

**U.S. Senate Committee on Foreign Relations**  
**Senator Richard G. Lugar**  
**Opening Statement for Hearing on Global Food Security**  
**March 24, 2009**

I join with Chairman Kerry in welcoming our witnesses today. Each of them has made unique contributions to alleviating hunger and promoting rural development. I appreciate the leadership that Dan Glickman and Catherine Bertini have provided to the recent outstanding food security report by the Chicago Council on Global Affairs. As a former Secretary of Agriculture and a head of the World Food Program, they speak with great authority on hunger issues. Likewise, I am pleased that we are joined by David Beckmann, who has gained respect over many years as a consistent and creative advocate on hunger issues. Finally, the scholarship of Dr. Robert Paarlberg, a born and raised Hoosier, has greatly advanced my understanding of food security issues. His book, *Starved for Science*, is a must read for anyone attempting to understand the global food dilemma and how political factors are creating obstacles to the scientific advancements necessary to meet rising demand for food. Dr. Paarlberg also was a primary contributor to the Chicago Council's report.

I am also pleased that we have two distinguished scientists on the second panel. Dr. Edwin Price, Director of the Norman Borlaug Institute for International Agriculture, has spent a long career working in the agriculture development field. Dr. Gebisa Ejeta, a plant geneticist working with sorghum at Purdue will provide insights on the state of agriculture in his home country of Ethiopia and more broadly in Africa.

We live in a world where nearly one billion people suffer from chronic food insecurity. An estimated 25,000 people die each day from malnutrition-related causes. Health experts advise us that chronic hunger has major health consequences, including decreased child survival, impaired cognitive and physical development of children, and weaker immune system function, including resistance to HIV/AIDS.

These severe humanitarian consequences of hunger are sufficient cause for us to strengthen our approach to global food security. But we have an even bigger problem. A dangerous confluence of factors threatens to severely limit food production in some regions as the world's population continues to expand. Between 1970 and 1990, global aggregate farm yield rose by an average of 2 percent each year. Since 1990, however, aggregate farm yield has risen by an annual average of just 1.1 percent. The USDA projects that growth in global farm yields will continue to fall. These trends threaten the fundamental welfare of a large share of the world's population.

Here are the basic parameters of the problem:

First, the world's population is projected to increase to about 9.2 billion people by 2050. Growing affluence in China, India, and elsewhere is increasing demand for resource-intensive meat and dairy products. It is estimated that the world's farmers will have to double their output by 2050.

Second, food security is closely tied to volatile energy costs. Farming is an energy intensive business: crops have to be transported efficiently to market, and petroleum-based fertilizers and pesticides are widely used. Energy price spikes in the future are likely to hit with even greater ferocity than the spike in 2007 and 2008.

Third, water scarcity will worsen in response to population growth, urbanization, land use pressures, and the effects of climate change. According to a recent report by the Royal Institute of International Affairs, a half billion people currently live in countries with chronic water shortages, a figure that is expected to rise to 4 billion by 2050.

Fourth, climate change is challenging farmers on every continent to deal with altered weather patterns, novel agricultural pests, and new water conditions.

Despite these alarming trends, investments in agriculture have tumbled in recent decades. By 2007, rich countries devoted a mere four percent of their foreign assistance to agriculture. In Africa, which has the most

severe food problems, donor aid to the farm sector plunged from \$4.1 billion in 1989 to just \$1.9 billion in 2006. Africa's per capita production of corn, its most important staple crop, has dropped by 14 percent since 1980.

Equally troubling are sharp cutbacks in research into new technologies, farming techniques, and seed varieties that could increase yields, cope with changing climate conditions, battle new pests and diseases, and make food more nutritious.

In recent years, development investment dollars have flowed to urban areas because cities were seen as the drivers of growth. Likewise, some recipient governments have favored infrastructure projects and urban-focused development assistance for political reasons. In those nations afflicted by corruption, agriculture assistance also may offer less of an opportunity for diversion of funds than an expensive infrastructure project.

Trade policy of both developed and developing countries has too often focused on protecting domestic farmers, rather than creating well-functioning global markets. In addition, many governments, especially in Europe and Africa, have rejected biotechnology advancements that are necessary to meet future demand for food. Opposition to safe genetic modification technology contributes to hunger in Africa in the short run and virtually ensures that much of the continent will lack the tools to adapt their agriculture to changing climatic conditions in the long run.

Without action, we may experience frequent food riots and perhaps warfare over food resources. We almost certainly will have to contend with mass migration and intensifying health issues stemming from malnutrition. Our diplomatic efforts to maintain peace will be far more difficult wherever food shortages contribute to extremism and conflict. Our hopes for economic development in poor countries will continually be frustrated if populations are unable to feed themselves. In short, overcoming hunger should be one of the starting points for U.S. foreign policy.

With these factors in mind, Sen. Robert Casey and I introduced the Global Food Security Act of 2009. This bill is not meant to be a comprehensive solution to the problem, which is beyond the scope of a single bill. But we are hopeful that it will serve as a practical starting point for improving U.S. and global efforts in this area and as a rallying point for those who agree that food security should play a much larger role in our national security strategy.

The bill would make long-range agricultural productivity and rural development a top development priority. It establishes a Special Coordinator for Food Security within the Executive Office of the President and charges the Coordinator with developing a whole-of-government food security strategy. Among other goals, the bill attempts to improve research capacity at foreign universities and the dissemination of technology through extension services. The bill also improves the U.S. emergency response to food crises by creating a separate Emergency Food Assistance Fund that can make local and regional purchases of food, where appropriate.

As a farmer who has seen agricultural yields more than triple during my lifetime on my family's farm in Marion County, Indiana, I have faith that human ingenuity can avert a Malthusian disaster. But we have to have time for innovations to take root, and we have to apply all the agricultural tools at our disposal. The current global effort on food security risks falling far short of what is needed to guarantee food security.

I believe the food security challenge is an opportunity for the United States. We are the indisputable leader in agricultural technology. A more focused effort on our part to join with other nations to increase yields, create economic opportunities for the rural poor, and broaden agricultural knowledge could strengthen relationships around the world and open up a new era in U.S. diplomacy. I thank the Chairman for holding this hearing and look forward to the discussion with our witnesses.

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