

Food For Thought

Wall Street Journal - 14-Oct-2005 - Norman Borlaug And Jimmy Carter

The past 50 years have been the most productive period in global agricultural history, leading to the greatest reduction in hunger the world has ever seen. The Green Revolution, as this period came to be known in the developing world, has kept more than one billion people from hunger, starvation, and even death.

Many factors contributed to the Green Revolution. The doubling of the global area under irrigation was certainly important. But at the core was the development and application of new high-yielding, disease- and insect-resistant seeds, new products to restore soil fertility and control pests, and a succession of agricultural machines to ease drudgery and speed everything from planting to harvesting.

It took around 10,000 years for the world's farmers to reach their current production of nearly six billion gross tons of food, consumed virtually in its entirety by 6.4 billion people annually. Within 50 years, we will have to increase this amount by at least another 50% -- to nine billion tons. Most likely we will have to achieve this feat on a shrinking agricultural land base, and with most of the production increases occurring in those countries where it is to be consumed.

However, agricultural science is increasingly under attack by groups and individuals who, for political rather than scientific reasons, are campaigning to limit advances, especially in new fields such as genetic modification (GM) through biotechnology. Despite this opposition, it is likely that 250 million acres will be planted to GM crops in 2005. Most of this acreage is in the industrialized world, although the area in middle-income developing countries is expanding rapidly. However, the debate over biotechnology in the industrialized countries continues to impede its acceptance in most poor, food-insecure countries.

More than half of the world's 800 million hungry people are small-scale farmers who cultivate marginal lands. New science and biotechnology have the power to address the agro-climatic extremes. Their use lies at the core of extending the Green Revolution to these difficult farming areas. Because there are so many hungry and suffering people, particularly in Africa, attacks on science and biotechnology are especially pernicious. Africa is facing a pandemic scourge of HIV/AIDS, malaria, and other diseases, a 30-year period of continuous degradation in soil fertility, frequent droughts and a burgeoning population.

This set of converging circumstances can lead to a human catastrophe in Africa on a scale the world has never seen. We know it is coming. We have the knowledge to avert it. If we put it off, solving it later will mean the acute suffering -- and even death -- of millions of innocents who could have been spared such a tragedy.

Messrs. Borlaug and Carter, Nobel Peace laureates for 1970 and 2002, respectively, are members of the Council of Advisors for the World Food Prize, which was awarded yesterday in Des Moines, Iowa.