

**State Department Food Crisis Meeting  
9 September 2008**

**Opening Remarks**

**US Agency for International Development Administrator Henrietta Fore** offered a welcome on behalf of the Secretary and USAID. She stated that the Agency was particularly focused on Africa, noting that underinvestment by both the public and private sector had contributed to the current situation. Fore articulated her interest in hearing from the gathered experts, especially about the role that public-private partnerships and research should play in creating sustainable approaches to food security.

**Under Secretary of State for Democracy and Global Affairs Paula Dobriansky** added welcoming remarks, noting that the conversation was particularly timely given that the UN Commission on Sustainable Development will continue to focus on agricultural issues through its next cycle.

**Secretary of State Condoleezza Rice** thanked all of the participants for participating and explained her and Secretary of Defense Robert Gates' interest in food security. Food security is a critical long-term issue that will require long-term solutions, much like energy and the environment, with serious security implications.

**Secretary of Defense Robert Gates**, noting his experience with Norman Borlaug, stated that we must figure out a better approach to the global food crisis, integrating government responses with those of the private sector and non-governmental organizations. He cited the example of University of California at Davis partnering with Texas A&M University to develop livestock programs in Afghanistan. Secretary Gates sees many opportunities for collaboration and integration among these groups in a "target-rich" environment.

**Science and Technology Adviser Nina Fedoroff** noted that today, most people in the developed world live in urban and suburban areas whose food needs are supplied by a complex agri-business industry and delivered through a world-wide, fossil fuel-driven transport system. This year's food and energy price shocks have come as a surprise to many. But the food crisis is not a fleeting one with the human population approaching 7 billion, water and arable land in short supply, climate changing, and fossil fuel energy growing expensive. While there is talk of a second Green Revolution, expanding the food supply today in the poorest, most crowded, insecure, and poorly governed nations is no easy task. Dr. Fedoroff encouraged the participants to be open and frank in defining the dimensions of the problem and devising solutions involving new collaborative efforts and partnerships.

**Moderated Discussions**

**Dr. Joachim von Braun, Director General of the International Food Policy Research Institute** overviewed the current food crisis and provided his recommendation of the actions that need to be taken by the international community to achieve long-term global food security.

- 1) Instability and increases in food prices have evolved into a macro-economic crisis because of the role of food prices in driving inflation. Although food prices have come down recently, they have not returned to previous levels. Economic growth has declined, as well, and cannot be counted on to compensate for higher food prices. Instead, people in the poorest countries have been "shrinking" themselves out of the crisis by getting by on less.
- 2) Social and political unrest have grown with increasing food costs. This is happening not in just the poorest countries, but in countries with poor governance indicators.
- 3) There is a growing human capital issue as food deficiency and malnutrition continue to rise. The food crisis has affected the nutrition status of 100 million people. The real income for a family of five living on US \$5 per day has decreased by approximately US \$1.50. Families are adapting by shifting to less nutritious food, eating less and keeping girls out of school to save money.
- 4) There is growing evidence that early malnutrition has a long-term detrimental effect. A recent study showed that the earning power as adults of nutritionally deprived boys receiving nutritional supplements before the age of two is 50% higher than that of members of the same cohort not receiving supplements.



Dr. von Braun stated that while short-term humanitarian food aid, particularly early nutritional interventions, is important, it is not enough. He advocated several long-term policy actions:

- 1) Reduce market instability by establishing a virtual grain reserve to be used to intervene in futures markets when there is a price crisis.
- 2) Connect small farmers to markets and the agro-processing sector through information technology.
- 3) Invest in science, infrastructure, and human capital. Research is needed to increase agricultural productivity, improve stress tolerance, and increase crop nutrient content, as well as to improve fish and livestock farming.
- 4) Promote higher education and development of partnerships between US universities and developing-country universities.
- 5) Invest in people and nutrition. Improve early childhood nutrition through smart school feeding programs and create incentives for children, particularly girls, to stay in school. Develop programs for the nutritional supplementation of children under the age of two.
- 6) Revisit biofuels policy.

Dr. von Braun noted that by driving poor people toward a more meager, nutritionally impoverished diet, the global food crisis could reverse previous gains. Secretary Rice asked Dr. von Braun whether we had reached a tipping point that would reverse the nutritional gains made before the food crisis or whether we could arrest the reversal with quick action. Dr. von Braun replied that many of the countries that have been most significantly impacted by the food crisis did not have the institutional infrastructure to implement the kinds of feeding programs that could make a difference for the next generation. Pakistan and other countries are at a tipping point and time is of the essence for the next cohort of young children. Putting the infrastructure in place for such programs takes at least a year and is a possible initiative for USAID.

Secretary Gates stated that the banning of food exports by many countries will exacerbate the food crisis. He found Dr. von Braun's comments about stabilizing the grain and food supply interesting, and offered the International Energy Agency as a possible model to emulate. The IEA plays a stabilizing role by being a transparent provider of information. Dr. von Braun thanked Secretary Gates for his suggestion, noting that when export bans were enforced by Vietnam, grain prices increased by thirty percent (30%). Grain market stabilization will require the establishment of an organization that the international community trusts.

Secretary Gates also asked whether the "demographic disaster" in Africa during the extreme drought of the early 1990s was still in evidence. While children were being intellectually and physically stunted by malnutrition, adults were affected by HIV/AIDS, crippling economic productivity through two generations. Dr. von Braun commented that linking nutrition and productivity continues to be politically touchy, but that the connection cannot be denied. The effects of malnutrition in Zimbabwe and the 1960s famine in China continue to be seen.

Deputy Secretary of Agriculture Chuck Conner stated that the idea of grain reserves should be viewed with caution. In the past, the US has maintained international reserves to the detriment of domestic prices. Mr. Conner noted that market volatility has led to large profits and encouraged investment in productivity increases. Greater stability may decrease the profit motive, limiting future investments.

Secretary Rice noted that the grain reserve issue sounded like a "collective goods problem," which is exacerbated by imperfect signals and information. Countries choose not to export when exporting is the rational choice. An international organization, such as the IEA, could provide transparency and information to all countries worldwide. Secretary Rice noted that the objective is not to depress markets, but to provide better price information for all member countries. Dr. von Braun noted that the concept of a virtual grain reserve is not the same as the physical grain reserve to which Deputy Secretary Conner referred. Rather it is a mechanism to reduce the impact of speculation and build trust in the markets so that countries do not close borders and commodity exchanges in response to rising prices.



**Dr. Derek Yach, Vice President for Global Health Policy at PepsiCo International,** discussed the role that business can play in addressing the long-term solution to the current food crisis. Dr. Yach began with a reflection of his recent experience in his home country of South Africa. He observed that people first started eating less nutritious food, then consumed smaller quantities, reducing their intake by hundreds of calories, and finally resorted to begging.

The book *The End of Food* by Paul Roberts offers a succinct overview of how we arrived at this point and shows how multiple decisions in various areas moved the world into the current crisis in which a billion people are obese, while another billion are undernourished. But, as Dr. Yach pointed out, poor nutrition is not a new problem. The 1941 National Nutrition Conference for Defense highlighted the nutritional deficiencies of American diets, leading to the development of nutrient enriched foods. (At the end of Dr. Yach's remarks, Secretary Gates noted that only 23% of adolescents in the US meet national physical fitness standards today.)

He explained the long-term implications of poor nutrition, including irreversible IQ deficits and susceptibility to chronic diseases at a younger age with greater effects. Nutritional interventions are not costly when the programs are focused on women and children, particularly those under the age of five. Donor agencies must make the tough choices between nutritional intervention and humanitarian assistance. Until the Gates Foundation came on board, humanitarian assistance far surpassed investments made in nutrition. It is also important to consider how the world will meet its protein needs and the effect that increasing global consumption of meat has on grain supplies.

Dr. Yach offered actions that should be undertaken to improve nutrition and mitigate the impact of the global food crisis for the long term. These include:

- 1) Invest in nutrition science. Currently, there is no CGIAR for nutrition. There has been a failure in nutrition science and more epidemiological studies are needed. Many individuals have an archaic view of nutrition science, and as a result, policy decisions are not well-informed or science-based. There is a role for private investment in centers of excellence that needs to be explored.
- 2) Unlock corporate excellence. Yach noted that the corporations seated around the table were all actively involved in addressing the food crisis and would be natural partners for the US government in developing solutions. However, we need to bring together diverse corporate interests around a common goal and overcome the mistrust between the private and public sectors. For instance, corporate involvement was excluded from the UN Food and Agriculture Organization meeting in Rome. The private sector, for example is critical to developing efficient distribution systems.
- 3) Invent new business models. There is a need for corporations to develop business models that address social needs and causes at the same time as economic interests. Yach called for deep interaction with the government to think through what these new models might look like, offering the Global Alliance for Improved Nutrition as a good example of an innovative new business model that is moving past traditional barriers to foster cooperation between the public and private sectors. The question is: who is going to convene governments to think about the linkages between nutrition, agriculture, and private investment? The FAO and WHO nutrition branch are inadequate. Yach suggested that the World Food Program may be used as the tip of the spear for such action.

**Dr. David Skorton, President of Cornell University,** spoke about the role that universities can play in addressing the global food crisis, offering three examples that can serve as models for how universities can contribute.

- 1) The Gates Foundation and 14 institutions are participating in a collaborative research project to develop wheat resistant to the Ug99 stem rust sweeping across Africa and the Middle East. This is an innovative model because it brings together many institutions around a specific problem threatening wheat, potentially everywhere. The rapid infusion of funds from the Gates Foundation allowed the project to get off the ground quickly.
- 2) Cornell offers a degree program in integrated watershed management designed specifically for Ethiopian students. This program underlies the importance of capacity building at the behest of



people who live in a given country and strives to avoid imposing the ideas of donor countries on them. Funded by the World Bank, Cornell will lead the course for three cycles, after which the university will hand over the project to the Ethiopians in order to build capacity in country. This type of project can be facilitated with a little money and a push from government.

- 3) Partnerships between academia and business also have potential. The Business Higher Education Forum is a good example. According to Skorton, such partnerships would require coordination between institutions and multinationals, but not much more than a healthy push in the right direction by government. He made it clear, though, that he did not advocate starting new organizations.

### **General Discussion**

Secretary Gates stated that part of the problem is that no one has a good idea of what is going on around the world amongst governments, agencies, universities, NGOs and others. Land-grant universities are a starting point, but they are not the only players. USAID needs an inventory of projects already on the ground, so that they can get the most mileage out of their investment. NASULGC could perhaps help out with an assessment on which of these projects are most worth funding. Dr. Skorton mentioned that such inventories were being done, including by NASULGC. As well, Fedoroff stated that the New York Academy of Sciences has a project titled “Scientists without Borders” that is using geographic information systems to create a geographically referenced inventory of development projects and funding sources around the world. This portal will be useful in matching people with opportunities for collaboration and funding.

Secretary Gates agreed with Dr. Skorton about the importance of the government’s bully pulpit, noting that university faculty are often interested in such projects, but boards of regents may need to be persuaded. Dr. Skorton recalled that it was communication among scientists that kept information flowing through the Iron Curtain during the Cold War. The problem now is that universities are very competitive for research money, so government incentives encouraging partnerships are often needed.

Hugh Grant, CEO of Monsanto, stated that if Dr. Borlaug were present, he would be frustrated at the amount of energy going towards articulating the problem, rather than identifying solutions and formulating next steps. He asserted that there was not enough time to discuss all that is taking place or all that can be done. Rather, he advocated creating a list of half a dozen projects that we can pursue, rather than creating another collection of ideas. He pointed out that it costs \$400 to ship a ton of corn to Malawi compared to \$35 to grow it there. Attention must be given to this disparity and the focus must be on cost-effective options.

Ambassador Kenneth Quinn, President of the World Food Prize Foundation, offered a few comments on behalf of Dr. Borlaug who advocates: 1) increasing productivity, including the use of biotechnology; 2) building up CGIAR and other research systems; 3) giving Africa the recipe for its first Green Revolution – seed, fertilizer, and irrigation; 4) investing in infrastructure. Quinn noted that during his time in Cambodia, the Khmer Rouge vanished where roads were built and that people nearby began to live freer lives and experience greater economic growth. Dr. von Braun pointed out that it is important to know what a Borlaug-like program would cost now – US\$14 billion (\$5 billion for Africa) per year until 2015 – which is not a large number considering the total budget of the US government.

Secretary Gates stated that it is not an issue of money, but of political will. It is imperative that one frame the problem and solution in such a way that attracts the political support necessary to achieve the goal. He added that there is the greater likelihood of success if many countries are involved. Referring to Ambassador Quinn’s point, Secretary Gates agreed with the need for infrastructure. The Department of Defense is expending substantial resources on building roads in Afghanistan, because “where the road ends, the insurgency begins.” Secretary Gates seemed optimistic that the political support for the type of actions being laid out was growing, but he again stressed the point about framing the issue properly so as to leverage the most support.

Secretary Rice followed up, commenting that a large portion of USAID money in Afghanistan was going to roads as well. She then observed that the challenge internationally is to think about development differently. First, solutions must be homegrown. This can be achieved only when governments have the



capacity to function and provide for their people. While US agencies are helpful during times of crisis, the assistance often vanishes when the crisis is over. Furthermore, our own underinvestment in USAID has made it difficult to help even during crisis, as USAID's staff has been cut from 11,000 to 1,100 over the past three decades. According to Secretary Rice, the Millennium Challenge Corporation has a new approach to development and only funds partners that meet minimum good governance standards in order to ensure that investment builds the capacity necessary for sustainable solutions. About 75% of all MCC projects are agriculture-related, which underscores the importance of food security to poverty alleviation in these developing countries.

Hans Jöhr, Corporate Head of Agriculture of Nestle, commented that although government interventions are important, they cannot run food chains. Rather, government action should focus on creating the environments that enable private investment in the food chain and agro-processing industry. He agreed that buffer stocks are necessary at the right level and value, but that decentralized, local solutions are needed as well. Finally, he observed that while governments and businesses were important actors in this discussion, it is consumers and farmers that make the difference. Linking the farmer to research and knowledge using extension services is important.

Dr. Yach commented that the private sector was often leery of interacting with the public sector and that the Fogarty International Center's philosophy of bridging the United States with the developing world was one that we could learn from.

Administrator Fore was very interested in the list of priorities that the group comes up with since it will be USAID that operationalizes these ideas. She suggested some items to consider:

- Increasing access to agricultural inputs (seeds, fertilizer)
- Developing extension services
- Building university capacity
- Funding research and the CGIAR system
- Building roads and infrastructure
- Development of post-harvest techniques (processing, value addition, storage, transport)
- Financing

Mr. Jöhr highlighted the critical need for a strong partner to help link farmers to markets and consumers. He pointed to the shortage of academic understanding of how food systems work and how this was critical, especially as the world struggles to figure out how to feed people in urban centers. They must have affordable, organized access to food. Also, he stated the fact that 20% of US farmers produce 80% of the output, which is also true in the developing world, and that the challenge was to take the most progressive farmers and help them feed the world.

Hart Schafer, Acting Vice President of the Sustainable Development Network at the World Bank, agreed with Mr. Jöhr's premise, but brought up the need to have strategies that target both large- and small-scale farmers. He then turned to Mr. Grant's previous point about the \$400 per ton cost of corn in Malawi, stating that it costs so much because the farmers have future purchasing problems. In Malawi, they have on average a drought every 5 years or so. However, because they have inadequate information, they don't seem to buy as many forward contracts, despite the fact that it would make sense for them to do so. They need to have the capacity to use financial measures for their benefit. USAID could invest in building that capacity, as well as providing mechanisms for risk protection and crop insurance to ensure that farmers are not wiped out during a drought or other crisis.

Under Secretary Conner said that the food crisis was not going to be solved by the 2-hectare farmer, no matter how much money is invested. He stated his belief that investment in commercial scale agricultural development was needed to take advantage of scale, not just investment in subsistence-level farmers. He noted that some have said that funding small farmers is money down the drain.

Dr. Roger Glass, Director of the NIH Fogarty International Center, observed that a major focus of the meeting's conversation has been on malnutrition and its economic consequences. He indicated that research on nutrition is now poor, except when dealing with nutrition impacts and HIV/AIDS. He stated



that there is a need for investment in the training of health professionals to monitor malnutrition rates and incidence, as well as in research to study the effects of malnutrition on people, especially children.

Dr. von Braun emphasized there are measures whose efficacy was established by the Green Revolution. Simply put, better seeds and fertilizer increase agricultural output and reduce food insecurity. He stated that these measures can be pursued as short-term kick-starts and could be handled mainly by the private sector. He recommended that USAID should stick to investing in the public good. By this he meant extension services associated with international agricultural research organizations, such as CGIAR, and the development of information systems, roads, and other infrastructure. Also, he encouraged USAID to play a leadership role in connecting the CGIAR research institutes to the private and academic actors.

Administrator Fore asked the group their opinion on whether extension services should be private; several agreed that they should be run like a private sector entity. Dr. von Braun, for instance, insisted that extension providers should be accountable and able to be fired if their work is not satisfactory.

Robert Horsch, Deputy Director of Agricultural Development for the Bill and Melinda Gates Foundation, added that while the research should be conducted publicly, the act of extending good information to the community level can be a combination.

Dr. Horsch noted that most of the discussion so far had been on the demand side, with not much mention of the supply side crisis of rising energy costs. The \$400 per ton corn being shipped to Malawi actually costs \$150 to produce and \$250 to get it there. Horsch indicated concern for small producers, who produce so little that they are actually net consumers, especially with the big issues of the cost of fertilizer and seeds. In urban areas on the other hand, perhaps the focus should be on trade issues.

Administrator Fore stated that India is able to produce on a large scale by using small producers in cooperative arrangements and that organization of small holders is very important. From her perspective, the biggest problem facing Africa is infrastructure. Dr. Skorton agreed, pointing out that while the World Bank is investing large amounts into developing internet connectivity, such connectivity is not useful in the absence of a stable supply of electricity.

Bonnie Raquet, Corporate Vice President of Corporate Affairs, stressed the importance of getting farmers to move, rather than talking about them as static actors. The Technoserve co-op model and the Gates Foundation dairy project are possible good models to follow, as the co-op model is allowing the small farmer to move to the commercial level. For their part, Cargill may be the largest microfinance organization in the world. They've trained 2.5 million farmers how to better feed their cows and 1 million cocoa farmers about planting and harvesting techniques. All the same time, Cargill is promoting improved public health and education in local communities. The bridge from the university to the farmer is community-based work that can be implemented by government and the private sector. She suggested that we might at least want to study the Chinese model in Tanzania, where they built roads, generators, and other infrastructure for their use during the cotton ginning season, leaving during the off-season. The Chinese have used this template in many places throughout Africa, leaving new roads and other infrastructure. Ms. Raquet suggested studying and comparing the Chinese and Western models to determine which worked better.

Fore acknowledged the complexity of this problem, which is one of the reasons USAID is trying to triple their activity in public-private partnerships. The question for her was, what can companies best help us do better?

Tom Verdoorn, Vice President for International Development at Land O'Lakes, emphasized that crop yields in Africa were about 30% of those in the developed world and that improving yields is an immediate need. Also addressing post-harvest losses are important, as are extension services. Sub-Saharan African countries have agreed to spend 14% of their budgets on agriculture, but so far have only gotten up to 4% on average. This is a devastatingly low investment, especially since 60-80% of their populations are involved in agriculture. He has seen successes in using the co-op system to get food to market and agreed that there need to be strategies to address farmers at every level.

Mr. Grant noted that the production in the US last year was about 150 bushels/acre, but Brazil is at only 50. Increasing this to 100 bushels/acre would be a tremendous gain. He emphasized that various initiatives should be pursued on a parallel basis, and not sequentially, or it will take 20-30 years. He stressed the need to develop strategies that allow corporations and individuals to make money, while also improving the economic prospects of the most disadvantaged. In the end, he advocated defining our goals and developing milestones to be achieved along the way.

Dr. Yach suggested the development of long-term scenarios to assess what the food supply would need to be in order to meet nutritional needs worldwide. He would also like to see an analysis of protein consumption worldwide in the future. He stressed that health and agriculture need to meet, because the goal is not just to increase productivity but also to develop a nutritionally balanced food supply.

He also suggested bringing Grameen Bank microfinancing experience together with USAID and other private sector players for a broad discussion of agricultural financing. Finally, Dr. Yach encouraged the NIH Fogarty International Center to increase its investment in nutrition science in partnership with the private sector.

Administrator Fore closed the meeting by thanking the participants and expressing her desire for their future help and collaboration.