



INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER

MIR

Improving Livelihoods

Reducing Hunger

Sustaining the Environment

Sharing Knowledge for Development



CIMMYT is a non-profit research and training center with direct links to about 100 developing countries through offices in Asia, Africa, and Latin America. We participate in an extensive global network of people and organizations who share similar development goals, including the public and private sector, non-governmental and civil society organizations, relief and health agencies, farmers, and the development assistance community.

The United Nations Millennium Declaration: **Urgent Summons**

The United Nations has pledged to halve the number of people suffering from extreme poverty and hunger by 2015. It has also committed the world to reducing environmental degradation. As stated in the mission below, CIMMYT addresses Millennium Declaration concerns by connecting science with agriculture and livelihoods.

The Challenge

Suffering from poverty: **Almost 3 billion people**
Suffering from hunger: **815 million people**
Suffering from water shortages: **More than 2.8 billion people by 2025**
Malnourished: **50% of all children in the poorest countries**
Dead by age 5: **20% of those children**
Living in an ecologically unsustainable world: **Every person on earth**



CIMMYT's Mission

CIMMYT has a global mandate to conduct maize and wheat research to benefit developing countries. Through strong science and effective partnerships, CIMMYT creates, shares, and uses knowledge and technology to increase food security, improve the productivity and profitability of farming systems, and sustain natural resources in developing countries.

Why Do Maize and Wheat Matter for Sustainable Development?

There are many ways to foster development, such as building roads, schools, and health facilities. Maize and wheat research—the area of CIMMYT's expertise—is an important path to development, because:

- Seventy percent of the world's poorest people live in the countryside. Many depend on farming, especially of maize and wheat, for food and income.
- Maize and wheat account for about 40% of the world's food and 25% of calories consumed in developing countries, according to FAO.
- Millions of people—including poor people in urban areas—get more than half of their daily calories from maize and wheat alone.
- Maize and wheat occupy almost 200 million hectares—a composite area larger than the Republic of Mexico—in developing countries. Farmers must grow these crops in environmentally beneficial ways, or the results could be devastating.
- To meet the demand for food, developing countries will need 368 million additional tons of maize and wheat by 2020 (today, they need about 700 million tons).

How CIMMYT Helps

We develop maize and wheat varieties and cropping practices tailored to the needs of developing country farmers

Improved maize and wheat seed can produce plants that naturally resist diseases and pests, tolerate too much or too little water, overcome the limitations of poor soils, survive excessive cold or heat, offer more nutrition, are more marketable, and yield more grain for food or sale. Better cropping practices save water, land, and other natural resources, and also raise yields.

We help the world conserve and use the great genetic diversity in maize, wheat, and related species

Through our genebank, important worldwide collections of maize and wheat are held in trust for future generations. The genes in these seeds can be used in new varieties that address food production problems, such as those caused by climate change.

We build capacity and share knowledge to promote development

We train and mentor researchers. We teach farm households and rural communities to use new farming practices and produce seed. We provide technical information and support that help researchers, policymakers, and development workers worldwide. We advocate appropriate policies to foster food and income security. Results of our research are widely shared and publicly available.

We speed the recovery from natural disasters and civil strife

We provide advice about appropriate seed and cropping practices to help farm households recover from famine, drought, floods, war, and other disasters. We help nations restore agricultural research materials and infrastructure. These activities reduce the threat of continuing food shortages and long-term dependence on food aid.

We achieve these goals through two global and four eco-regional research programs:

- Genetic Resources
- Impacts Targeting and Assessment
- African Livelihoods
- Tropical Ecosystems
- Rainfed Wheat Systems
- Intensive Agro-Ecosystems



Agricultural Research Has a Humanitarian Impact

- Wheat varieties bred at CIMMYT and its predecessor organization prevented famine and hunger in South Asia and elsewhere in the world. The benefits of this Green Revolution were recognized through the 1970 Nobel Peace Prize.
- More nutritious maize varieties developed by CIMMYT won recognition through the 2000 World Food Prize.
- Wheat varieties developed by CIMMYT and its partners are planted on more than 64 million hectares in developing countries, representing more than 75% of the area planted to modern wheat varieties in those countries.
- Maize varieties developed by CIMMYT and its partners are planted on nearly half of the area sown to improved varieties in non-temperate areas of the developing world.
- Without international research centers such as CIMMYT, crop yields in developing countries would have been as much as 24% lower; prices of food crops would have been as much as 66% higher; imports would be nearly 30% higher; calorie intake would have been about 14% lower; and 32-42 million more children would have been malnourished.
- Low food prices extend the benefits of agricultural research to poor consumers in urban areas and landless people in rural areas (and even to the industrialized world).
- If the developing world attempted to meet its food requirements in 1995 without the improved varieties of food crops developed since the Green Revolution, an additional 426 million hectares of cropped area would be needed (a five-fold increase over cropped area in 1965). These land savings helped to reduce greenhouse gas emissions by 35%. A higher concentration of greenhouse gases might have caused climate change to begin sooner.

Staffing and Funding

CIMMYT achieves its mission with about 100 specialized research staff and 500 support staff from about 40 countries. CIMMYT is a member of the Consultative Group on International Agricultural Research (CGIAR), a consortium of research centers and funding agencies. CIMMYT is funded by international and regional development agencies, national governments, private foundations, and the private sector.

For more information:

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