

REALIGNMENT OF CIP'S RESEARCH AND DEVELOPMENT PROGRAM

In 2003 CIP completed a Vision exercise that resulted in the prioritization of seven development challenges, which represent eight of the UN's Millennium Development Targets. These challenges can be summarized as: reducing poverty and hunger; improving human health; developing sustainable rural and urban systems; and improving the availability of new technologies. The CIP Vision Plenary concluded that CIP's research and development program can contribute significantly to achieving these Development Targets over the next two decades. The first step taken in moving towards implementation of this vision was a realignment of CIP's program.

Realignment of CIP's Program

As outlined in Challenge 1 of the CIP Vision (see www.cipotato.org/cipvision.pdf), impact assessment studies have documented that improvements in potato and sweetpotato production systems through CIP-related technologies have resulted in significant gains to farm productivity throughout the world, especially in China, India, Central Africa, and the Andean highlands (see *Advanced technologies readied for potato and sweetpotato producers*, page 21). A fundamental objective is to increase the impact of our research across a broader array of challenges, as defined by the Millennium Development Goals and Targets.

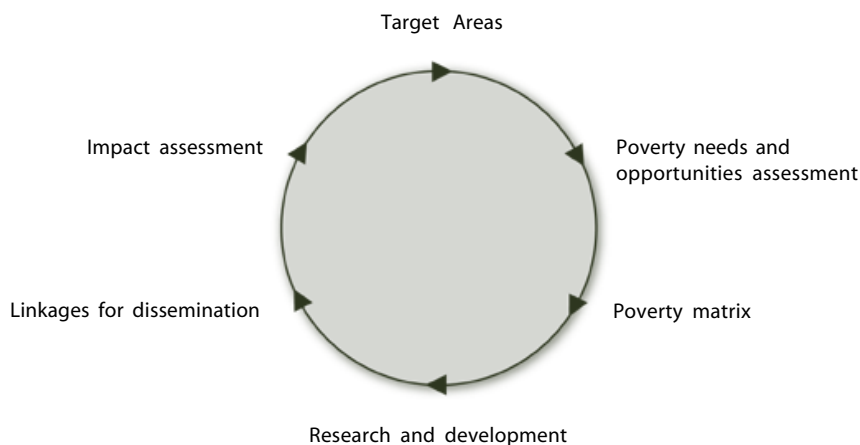
In order to enhance impacts on poverty and hunger alleviation, human health, and rural and urban sustainability, the realignment of CIP's Research and Development Program will reflect a pro-poor research and development (R&D) cycle.

The cycle starts with impact targeting in order to identify priority areas, populations, and systems where CIP's Program should focus, i.e., where research and development activities should be prioritized. This is followed by participatory needs and opportunity assessments, with anticipated impacts, to shed light on the types of knowledge and technologies that need to be generated or adapted to enhance impact. These analyses will inform the research agenda. Research outputs will then be linked to development partnerships for more efficient and effective dissemination. Impact monitoring and assessment will establish indicators and, through analysis and evaluation, will allow for reorientation or redirection of efforts during the R&D process to maximize the probability of achieving the expected impacts.

In order to make this R&D cycle operative, CIP has realigned its program structure (see next page). Research outputs have been linked to partnership programs for more efficient and effective dissemination. Through this realignment we expect gains in the efficiency, effectiveness, and flexibility of the program.

CIP has a rich and successful history of creating, coordinating, and working in partnerships. Our partners should have a stronger voice in defining national and regional needs and opportunities, and in influencing CIP's research agenda. At the same time it is expected that these needs and opportunities will be increasingly resourced by partnership programs through contract research from the relevant research divisions. Simultaneously, partnership programs

Pro-poor research and development cycle



will serve as primary update and utilization platforms for research results, increasing the dissemination and scaling out of the global public goods produced by CIP and enhancing the development impact. The Partnership Programs included in CIP's realigned program structure are coordinated and hosted by CIP; development partnerships will prioritize these highly relevant programs, but not be restricted only to these partnership platforms.

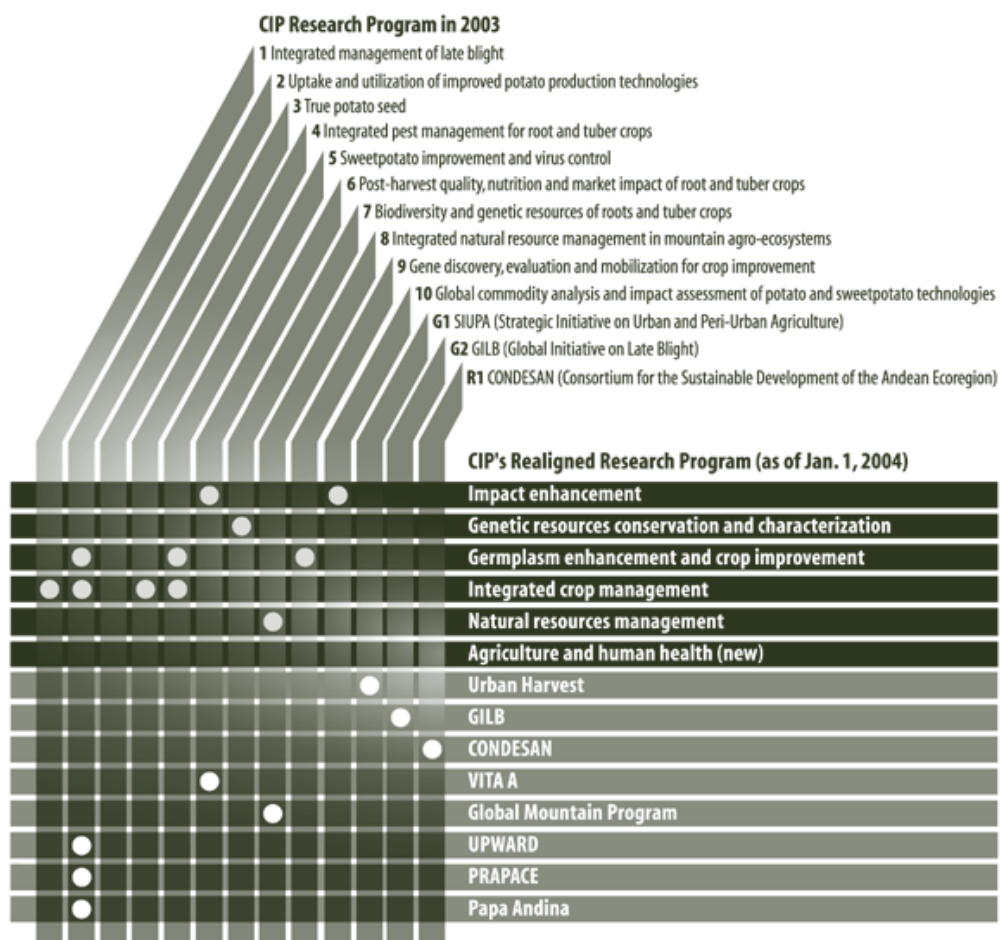
Within the research program, six Research Divisions have been defined. This revised structure should achieve more streamlined research management and be robust enough to

persist and maintain its relevance in the face of a dynamic external environment.

New Research Divisions

The Impact Enhancement Division will undertake research to develop improved methodologies for impact targeting and needs/opportunities assessment; adopt and validate a broader conceptual framework for impact assessment; identify impact indicators and methodologies for measuring and monitoring these indicators; and develop strategies and tactics to add value to CIP's commodity research. In essence, this Division will serve

CIP's program structure: In 2003 and as of January 1, 2004



as the compass for the Program, monitoring progress against desired impacts in each of the regional settings and, through research, striving to increase our impact.

The Genetic Resources Conservation and Characterization Division will manage CIP's non-negotiable core responsibility to maintain and characterize the collection of potato, sweetpotato, and Andean root and tuber germplasm that the Center holds in trust. The Germplasm Enhancement and Crop Improvement Division will be responsible for CIP's efforts to better understand and enhance this germplasm for improved crop value. These two Divisions represent CIP's foundation, built and solidified over more than 30 years. They remain critical to enhancing our impact and meeting our challenges.

The remaining three Research Divisions will conduct integration research. The Integrated Crop Management Division will undertake research to integrate solutions to production constraints (e.g. late blight, bacterial wilt, soil degradation) in ways that are appropriate for the region, the target systems, and the socioeconomic constraints of the target populations.

The Natural Resources Management Division will conduct research to improve our understanding of production systems (e.g. potato, sweetpotato) within the complex agro-ecosystems in which they are embedded (e.g. potatoes in highland production systems), and will develop strategies and tactics for intervening in these complex systems that will provide valuable, long-term contributions.

The Agriculture and Human Health Division will carry out research to clarify the linkages among agricultural production, the environment, and human health. Based on the knowledge gathered from this research, intervention strategies will be designed to increase the benefits and mitigate the risks of agricultural production to human health. This exciting new research division will allow CIP to institutionalize and carry forward the innovative research that we have been conducting, and to move beyond compartmentalization of research and development in the fields of agriculture and human health. It will be the first institutionalized program dedicated to agriculture and human health in a CGIAR Center.

Research divisions and their principal activities

1. Impact enhancement

- Characterizing user needs and opportunities for agricultural knowledge and technology
- Assessing dissemination strategies, adoption, and impact
- Adding value to commodities through post-harvest innovations
- Institutional learning for pro-poor impact

2. Genetic resources conservation and characterization

- Collecting and conserving genetic resources
- Assessing genetic resources diversity
- Characterizing genetic resources
- Collaborating on genetic resources policies and capacity building

3. Germplasm enhancement and crop improvement division

- Enhancing potato germplasm and crop improvement
- Enhancing sweetpotato germplasm and crop improvement
- Improving root and tuber crops through transgenics
- Improving adaptation and variety use

4. Integrated crop management

- Integrating management of the potato crop
- Integrating management of the sweetpotato crop

5. Natural resources management

- Characterizing the sustainability of targeted agro-ecosystems
- Examining external disturbances of targeted agro-ecosystems
- Designing and validating resilient agro-ecosystems

6. Agriculture and human health

- Analyzing linkages among production, ecosystems, and human health
- Enhancing human health benefits from agricultural production
- Mitigating human health risks from agricultural production