

Still Feeding the World

By Paul Driessen

Norman Borlaug just turned 94 - and is still going strong. He's the father of the Green Revolution. Penn and Teller call him the greatest person in history. When the Nobel committee awarded him the 1970 Peace Prize, it said his work had saved a billion lives. Norman Borlaug turned 94 on March 25 and, despite cancer that had him sick and hospitalized a couple months ago, just attended a conference in Mexico on new rust-resistant wheat varieties and modern agricultural methods.

During the "Eat This" segment of their docu-comedy series BS, Penn Jillette beat Teller in a round of their "Greatest Person in History" card game. Penn needed just one card: Norman Borlaug.

This Iowa farm boy and University of Minnesota agriculture graduate lived Thomas Edison's maxim to the fullest. "Invention," Edison once remarked, "is 1% inspiration and 99% perspiration." Dr. Borlaug did most of his 99% in the sweltering fields of Africa, India, Mexico and Pakistan.

At 94, and despite having cancer, the "Father of the Green Revolution" is still "an Energizer Bunny," his daughter Jeanie says. He serves as a consultant, attends occasional conferences, and graciously let my daughter interview him for a high school paper.

Decades ago, while neo-Malthusians were predicting mass famine, Borlaug used Rockefeller Foundation grants to unlock hidden (recessive) genes and crossbreed different wheat strains, to create new "dwarf" varieties that were resistant to destructive "rust" fungi. The shorter plants were also sturdier, put less energy into growing leaves and stalks, and thus had higher yields.

He also taught modern farming methods to Third World farmers and persuaded governments to lift price controls and permit the use of chemical fertilizers, thereby generating unprecedented harvests. Mexico became self-sufficient in wheat by 1960, India and Pakistan soon did likewise, and Borlaug next helped China, Indonesia, the Philippines and other countries achieve great success with wheat, corn and rice.

When the Nobel committee awarded him the 1970 Peace Prize, it said his work had saved a billion lives. Borlaug simply observed that "you can't build a peaceful world on empty stomachs and human misery." He later won the Presidential Medal of Freedom and Congressional Gold Medal.

In 1985, he began working with former President Jimmy Carter to bring a Green Revolution to Sub-Saharan Africa, emphasizing intensive modern farming methods with new hybrid and biotech seeds on existing fields, to reduce the need to slash and burn wildlife habitat, as soil nutrients are exhausted.

Unfortunately, their progress may be undermined by former UN Secretary General Kofi Annan and his misleadingly named Alliance for a Green Revolution in Africa. Annan says biotech crops are unsafe, untested, and likely to enslave poor farmers to mega-corporations and expensive seeds. He wants to battle Africa's chronic poverty and malnutrition with "traditional seeds" and methods.

Dr. Borlaug fears that would be a devastating failure. As he said during a 2005 biotechnology conference, sponsored by the Congress of Racial Equality at the United Nations, he sees no way the world can feed its hungry population without genetically engineered (GE) crops, especially if it relies more on biofuels.

He has little patience for "well-fed utopians who live on Cloud Nine but come into the Third World to cause all kinds of negative impacts," by scaring people and blocking the use of biotechnology. These callous activists even persuaded Zambia to let people starve, rather than let them eat biotech corn donated by the USA. They also oppose insecticides to combat malaria - and fossil fuels, hydroelectric dams and nuclear power to generate abundant, reliable, affordable electricity for poor nations.

"Our planet has 6.5 billion people, says Borlaug. "By all means, use manure. You can't let it sit around. But if we use only organic fertilizers and methods on existing farmland, we can only feed 4 billion. I don't see 2.5 billion people volunteering to disappear." To feed everyone with organic and traditional farming, we would have to plow millions of acres of forests and other wildlife habitat, he calculates. If, instead, we continue to use commercial fertilizer and hybrids, and have strong public support for both biotech and traditional research, "the Earth can provide sufficient food for 10 billion people."

Producing 7 billion gallons of ethanol in 2007 required corn grown on an area the size of Indiana - plus vast amounts of water, insecticides, fertilizers and petroleum. It's a primary reason World Food Program operating costs rose 40% since June 2007, forcing the WFP to ration food aid, and millions to go to bed hungry. That is unsustainable - morally, economically and ecologically.

Biotech crops have higher yields; provide enhanced nutrition; are more resistant to insects, fungi and disease; and require less water and insecticides. New varieties are being developed that grow better in drought and flood conditions, and even supply vaccines and anti-diarrhea nutrients (as in Ventria Bioscience's GE-rice-based oral rehydration solution). Ongoing research will ensure that genes that once protected crop plants will be replaced by new ones, as plant pathogens continue mutating.

Genetically engineered crops are more stringently regulated and tested than any others - unnecessarily so, say many scientists. Americans have eaten well over a trillion servings of food containing genetically engineered ingredients, without a single instance of harm to people or habitats, notes former FDA biotech director Henry Miller - whereas organic spinach sickened and killed a number of people in 2007.

Biotechnology actually frees poor farmers from the shackles of Nature's destructive forces. They pay more for seeds, but less for insecticides and water, get higher yields and make more money. South African farmers who've switched to GE crops attest to this.

Elizabeth Ajele: "The old plants would be destroyed by insects, but not the new biotech plants. With the profits I get from the new Bt maize (corn), I can grow onions, spinach and tomatoes, and sell them for extra money to buy fertilizer. We were struggling to keep hunger out of our house. Now the future looks good. If someone came and said we should stop using the new maize, I would cry."

Richard Sithole: "With the old maize, I got 100 bags from my 15 hectares. With Bt maize I get 1,000."

Thandi Myeni: "The new Bt cotton means I only spray two times, instead of six. At the end of the day, we know the crop won't be destroyed and we will have a harvest and money."

Bethuel Gumede: "By planting the new Bt cotton on my six hectares [15 acres], I was able to build a house and give it a solar panel. I also bought a TV and fridge. My wife can buy healthy food and we can afford to send the kids to school."

Farmers in Brazil, China, India, the Philippines and other countries share similar stories.

His accomplishments have made Norman Borlaug a household name in parts of Africa, though not in America. That's partly because he did most of his work overseas. But it also reflects the fact that his favorable views on chemical fertilizers and biotechnology put him at odds with environmentalists and journalists who don't share his perspectives on these issues.

Leon Hesser's fascinating and inspiring account of Dr. Borlaug's life and successes may finally bring him the fame he deserves. "The Man Who Fed the World" does what I've always loved about biographies: it shows how one person can change the world. Now out in paperback, the book will ensure that Norman Borlaug's incredible legacy will live on - as will the billion-plus people whose lives he saved.

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