Strengthening Agricultural Research in Colombia through International Research Collaborations

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Topics for Discussion

- Colombian Challenges
- Proposed Overall Research Goals
- Strategy for Strengthening Research Capacity in Colombia
- Future Collaborations with LGUs
Colombian Challenges

- General low investment in agriculture and low crop productivity
- Rising temperatures and unpredictable rains are affecting harvests and forcing production uphill
- Overuse of pesticides is a major issue for both human and environmental health
- Deforestation is one of Colombia's greatest environmental challenges
- The agricultural sector in Colombia accounts for over 1/10 of the country’s GDP and employs over one-fifth of its population
- About 57% of farmers own only two per cent of the land and there are nearly 1 million landless rural workers
- Labor force and generational shifts
Proposed Overall Research Goals

- Increasing Yields
- Increasing Quality
- Agri-Management Research and Support
- Crop Diversification
- Reverse Environmental Degradation
- Breeding for Climate Resilient Crops
- Selected Value Chain Development
- Food Safety
- Labor Supply of Family Farms (including women and child labor issues)
Strategies for Strengthening Research Capacity in Colombia

The goal of today’s sessions is to discuss:

- **What?** – Identify Research Priorities
- **Where?** – Physical Locations and Institutions
- **Who?** – Individual Units and Investigators
- **How?** – Structural Framework for the LGU-Colombia Dialog and The Individual Projects
A definition with three levels of action

“The process by which individuals, groups, organizations, institutions and societies increase their abilities to:

(i) perform core functions, solve problems, define and achieve objectives;
(ii) and understand and deal with their development needs in a broad context and in a sustainable manner”

Sources: UNDP (1997); UNDP (1998); UNESCO (2005).

**Individual**
the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively

**Organizational**
the elaboration of management structures, processes and procedures, not only within organizations but also the management of relationships between the different organizations and sectors (public, private and community)

**Institutional**
making legal and regulatory changes to enable organizations, institutions and agencies at all levels and in all sectors to enhance their capacities
LGUs – Colombia Research Partnerships (Discussion Topics)

- Implementation by a consortium of US universities working with Colombian counterparts
  - National Agriculture Research Systems
  - International Agriculture Research Centers
  - US and Colombian Universities
  - Private Sector

- Traditional Collaborations vs Research Networks

- Integration of Graduate Education in the Research

- Structural Framework for the LGU-Colombia Dialog and The Management of Individual Projects
Success in International Science Collaborations

- Larger and more complex collaborations are more likely to be influenced by political and cultural rules, norms, and expectations.

- Governments pay for research, universities host it, but individuals decide where the best opportunities appear.

- Collaborations strongly depend
  - On the motivation and skills of the individual investigators;
  - Their ability to relate to others within their field, interdisciplinary and internationally;
  - The composition of the team;
  - The relationships dynamics among team members.