Working with (inter)regional innovation platforms: CRP on Roots, Tubers and Bananas

Graham Thiele
Program Director
Overview

• RTB, structure and impact pathways
• Three types of innovation platform
• Action research on partnerships
• Linkage mechanisms with systems’ CRPs and innovation platforms
A collaboration of:

+ a wide spectrum research-for-development stakeholders & partners
Our crops

- Banana
- Plantain
- Cassava
- Potato
- Sweetpotato
- Yam
- Other R&T
RTBs share

- Genetic complexity (> grains)
- Vegetative propagation, similar seed systems
- Perishability, bulkiness and post harvest/value chain options

- High potential: > yields & livelihood outcomes
- Low profile: “women’s crops”
Program Structure

Thematic

Upstream R4D funded directly

Downstream R4D projects funded by specific donors

Linkages for outcomes?

1. Improved access to genetic resources
2. Better varieties
3. Better management of pests & diseases
4. Improved seed systems
5. Better cropping systems
6. Better market access & post-harvest
7. Partnerships Comms/Capacity + Gender
Impact Pathways

**PRODUCT LINE**

**PL 1. Breeding tools, strategies, and approaches**
- Novel gene constructs
- New breeding methods with improved trait capture
- More efficient screening methods for drought, micronutrients

**PL 2. Trait capture and gene discovery**
- Global phenotyping network for key quality and root traits and responses to major stresses, including climate change

**PL 3. Population development and pre-breeding**
- Advanced populations with market quality and disease resistance include traits for micronutrients
- Base populations with drought and heat tolerance
- Support populations with new traits

**PRODUCTS**

**RESEARCH OUTCOMES**
- Novel (transgenic) traits used for crop improvement
- Varieties with more rapid yield gains and improved traits available sooner
- Reduced timeframe and expenses for quantification of relevant traits

**DEVELOPMENT OUTCOMES**
- Farmers grow varieties with novel durable resistance and added-value traits
- Farmers adopt new varieties in reduced timeframe
- Cultivars with better micronutrient composition grown and consumed
- Farmers have more stable yields under extreme weather conditions and in marginal environments

**IMPACTS**
- Improved health due to increased macro- and micronutrient composition of new varieties
- Increased food security from use of RTB varieties
Partnership action research

1. Potential innovation platforms and how do they work?
   - Value chain (Papa Andina)
   - Varietal development (Red Latin Papa)
   - Cropping systems (CIALCA)

2. Basic principles in building platforms?

3. How are scientists and others actually partnering?
   - Network mapping

4. What are the linkage mechanisms with RTB?
Coastal Agricultural Research and Action Network (CARAN)

Collective Learning

Bolivia

Ecuador

Peru

Coordination: CIP-Papa Andina

Local Partners

Farmers

Strategic Partners

Strengthen capacity with strategic partners

Stakeholder Platforms

Markets

Policies

Collective Learning

Strengthen capacity with strategic partners
Innovation process in Peru triggered spillover in Ecuador and Bolivia
Red Latin Papa

Provides potato germplasm

Feedback loop to management committee on participatory varietal trials

Adjusts breeding strategy

Improve germplasm provided
Participatory Breeding / Varietal Selection (PVS) to involve stakeholder in selection & dissemination

1. Flowering Stage
2. Harvest Stage
3. Organoleptic ev.
4. Post-harvest ev.

Mother & Baby trial design

= consortiums
CIALCA
Enhance productivity banana and legume cropping systems

Country level organization: Rwanda, Burundi and DRC

Knowledge resource centers: out-scaling to escape country silos
CIALCA

Knowledge resource center

Contextual validation and adaptation of knowledge products

eg control of banana bunchy top disease
Partnership action research (ILAC)

RTB actor network maps

Node colours by type of organization

- CG-CG, CG-ARI
- Other colors = other orgs
- Node size set by degree centrality
RTB actor network maps

New collaboration
CRP Humidtropics

Action areas

Large overlap with RTB “hotspots”

Incorporates CIALCA
Challenges to partnering for outcomes

1. RTB predominance linkages among CG and ARIs
2. Limited engagement of non-HQ scientists and downstream R4D partners
3. Limited coordination across CRPs
4. CRPs are reconfiguring innovation platforms – how?
5. Compatibility “honest broker role” and accountability for outcomes?
Linkage mechanisms: CRPs and innovation platforms

1. Joint priority setting with stakeholders
2. Joint construction of impact pathways with stakeholders
3. Shared research sites and R4D activity
4. Learning alliances across regional innovation platforms
5. Shared action research on partnerships to “get it right”, in context of increased organizational complexity
6. Monitoring evolution partnerships