure and access in Sub-Saharan Africa. This issue is further complicated by the high demand for biofuels that are motivating a significant portion of land grabs, which Jayati Ghosh identifies as contributing to increasing food prices and volatility in *The Unnatural Coupling: Food and Global Finance*.

### FOOD PRICES AND INSECURITY

Much of the literature illustrates that food insecurity is rooted in issues of access as much as availability, showing how high food prices reduce consumption for households without the economic means to purchase food. As well, dramatic food price volatility is shown to be a major barrier to achieving sustainable food security among populations that rely heavily on staple grains and cash crops. The interagency report, *Price Volatility in Food in Agricultural Markets: Policy Responses*, examines how to better manage food price volatility through targeted policy recommendations. In some cases, issues of limited access are also shown to cause physical insecurity. *Food Insecurity and Conflict Dynamics: Causal Linkages and Complex Feedbacks*, asserts that the complex relationship between food insecurity and conflict is a vicious cycle, whereby food insecurity driven by price volatility can be a factor in popular uprisings and an increased risk of conflict, which leads to the further instability within economies and thus persistent acute food insecurity.

### DISASTER RISK REDUCTION AND RESILIENCE

Much of the recent food security literature places a heavy emphasis on resilience, or the ability to bounce back from shocks, like conflict or climatic events. *No Accident: Resilience and the Inequality of Risk*, a report by Oxfam, explains that a lack of resilience comes from unequal risk-spreading, which

disproportionately places risk on the poor, and recommends mitigating this problem through systemic reductions of inequality. Other recommendations, such as those found in *Global Hunger Index 2013: The Challenge of Hunger: Building Resilience to Achieve Food and Nutrition Security*, include improving disaster risk reduction strategies. Reports such as *Harvesting Peace: Food Security, Conflict, and Cooperation*, discuss the challenges of achieving food security in spite of conflict. A recurring trend throughout the literature is the need for climate change adaptation and better preparation for natural disasters as well as more effective mechanisms for emergency response. *Managing Famine Risk: Linking Early Warning to Action* highlights the gap between existing early warning systems and countries' willingness to take preventive actions. This discussion of preventive versus post-crisis action is also present in *Hunger in the Balance: The New Politics of International Food Aid*, which offers a survey of the political landscape of food aid.

### CLIMATE CHANGE AND THE ENVIRONMENT

Increased natural disasters, erratic weather patterns, erosion and water scarcity are just a few of the serious climate change effects that are depleting natural resources, slowing agricultural productivity and perpetuating food insecurity. IFPRI's *Global Hunger Index 2012: The Challenge of Hunger: Ensuring Sustainable Food Security Under Land, Water, and Energy Stresses*, emphasizes the need for better resource management in order to achieve "sustainable food security in the light of population growth and increased consumption patterns." The UNEP report, *Avoiding Future Famines: Strengthening the Ecological Foundation of Food Security through Sustainable Food Systems*, also points to the need to minimize food waste and loss, reduce consumption, improve ecological biodiversity and create innovative agricultural systems to complement climate change adaptation strategies.

### NUTRITION AND HEALTH

The FAO's 2013 edition of its annual *State of Food and Agriculture* report chose "Food Systems for Better Nutrition" as the overarching theme. The report notes that despite significant progress in the last several decades along some indicators, undernutrition remains the most critical nutrition problem in developing countries, especially in Asia and Africa. In middle-income countries, overweight and obesity are also becoming serious health issues and may co-exist with other forms of malnutrition at the community, household, or even individual level. A core policy challenge for developing countries is to reduce undernutrition while simultaneously avoiding or reversing a rise in obesity.

Much of the literature on health and food security emphasizes the linkages between food security and disease transmission and progression, which may occur at the community, household, or individual levels. For example, Weiser et al's *Conceptual Framework for Understanding the Bidirectional Links between Food Security and HIV/AIDS* discusses the nutritional, mental health, and behavioral pathways through which food insecurity may be a cause or consequence of HIV/AIDS acquisition, immunologic decline, and increased morbidity and mortality among those already infected.

A common theme is the need to accelerate progress in health and nutrition through cost-effective, large-scale programs - the target of the United Nations Standing Committee on Nutrition's *Scaling Up Nutrition* movement, founded in 2009 to coordinate large-scale nutrition efforts and learning across countries. The *State of Food and Agriculture 2013* report notes that because nutrition is a cross-cutting issue, coordination must be achieved at the highest levels of policy-making, including "nutrition-sensitive" agricultural R&D and complementary interventions in food systems, education, and public health. One of the primary needs in nutrition programming is better targeting toward pregnant women and children in the "First 1,000 Days" from conception to age two, when the impact of nutritional programs is the strongest. Malnutrition is increasingly being recognized as not just a consequence of poverty but also a cause of it; the first installment of the *The Lancet's* four-part series on Maternal and Child Nutrition (*Maternal and Child Undernutrition and Overweight in Low-Income and Middle-Income Countries*) highlights a growing body of evidence of the intergenerational effects of poverty and of food insecurity, for example through fetal growth restriction during pregnancy, which later impacts education, cognitive development, and long-term economic outcomes of the child. The *Lancet* series also underscores the importance of complementing targeted agricultural and nutrition programs with efforts to support livelihoods, enhance access to diverse dietary options in vulnerable populations, and empower women.

## COMMON RECOMMENDATIONS

The reports in this bibliography give a wide range of recommendations for tackling food insecurity, but consistently cite lack of organizational coordination, lack of government capacity, and low levels of agricultural investment and growth as the major barriers to achieving development. For example, the Swiss Agency for Development, in its *Global Programme on Food Security: Strategic Framework 2010-2015*, suggests both increased investment in agricultural technologies as well as higher levels of

coordination between international organizations and governments involved in alleviating food insecurity. Increased government capacity is often suggested alongside recommendations for social protection policies such as social safety nets. This is especially common in reports addressing food security in the face of climate change, such as the World Food Programmes *Climate Change and Hunger: Responding to the Challenge*, which recommends social safety nets in conjunction with increased productivity and early warning systems. Difficulties with measurement and therefore monitoring of progress are also mentioned throughout the literature. Reports like Food Policy's *What Do We Really Know? Metrics for Food Insecurity and Undernutrition*, and *Measuring Food Insecurity* from the American Association for the Advancement of Science discuss the importance of finding indicators that can help address food insecurity at the source. Reports that recommend agricultural sector growth such as the World Bank's *Trusting Trade and the Private Sector for Food Security in Southeast Asia* commonly suggest high levels of private sector involvement as a sustainable avenue for growth.

To sum up, common recommendations include:

- \* Increased government capacity particularly in terms of investment and provision of social safety nets
- \* Increased coordination between government, international organizations, private ventures and NGOs
- \* Use of accurate and relevant indicators
- \* Investment in the agricultural sector, including research and development (R&D), especially through public-private partnerships

## CONCLUSION

The purpose of FSAB is to provide an easy-to-use platform for finding reliable documents related to food security for those interested in food security and related subjects. In the future, the hope is that it will also function a database that can identify the major trends in food security literature; however, this is not presently an option given the relatively small and unrepresentative sample size currently in the bibliography. The FSAB is a working document and as such the IPD team will continue to update it regularly. We welcome submissions, including those with suggested annotations.