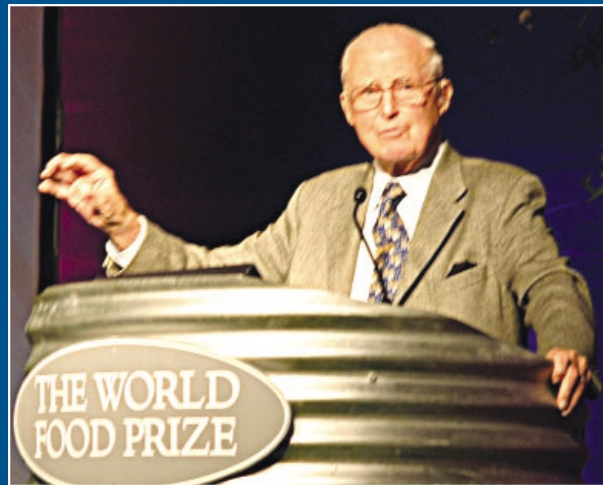


THE FIRST ANNUAL GOVERNOR'S LECTURE



With the support of Humanities Iowa, Dr. Norman E. Borlaug, a native of Cresco, Iowa and the recipient of the 1970 Nobel Peace Prize, gave the inaugural "Governor's Lecture" at the World Food Prize International Symposium on October 14, 2004.

It is said that Dr. Borlaug has "saved more lives than any other person who has ever lived."

This brochure commemorates Dr. Borlaug's Lecture and provides a summary of his life's work and achievements, in his own words, taken from this historic address. Additional points have been added along with the quotations from his speech to put Dr. Borlaug's accomplishments in historical context. Dr. Borlaug's Lecture was videotaped by Iowa State University Extension Service and will be available to schools across Iowa.

It is the hope of both of our organizations that this document will better inform Iowans about one of their greatest heros, and provide teachers in the classroom a guide on how to help their students find out more about this great man.

Amb. Kenneth M. Quinn, President



THE WORLD FOOD PRIZE

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www.worldfoodprize.org

Dr. Chris Rossi, Executive Director



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LEARN MORE ABOUT DR. NORMAN E. BORLAUG AND HIS LEGACY OF FEEDING THE WORLD

The Norman Borlaug Heritage Foundation

The Norman Borlaug Heritage Foundation is a non-profit corporation dedicated to promoting educational programs and projects which reflect the lifetime achievements and philosophy of Dr. Norman Borlaug. The Foundation's key project is preserving the Borlaug Family Farm near Cresco.

For more information visit www.normanborlaug.org



The World Food Prize Global Youth Institute

In October of each year, the World Food Prize Youth Institute provides a three day, all-expenses-paid educational opportunity and forum for Iowa high school students and teachers. Students interact with Nobel and World Food Prize Laureates and are exposed to an array of experts, facilities and organizations relating to food security.

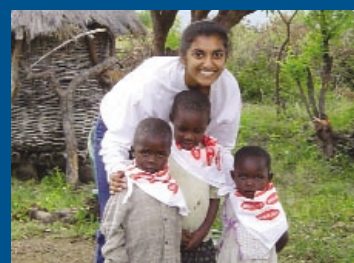
For more information visit www.worldfoodprize.org/Youthinstitute



The World Food Prize Borlaug-Ruan Internship Program

As an extension of the World Food Prize Youth Institute, the all-expenses-paid Borlaug-Ruan International Internship Program offers Iowa high school students the unique opportunity to work with leading scientists at world renowned research centers in Asia, Africa and Latin America for 8 weeks each summer.

For more information visit www.worldfoodprize.org/Youthinstitute



The Norman E. Borlaug World Food Prize Hall of Laureates

Housed in the century-old Des Moines Public Library building, The World Food Prize Hall of Laureates will serve as a permanent home for The World Food Prize Foundation and a public museum and convocation center in honor of the achievements of Dr. Borlaug, Iowa's Humanitarian Heroes and the World Food Prize Laureates.

For more information visit www.worldfoodprize.org



“Out of Iowa: Borlaug and the Green Revolution”

Shown each October as a part of the World Food Prize Harvest Festival, this documentary about “a hero in an age when heroes are hard to find” chronicles Dr. Borlaug's life from humble beginnings in Cresco, Iowa to his achievements in global agricultural production which have been credited with saving a billion people.

For more information visit IPTV online at www.iptv.org



FOR MORE INFORMATION ABOUT HUMANITIES IOWA VISIT WWW.HUMANITIESIOWA.ORG

THE ENTIRE TEXT OF “MY SIXTY YEARS OF FIGHTING HUNGER” IS AVAILABLE AT WWW.WORLDFOODPRIZE.ORG



THE WORLD
FOOD PRIZE

DR. NORMAN E. BORLAUG

“MY 60 YEARS OF
FIGHTING HUNGER”

THE FIRST ANNUAL
GOVERNOR’S LECTURE



Humanities Iowa

THE LIFE OF NORMAN

IOWA ORIGINS - MARCH 25, 1914

"I was born on a small farm in Northeast Iowa and I studied my first eight years in a one-room schoolhouse."

- Norman Borlaug excelled as a high school and college wrestler.
- He earned a Ph.D. in Plant Pathology at the University of Minnesota.
- Borlaug's family farm and one-room schoolhouse are preserved outside Cresco.



DEVELOPING "MIRACLE WHEAT" IN MEXICO: 1944 - 1960

"My work to combat hunger started in Mexico with the Rockefeller Foundation ... inspired by Henry Wallace, it was the first ever attempt to help food deficit nations by a foreign organization."

"I joined that program in 1944 and have spent 60 years since working in International Agriculture."

- Dr. Borlaug and his team of researchers worked directly with very poor farmers.
- They used "Shuttle Breeding" to develop a new disease resistant variety of wheat that could triple its output of grain.

"And Mexico became self-sufficient in wheat (by 1956) ... this had a major impact around the world."



Dr. Borlaug briefs fellow Iowan Henry A. Wallace during the Vice President's visit to Mexico

CONFRONTING FAMINE IN ASIA - A NEW APPROACH

- By the early 1960's the specter of huge grain deficits putting hundreds of millions of people at risk of hunger and starvation spread over South Asia and the Near East.

"We used the Mexican model to train young scientists from Algeria, Tunisia, Egypt, Jordan, Iraq, Turkey, Afghanistan, Pakistan, and India."

"We established an international nursery of the best spring wheat varieties from Canada, Argentina, Chile, Mexico, and Egypt."

"We trained these young scientists to work directly with farmers and not just to introduce new seeds, but also with emphasis on agronomy, soil, weed control, insect and disease prevention and the use of fertilizer and irrigation."



NORMAN E. BORLAUG - "MY 60 YEARS OF"



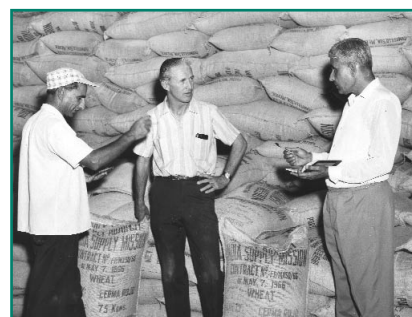
DR. NORMAN E. BORLAUG RECEIVED
THE NOBEL PEACE PRIZE IN 1970 AS THE
"FATHER OF THE GREEN REVOLUTION"



THE GREEN REVOLUTION: 1960 - 2000

"If you are dealing with hunger and starvation, you better use the information you have and use it courageously to get the political leaders to see the benefit."

- By the mid 1960's, there were huge food deficits in South Asia with 10 million tons of grain being imported. Famine and mass starvation appeared imminent.
- The United Nations asked Dr. Borlaug to travel to Pakistan and India, which were then at war.
- Working with courageous Pakistani and Indian scientists, Dr. Borlaug convinced the leaders of both governments to adopt his revolutionary new approach.
- Grain production increased dramatically, hundreds of millions were saved from famine, and India and Pakistan became self-sufficient in wheat in just a few years.
- Dr. Borlaug's approach to agriculture was adapted to rice production throughout Asia. It tripled grain production on the same amount of land.
- The impact in Asia from 1960 - 2000 can be seen from the table below.



Dr. Borlaug at work in India and Pakistan

"If there is the (new) seed...the fertilizer...the credit, the irrigation, it is surprising how rapidly change can come about."

YEAR	LAND PLANTED IN "MIRACLE WHEAT"	LAND PLANTED IN "MIRACLE RICE"	HECTARES OF IRRIGATED LAND	TONS OF FERTILIZER USED	TOTAL GRAIN PRODUCTION
1960	0%	0%	87 MILLION	2 MILLION TONS	309 MILLION TONS
1970	20%	20%	106 MILLION	10 MILLION TONS	463 MILLION TONS
2000	84%	74%	175 MILLION	70 MILLION TONS	962 MILLION TONS

IT IS ESTIMATED THAT NORMAN BORLAUG'S APPROACH TO AGRICULTURE HAS

- ◆ SAVED ONE BILLION PEOPLE FROM FAMINE AND STARVATION
- ◆ PRESERVED MORE THAN ONE BILLION HECTARES OF NATURAL HABITAT

FIGHTING HUNGER

FEEDING A WORLD OF 10 BILLION PEOPLE: OUR 21ST CENTURY CHALLENGE

"Africa is the greatest worry with 200 million hungry and malnourished people, declining soil fertility, poor education and lack of roads."

"The Sasakawa Global 2000 Program I helped start with former President Jimmy Carter now operates in 10 countries in Africa."

- Dr. Borlaug believes we must go "From the Green Revolution to the Gene Revolution" and use biotechnology if we are to grow sufficient food to feed an additional four billion people on our planet in the 21st century using the land now being farmed.

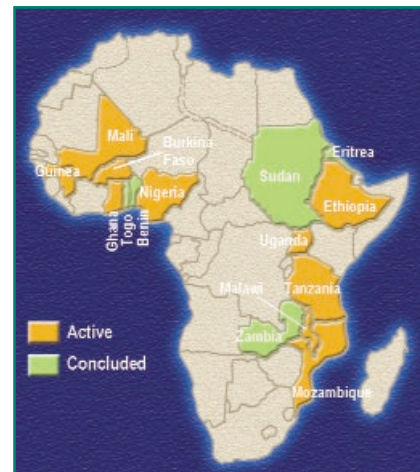
"Transgenics can permit us to do things we could never do before - enhance nutrition, drought and disease resistance, and cold tolerance."

- Dr. Borlaug stresses that agricultural progress can help achieve peace in a world beset with violence and terrorism. But he adds that it is crucial to build schools and roads as a part of this process.

"How can we still have close to 900 million adults who are illiterate and 150 million children not in school?"

"Only 8 percent of the countries with the lowest levels of hunger are mired in conflict, while 56 percent of the countries with the highest levels of hunger are caught up in war and violence."

"Nine hundred billion dollars spent on armaments, when they should have been building roads, schools, and public hospitals."



Countries with Sasakawa Global Programs



Dr. Borlaug with Nigerian Students

DR. BORLAUG'S LEGACY FOR THE NEXT GENERATION: THE WORLD FOOD PRIZE AND YOUTH INSTITUTE

"You can't build peace on empty stomachs."

- To inspire the Nobel-like breakthrough achievements needed to feed the world in the 21st Century, Dr. Borlaug created the \$250,000 World Food Prize, which is presented each October in Des Moines.
- To inspire the youth of Iowa to pursue careers in food and agriculture, Dr. Borlaug and John Ruan created the Global Youth Institute.
- At the conclusion of his address about his "60 Years of Fighting Hunger," Dr. Borlaug's exhortation to the hundreds of scientists and students in the audience was:

"You've got a big job ahead."

"Go for it!" "Reach for the Stars!"



Dr. Borlaug at the World Food Prize Global Youth Institute