SLU Global
Agricultural Sciences for Global Development

Richard Hopkins
Climate Change and Land Use.
SLU and the Rest of the World.
SLU Global – five scientific themes

- Efficiency in farming systems

- **Land Use and Climate Change**
  - Restoration of degraded rural landscapes
  - Scale issues in relation to food security and poverty alleviation
  - Urban and peri-urban farming
Global Challenges

Adaptation and mitigation are both viable strategies to combat Global Challenges.

However, they tackle the problem from completely different angles.

Mitigation and adaptation work at different spatial and time scales.

Mitigation is “global” and “long term”
Adaptation is “local” and “shorter term”
Global Challenges

Developing countries are vulnerable to the problems of emerging pests because they depend heavily on agriculture, they tend to be relatively warm, favoring reproduction, they lack infrastructure to respond rapidly, and they lack capital to invest in innovative adaptations.
CGIAR System and SLU

15 centers, 8,500 scientists and staff
Within SLU

Rodomiro Ortiz: Plant Breeding, adaptation to biotic and abiotic challenges to production.

Ingrid Öborn: Agroforestry, ICRAF, impacts of landscape scale issues on production.

Ylva Hillbur: the ecology, biology and sustainable management of sorghum chafer (*Pachnoda interrupta*) in Ethiopia; the mass trapping for control of sorghum chafer in Ethiopia.

A multitude of individual research programmes at every campus.
Global Challenges

Safe control of Guatemalan potato moth, *Tecia solaniv*, in household storage

*Colombia, potato 3rd biggest crop*

*Both pre and post harvest damage*

*Insecticice use a huge threat to health, particularly women and children*

*Mating disruption and host finding disruption*
Management challenges of fruit fly infestation in Southern Ethiopia

Problem: Fruit fly cause loss of mango:
> 50% before harvest, 20% after harvest

Project: Study locally available and appropriate management measures

Collaboration:
Addis Ababa University
Arbaminch Plant Health Clinic
Swedish University of Agricultural Sciences
Miriam.Karlsson@slu.se

Financed by: SIDA
Early in the intervention process against fruit flies

Group meetings, Individual semi-structured interviews and field walks with farmers

Farmers ask:
- What do with infested fruits?
- How can we trap the female fruit fly?
- Shall I, if my neighbor does not manage fruit fly?

Current status:
- Ownership and responsibility of the crop management vague
- Insufficient knowledge of fruit fly life cycle among farmers and extension agents
- Research lacking management methods for small scale farming
- Fruit production is not prioritized field of agricultural advisory system
www.slu.se/slu-global

Thank you!

SLU Global