



Consortium

CGIAR is a global research partnership for a food secure future

Food security Progress, achievements, results

Nairobi, 5 November 2013

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.

Four pillars to food security: **availability, access, utilization, and stability**

Source: FAO 1996 and 2009

New accountability framework of the CGIAR

	Intermediate Development Outcome measured by the CGIAR	A pillar of food security	Influences food security
1	Increased productivity	Availability	
2	Access to food commodities by rural & urban poor	Access	
3	Increased consumption of safe, nutritious foods by the poor	Access	
4	Increased and more equitable income by low income chain actors		Access
5	Increased control by women and other marginalized groups of assets, inputs, decision-making and benefits		Availability + Access
6	Increased capacity for innovation and to adapt within low income and vulnerable rural communities		Stability
7	Greater resilience of agricultural systems	Stability	
8	Policy changes		Availability, Stability, Access
9	Greater environmental health and productivity		Availability
10	Carbon sequestration and reduction of greenhouses gases		Stability
11	Future options: Genetic diversity for future generations		Stability

Averting major food production losses at continental scale

Flagship Projects:

- Food security crisis averted through stem rust (Ug99) resistant wheat
- **Forthcoming solutions:** Banana bunchy top virus
- **New challenge:** Maize lethal necrotic disease (MLN)

What do we do differently today?

- Genomics tools allow allele mining and accelerated germplasm development
- More effective partnerships for rapid impact

Challenges:

- Policies that ignore the crucial need for local seed sector development

Target: 120,000 HH recover virus-free production



MLN in farmer's field in Bomet Kenya, now in 6 countries.

Target: potential spread to all dual cropped maize systems in Africa



Increasing food security through system intensification

2013: > 100 innovation platforms operational

- Greater access by poorer HHs to technologies and marketing opportunities.
- Improved HH productivity => greater diversity and quality of diets.
- Reduced post harvest losses & year-round access



What do we do differently today?

- Significant increase of donor investment R4D
- Farmer proximity fosters proactive gender focus
- Precision agriculture for smallholders – Exciting!
- Testing innovations in extension & ICT

Challenges

- Baseline studies and collaborations that can drown in complexities >> Simplicity drives impact
- CGIAR is to produce scalable insights: R4D



Resilience and improved supply under drought and stress prone conditions

Impacts are being achieved:

- 33,000 smallholders increase yields by 40% with post-rainy season **sorghum** in India.
- 3 million HH in Africa benefit in 2012 from drought tolerant **maize** seed.
- Stress tolerant **rice** varieties reach approximately 4 million Indian farmers.
- Heat tolerant **chickpea** yield 30% in on-farm trials in India.



What do we do differently today?

- Stronger impact pathways through systematic collaboration with the local private seed sector.

Challenges:

- HH typically face one or more food deficit months already in average rainfall years.
- Climate change – Heat – Climate change



The comparative advantage of the CGIAR – 2013 Partnership Survey

Comparative advantage

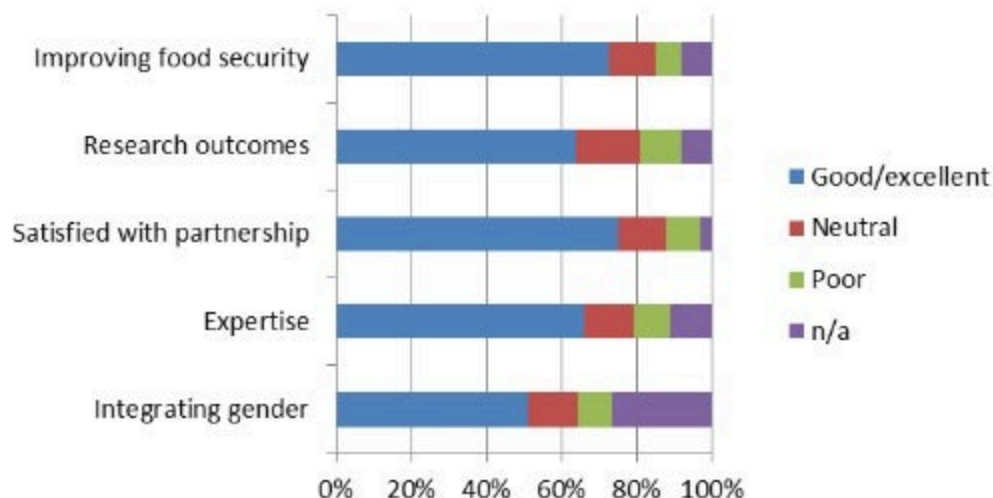
- “Strong collaborative network on research and development”
- “Global coverage”
- “Network of centres, sites and collaborators”
- “Presence in the south AND staff quality”
- “Capacity building and funds for partners”

Challenges

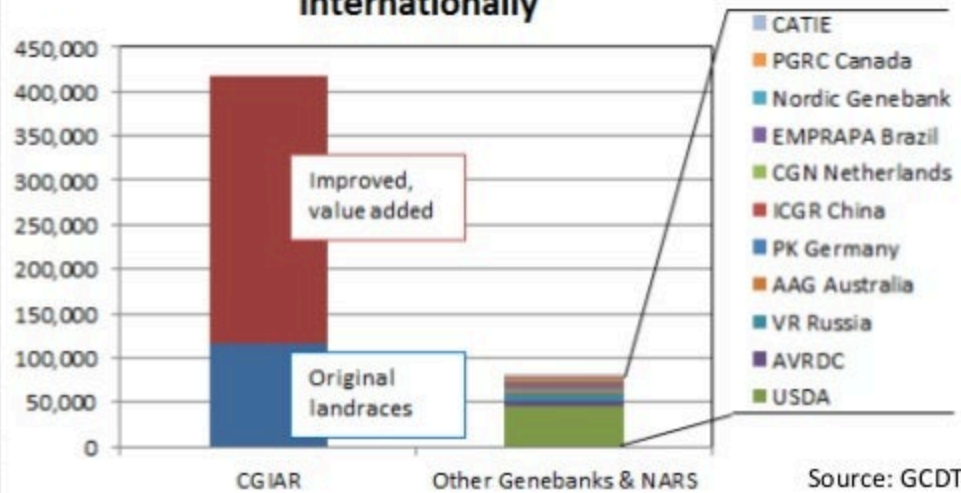
- “Inability to consistently follow through with research project goals”
- “Short duration activities in deference to the dictates of donors”
- “Need to better address social context”
- “Info dissemination”
- “Overcommitted and overstretched”

Look at and absorb the Partnership Survey!

2013 Partnership survey (Source: GLOBESCAN)



Annual distribution of germplasm internationally



Source: GCDT

Feedback from Today's frontline: *"We need to overcome outdated paradigms"*

Land consolidation - either real or virtual - and mechanization are major drivers of productivity increases and lower food prices.

- How does the CG support transformation to **small-scale commercial inclusive farming approaches** in the developing world?
- Feminization of agriculture and mechanization - a contradiction?
- CGIAR are you listening ... How do we involve today's youth?



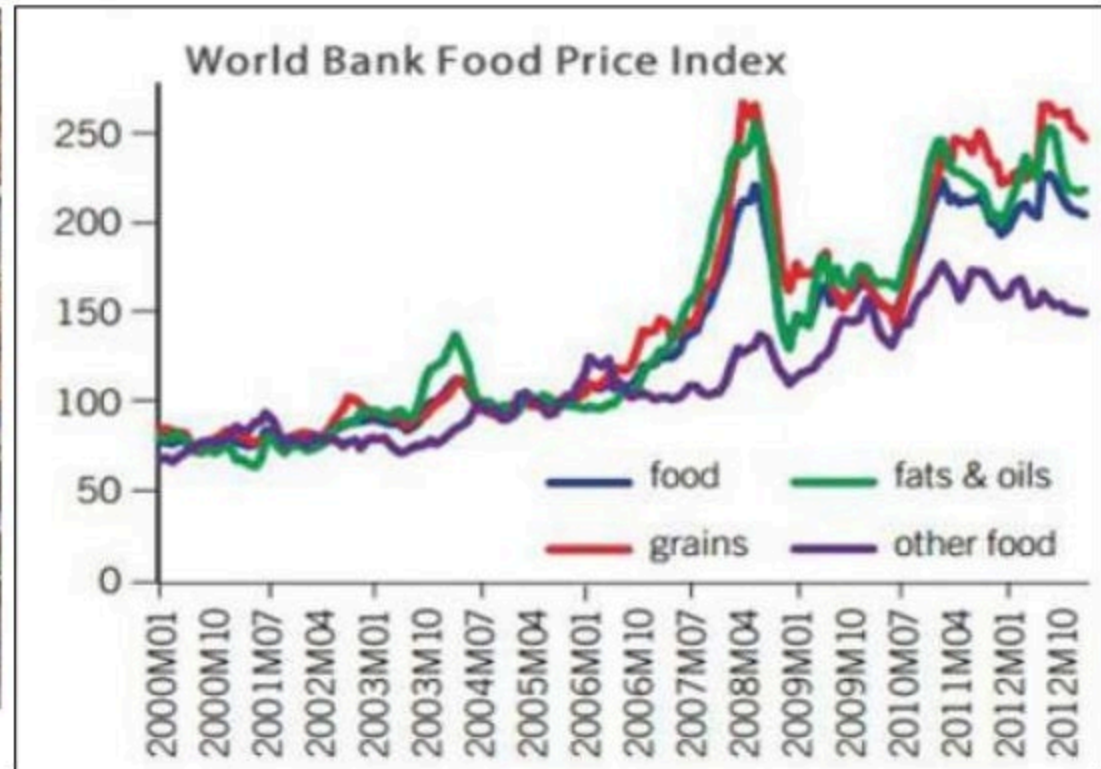
Feedback from Today's frontline: *"We need to overcome outdated paradigms"*

From sole focus on smallholders **To** listening to net consumers = the rural and urban female poor.

- Their available income is eroded by rising food prices >> See consumer price index @ fao.org
- Poor female consumers choices explain rising demands for wheat and rice in Africa.
- Are we responding?



The food of this family - Source: Oxfam



And finally ... Food security is no longer an issue for the developing world alone



Climate change + demand increases require >15% productivity increase per decade.

If not: price increase, deforestation

Future agricultural productivity increases will have to come from the developing world.

Not investing today in future food security solutions - **R4D** - is like saying "**I begin to invest in my retirement once I retire ...**" It will be too late.