

SEEDS of INNOVATION:

CIMMYT's

Strategy for Helping to
Reduce Poverty and
Hunger by 2020



CIMMYT^{MR}

The strategic choices made by CIMMYT and its partners will improve their capacity to contribute to the UN Millennium Development Goals of halving poverty and hunger through maize and wheat research. Their strategic choices will also contribute to the capacity of a renewed CGIAR System to achieve the Millennium Goals.



A new strategy to help reduce poverty and hunger by 2020

Developed through extensive consultation with CIMMYT's stakeholders, this strategy initiates a more proactive, inclusive approach to planning and priority setting for CIMMYT. This approach is reflected in a new mission, in a confirmed focus on people and livelihoods, and in organizational and cultural changes that will foster collaboration, learning, and knowledge sharing for innovation.

CIMMYT's new mission is to act as a catalyst and leader in a global maize and wheat innovation network that serves the poor in developing countries. Drawing on strong science and effective partnerships, we create, share, and use knowledge and technology to increase food security, improve the productivity and profitability of farming systems, and sustain natural resources.

To achieve this mission, CIMMYT will rely on four sources or “seeds” of innovation:

The heart of the strategy: A focus on sustainable livelihoods for the world's poor maize and wheat producers and consumers—putting the needs of people first.

The mind of the strategy: A new innovation agenda that emphasizes global and eco-regional priorities.

The muscle of the strategy: A broad and growing set of partnerships and networks that will enable us to stay attuned and responsive to the needs of poor people and ensure the impact of all partners' efforts to promote sustainable human development.

The spirit of the strategy: Careful attention to the full cycle of innovation and the sharing and use of knowledge across scientific, institutional, and national boundaries.

Poverty is not a uniform condition. No organization helps all poor people in exactly the same way or to the same extent. The science of CIMMYT and its partners focuses on areas where maize and wheat, together or separately, are important to people's livelihoods and have potential to help alleviate poverty and sustain the environment. We tailor solutions to the needs of small-scale farmers, especially women.



The heart of the strategy:

Science to empower people

With its partners, CIMMYT will reduce farm households' vulnerability to poverty by offering science-based alternatives that fit their mix of livelihood strategies:

- Strategies in which maize and wheat production offer food and nutritional security.
- Strategies in which maize and wheat production generate income, foster economic growth, and alleviate poverty.

Poor people often have little choice about the course of action they must take. Our research empowers people to choose: to remain in maize and wheat production and make it more profitable; to incorporate more stable maize and wheat production into other, increasingly important livelihood strategies; or to diversify out of maize and wheat entirely if this makes the most socioeconomic sense.

Our science has yielded and will continue to yield exciting innovations that change people's lives:

- The wheat varieties that started the Green Revolution have met the needs of a rapidly growing population in developing countries (Nobel Peace Prize, 1970)
- Maize with higher quality protein offers more nutrition and better income-earning alternatives (World Food Prize, 2000)

CIMMYT's research will be as holistic as possible, considering the diverse natural, economic, and cultural factors that determine where and how maize and wheat are grown. Research will be based on global and eco-regional initiatives that draw on multiple disciplines and diverse partners.



The mind of the strategy:

An agenda for innovation

The research agenda will be based on six initiatives:

- Harnessing maize and wheat genetic diversity for humanity
- Strengthening the global maize and wheat innovation network through policies and institutions, capacity building, and analysis of strategic global issues
- Reducing vulnerability in dryland, stress-prone, food-grain systems by managing risk
- Improving livelihoods and conserving natural resources in tropical agro-ecosystems
- Safeguarding food security in densely populated areas through sustainable intensification
- Increasing food security in Africa through better technology and improved markets

Within 10 years, CIMMYT and its partners will deliver:

- An expanded, more useful, and far more accessible collection of maize and wheat genetic resources
- Reduced vulnerability of poor households to drought, infertile soils, diseases, and other stresses, through the use of new varieties and improved crop management
- Expanded crop rotations and greater crop diversification to improve agricultural productivity, profitability, and environmental sustainability
- Reduced use of water, fuel, and other inputs in agriculture through the use of resource-conserving technologies and varieties
- Improved nutrition through maize and wheat varieties with superior nutritional quality
- Improved access to markets through varieties with value-added traits
- New tools and methods for public agricultural research
- Policies to strengthen technology delivery and remove constraints to adoption
- A strong learning and mentoring service, supported by a global portal to knowledge on maize and wheat livelihood systems in the developing world

► Environmentally sustainable practices will have a tremendous impact on the nearly 200 million hectares planted to maize and wheat in developing countries.

CIMMYT will emphasize its catalytic role in partnerships and networks to improve research efficiency and impact in farmers' fields. We will identify common goals among traditional and non-traditional partners, effectively use complementarities, minimize transaction costs, and make partnerships more productive for everyone involved.



The muscle of the strategy:

Partnerships and networks

CIMMYT's intention is to be a true partner in innovation, providing products, services, information, and technical expertise. Principles for partnering include:

- Engage in strategic partnerships for specific purposes.
- Engage in collective priority setting and shared implementation.
- Emphasize equality in sharing resources, contributions, accountability, and credit.
- Work where CIMMYT has a comparative strength and devolve other activities wherever possible.
- Strengthen the capacity of partners so others can take on new roles and create additional synergies.

CIMMYT will:

- Strengthen work with **national agricultural research and extension systems** in broad alliances of diverse partners.
- Actively harmonize and integrate CIMMYT's efforts with those of other **CGIAR Centers**.
- Establish more strategic and productive relationships with the **private sector** and **advanced research institutes** to strengthen research capacity and extend research results to areas with less attractive markets.
- Expand relationships with **non-governmental and civil society organizations**, especially in seed production and delivery systems, seed relief, and health initiatives.
- Maintain strong links with other **international development agencies** and **global and regional development fora**, especially with a view to advocating policies and institutions that favor sustainable development.
- Improve **flexibility to form new partnerships** by increasing decision-making authority across all CIMMYT locations.

► Long-term collaboration with multiple partners in the lab and in the field yielded more nutritious "quality protein maize" for this community.

Knowledge produced by CIMMYT and its partners will become as important a global public good as improved varieties or practices. Innovation and the creation of knowledge are complex processes. To excel in this new context, CIMMYT will dramatically improve its capacity to acquire, create, and share knowledge.



The spirit of the strategy:

Sharing and using knowledge for innovation

A foremost mechanism for adding value to networks and partnerships is to support knowledge sharing and information flows. To serve as the catalyst and leader in a global maize and wheat innovation network, CIMMYT will attend to the whole cycle of knowledge management:

- Diagnose needs: Listen to farmers and other partners.
- Provide access to essential knowledge for research.
- Develop new technologies with partners.
- Share new technologies widely with other users.
- Carefully monitor adaptation and use of technologies, with an emphasis on learning for future efforts.
- Understand that knowledge is created and used through a complex system of multiple interacting players and forces.

CIMMYT will further an organizational culture, structure, management style, and performance incentives to stimulate the acquisition, sharing, and evaluation of knowledge.

We are committed to working
with others to provide global
public goods that poor people can
use to gain a sound economic
footing and attain better lives for
themselves and their children.



Building on our strengths and sense of commitment

In carrying this strategy forward, CIMMYT will build on:

- Its stewardship of the world's largest collections of maize and wheat genetic resources.
- Its knowledge, expertise, and effectiveness in international plant breeding.
- Its understanding of the complex biophysical and socioeconomic dynamics of agricultural systems.
- Its extensive network of partners, which transcends borders and economic sectors.
- Its commitment to seek out and evaluate new research tools and methods.
- Its commitment to the renewal process in the CGIAR.

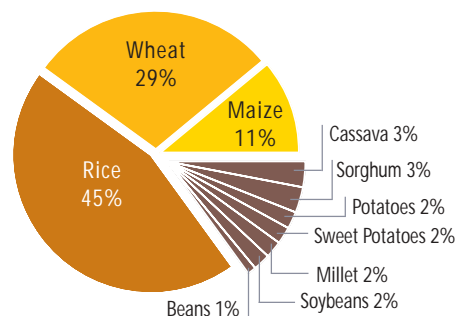
Strategic planning has already initiated considerable change within CIMMYT. In the coming year, CIMMYT and its partners will continue the change process. They will define the research agenda in detail, set priorities, and foster the organizational transformation that will put this plan into practice.

Maize and wheat will continue to play vital roles in nutrition, health, income, environmental sustainability, and overall development. Aside from these important roles, both crops possess a deep cultural significance for many of the world's people.



Maize and wheat matter for sustainable development

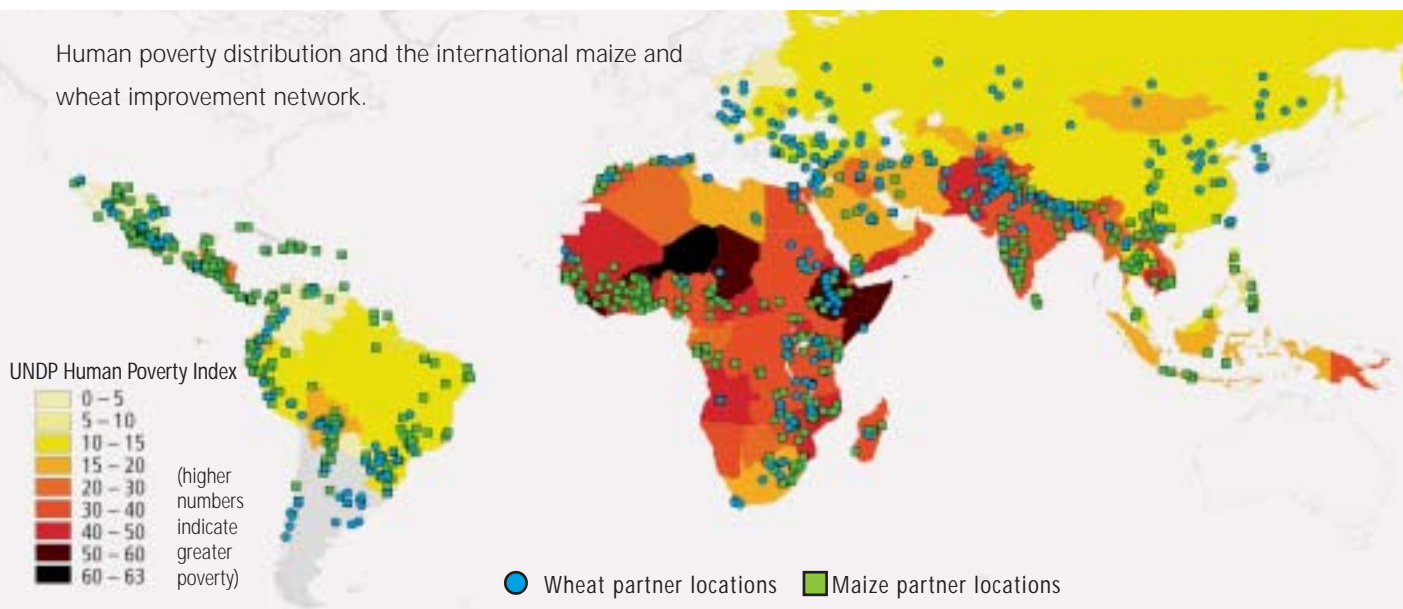
Maize and wheat are among the developing world's most important staples (see chart). CIMMYT has a global mandate for research on these crops. The international maize and wheat improvement network formed by CIMMYT and its partners spans the developing world, including areas where poverty is severe and where maize and wheat account for as much as half of the calories consumed every day in poor households (see map). This network, built on decades of germplasm exchange, information sharing, and collaborative research, is a strong foundation for innovation that links local, regional, and global perspectives.



Daily per capita caloric intake of the 10 most important food crops in developing countries, 1999-2001.

Source: FAOSTAT online database, October 2003.

Human poverty distribution and the international maize and wheat improvement network.





Anticipating and adapting to change

In a time of growing and unpredictable change, CIMMYT will fulfill its mandate with respect to maize and wheat, two of the world's most important crops, by building on the combined strengths of its partners in innovation and focusing on the livelihoods of the poor. We welcome all partners who wish to share in this work or who see a role for CIMMYT in achieving their own humanitarian goals.



CIMMYT^{MR}

International Maize and Wheat Improvement Center

For more information on CIMMYT
and its strategy, see

www.cimmyt.org

CIMMYT is supported through the Consultative Group
on International Agricultural Research (CGIAR)

www.cgiar.org