Causes and Strategies on World Hunger
Green Revolution versus Sustainable Agriculture

*Katarina Wahlberg
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World hunger is not new. Before the current price increase, 850 million people – 13% of the world’s population – were chronically hungry.

The number of under-fed people has steadily climbed over the past decade. Now, the World Food Programme estimates that the crisis has driven another 100 million people into hunger, including even urban middle class people in Indonesia and Mexico. UN Secretary General Ban Ki-moon, World Bank President Robert Zoellick and other leaders are urging governments to act promptly. But before jumping on the official bandwagon, we must ask what kind of action, and what brought this crisis on.

Green Revolution for Africa?

Food prices are escalating because agricultural production has not increased fast enough to meet booming demand. According to conventional economic theory, production will rise automatically to meet this demand, and once supply is up, prices will fall. Following this approach, the World Bank, the Bill and Melinda Gates Foundation and the Rockefeller Foundation are promoting a "New Green Revolution" in Africa. Already underway, this initiative will "seize an opportunity from the higher demand for food" – to increase agricultural production through scientific development of more productive crops, improved fertilizers, and better farming techniques. The World Bank is doubling its lending to $800m to increase agricultural productivity. And the Rockefeller and the Gates Foundations have allocated $150m to make seeds more productive and suitable for Africa's unpredictable rainfall patterns.

The World Bank is also urging countries to cut tariffs and eliminate barriers to international trade. Again, this follows conventional economic theory, which
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holds that a liberalized market will foster growth as each country specializes in producing the goods and services that it is particularly suited to produce. Unfortunately, conventional economic theory fails to recognize that the earth cannot be exploited indefinitely. Following the Green Revolution of the 1960s, farm productivity increased but at a high social, economic and environmental cost. Industrial farming and heavy use of fertilizers and pesticides led to soil degradation, health problems and climate change. Agriculture currently contributes 30% of the world’s greenhouse gas emissions. And climate change is already threatening production in many countries through shifting weather patterns, including an increase of droughts and floods.

New dependencies

The last three decades of international trade liberalization may have increased overall economic growth, but wealth has been distributed very unevenly. The rich have become richer, while the poor are poorer. Through the World Trade Organization, the International Monetary Fund, the World Bank and numerous trade agreements, rich countries pressured poor countries to dismantle tariffs and other barriers to trade. Meanwhile rich countries have supported large agribusiness with almost $300bn each year in agricultural subsidies. Now, a handful of companies, such as Cargill, Archer Daniels Midland, ConAgra and Monsanto dominate the global production and trade of many commodities. Unable to compete with large agribusiness and subsidized goods, millions of small-scale farmers have been driven off the land. Meanwhile, large-scale industrialized farming of export crops dominates remaining agricultural production. Most poor countries no longer produce enough food to satisfy domestic needs. Thirty years ago, Haiti was almost self-sufficient in rice. Today, Haiti imports most of its rice from the US. Mexico used to produce enough corn to feed its population but since joining the North American Free Trade Agreement, Mexico depends on imports from the US. International trade also puts a strain on the environment as agricultural commodities are being processed, packaged and transported over long distances.

What about demand?

The most important factors behind the current price hike relate to the demand side – not the production side – of the equation. So why not reduce demand? Hunger analysts identify biofuel production as a leading cause of the current crisis. In the US and the EU, large subsidies, tax exemptions and mandatory targets have created an artificial demand for biofuels. Instead of producing for human consumption, farmers make larger profits from growing biofuel crops. But, filling one SUV car tank with biofuel requires 200kg of corn, which could feed one person for one year. Climate scientists also warn that biofuel production is speeding up global warming. Rising global consumption of meat and dairy is another major factor behind the rising food prices. Beef is grain-intensive. To
produce one pound, seven pounds of grain are needed. Since the 1970s, global meat production has more than doubled, putting enormous strain on global cereal stocks, as well as the environment. The cattle industry is responsible for 18% of all greenhouse gas emissions.

While analysts identify population growth as a less immediate cause of the food crisis, population plays a major role over the long term. The UN expects world population to grow from 6.7 to 9.2 billion in 2050. But these numbers depend on fertility decreases in the poorest countries, which require improved access to family planning and reproductive health services. Partly due to the anti-family planning policy of the US government, international organizations promoting these issues have faced financial constraints. Since 2002, the US government has withheld $34m in annual funding from the UN Population Fund and millions more in grants to private agencies.

**Sustainable agriculture as an alternative**

The global food crisis has brought attention to the long-standing problem of hunger. It is time that world leaders are held accountable for their past promises of food for all. Governments must immediately increase food aid, ban biofuel production and develop policies to supersede factory farms and other unsustainable farming practices. In recent weeks, an important international report presented a compelling vision of truly sustainable agriculture. The IAASTD (International Assessment of Agricultural Science and Technology for Development) based this report (see reference) on three years of international research, involving 400 scientists and development specialists.

The landmark project provides an alternative to the "New Green Revolution." It focuses less on increasing yields, and more on reducing hunger, through "environmentally, socially, and economically sustainable development." The report talks about addressing the needs of small-scale farmers, by increasing their access to land and natural resources. It cautions against Genetically Modified (GM) crops, as too little is known about their long-term effects. Further, the report warns that patenting of GM crops undermines local farming practices and concentrates ownership of resources. Finally, the authors propose financial incentives to reduce deforestation and conserve natural habitats so as to mitigate climate change. A "fundamental shift" in agricultural policy is needed. Otherwise, says IAASTD Director Robert Watson, hunger, income inequality and environmental degradation will increase further and "we face a world no one would want to inhabit."

**Reference:**

*Katarina Wahlberg is Social and Economic Policy Coordinator at Global Policy Forum.