

Organic farming as a driver for the livelihoods of smallscale farmers?



Productivity and growth in organic value chains in East Africa

– potentials and challenges for accessing local high value markets

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Productivity and Growth in Organic Value Chains (ProGrOV)



- Research and capacity building project in Uganda, Tanzania, and Kenya
- Funded by the Danish Ministry of Foreign Affairs
- January 2011 – March 2016
- Addressing challenges in organic value chains
- A collaboration between universities and organic movements

OBJECTIVE:

- Research based knowledge strengthened for supporting increased productivity and sustainable growth in organic production and value chains, and
- capacity built for future development of the OA based value chains in Kenya, Uganda, and Tanzania

ProGrOV - Background



- **Increased market orientation**
- **Intensification of farming**

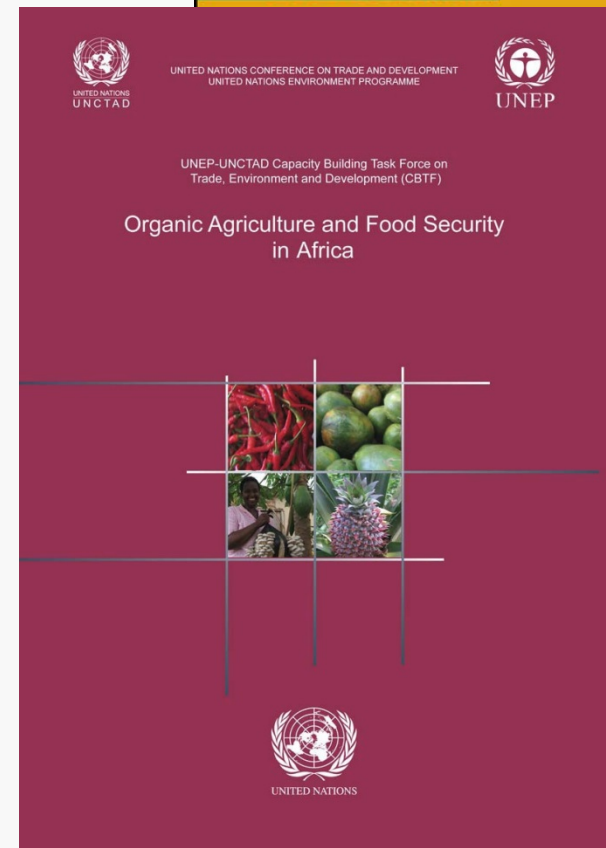
Hypothesis

Improved organic value chains serve a dual purpose for:

- Developing and demonstration of innovating partnership models for chain based economic and social growth, and
- Improving productivity potential and sustainable natural resource management

Organic Agriculture is a "good option for food security in Africa"

"... organic agriculture can be more conducive to food security than most conventional systems, and .. it is more likely to be sustainable in the long term."
(UNEP-UNCTAD, 2008).

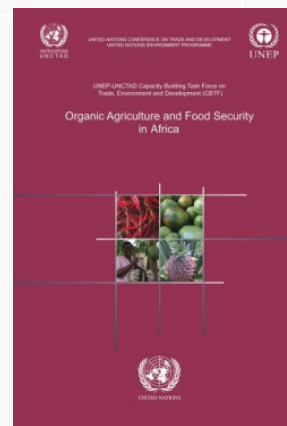


Yields of organic and Agro-ecological agriculture in Africa

Region	Number of countries represented	Number of projects analysed	Number of farmers in projects (million)	Number of hectares* million ha	Average change in crop yields** per cent
Africa***	24	114	1,900,000	2.0	+116
East Africa	7	71	1,600,000	1.4	+128
Tanzania	1	9	27,000	0.06	+67
Uganda	1	17	241,000	0.68	+54

- * Organic and near-organic agriculture, million ha
- ** compared with beginning of projects, per cent
- *** all countries with data

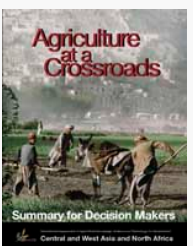
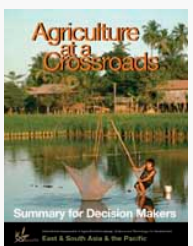
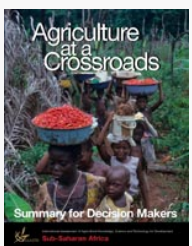
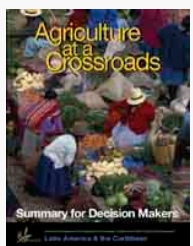
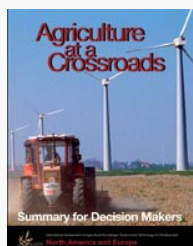
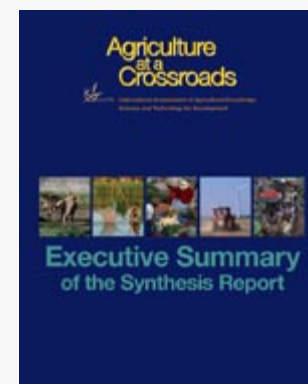
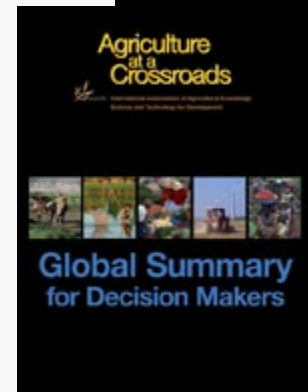
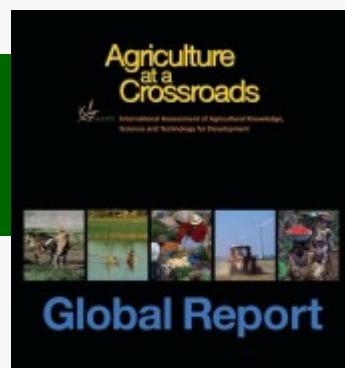
After Pretty et al., 2005



International Assessment of AKST for development (IAASTD)

IAASTD Executive summary (2009):

- Degradation of ecosystems limits or reverses productivity gains
- A fundamental shift in AKST is required to successfully meeting development and sustainability goals
- Recognition and increased importance to the multifunctionality of agriculture is necessary
- Accounting for the complexity of agricultural systems within the diverse social and ecological contexts
- Success requires increased public and private investment in Agricultural Knowledge Science and Technology
- An interdisciplinary and **Agro-ecosystems** approach to knowledge production and sharing will be important



The four basic principles of organic agriculture

Endorsed by IFOAM, September 2005

PRINCIPLES of ORGANIC AGRICULTURE

Principle of **HEALTH**

Organic Agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.

Principle of **ECOLOGY**

Organic Agriculture should be based on living ecological systems and cycles, work with them, emulate them and help sustain them.

Principle of **FAIRNESS**

Organic Agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities.

Principle of **CARE**

Organic Agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment.



Healthy soil
Healthy crops
Healthy livestock
Healthy people

Agro-ecology
Diversity
Recycling

**Ecological and
social justice**
Fair Trade?

Precaution



Definition of Organic Agriculture

IFOAM, 2008



Organic agriculture is a production system that sustains the health of soils, ecosystems and people.

It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects.

Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.

What is OA in developing countries?



Certified OA:

- Oriented towards products
- Focused on few high-value crops and quality
- Agro-organic methods used in varying degrees
- Gives access to the market and better prices
- Increasing market, globally
- Will remain a niche in the great number of small householders

Non-certified/informal OA:

- Agro-ecological farming systems
- Conscious use of organic methods
- Follows the principles or ideas of IFOAM,
- - but is not necessarily certified
- Improving the soil fertility including through recycling
- Using primarily local resources
- Using diversity in time and space
- Promote prevention, natural regulation
- Decreasing the use of limited resources



Faba Bean with and without compost



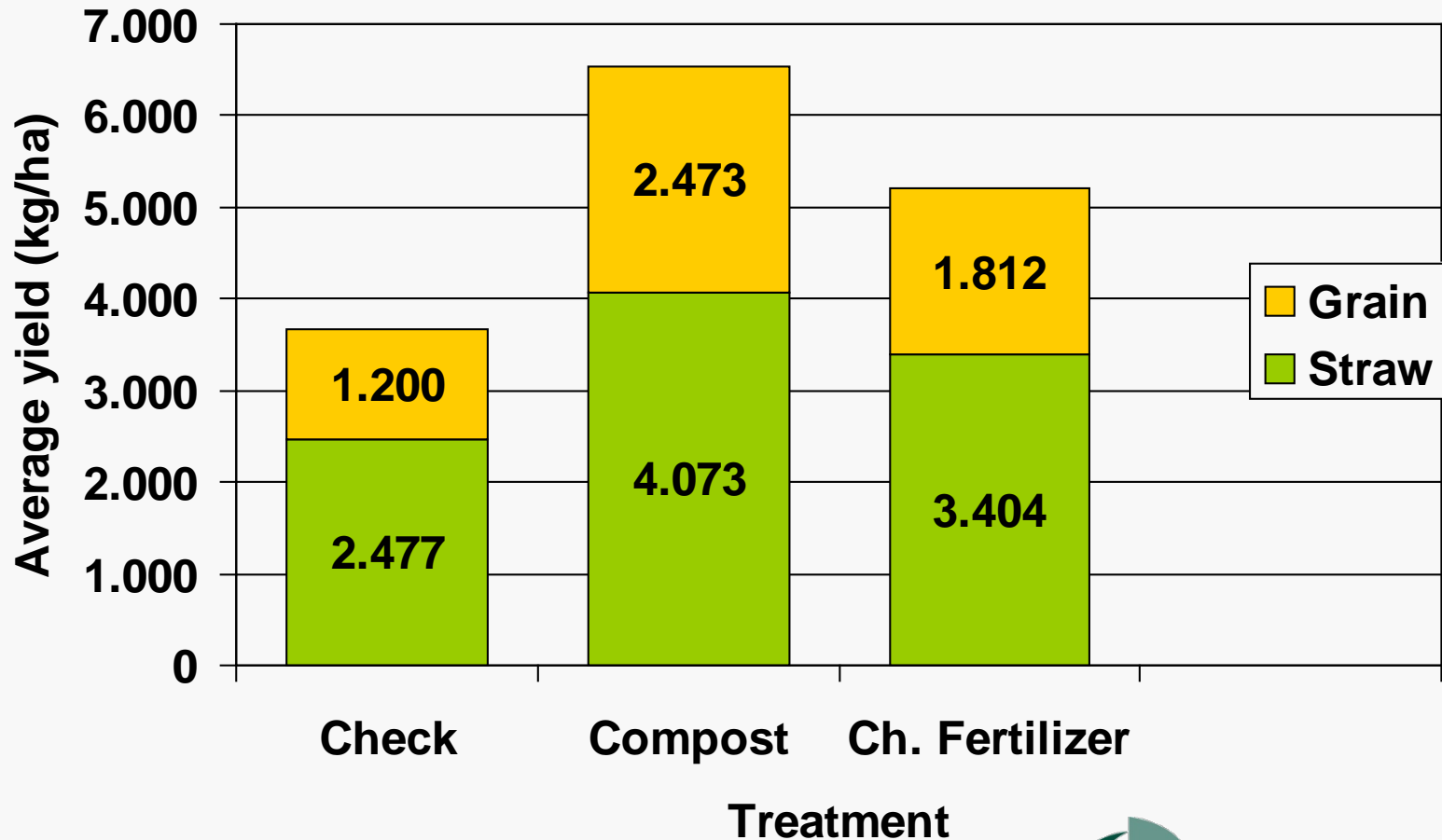
Composted Fababean
Akab Se'at, 2003



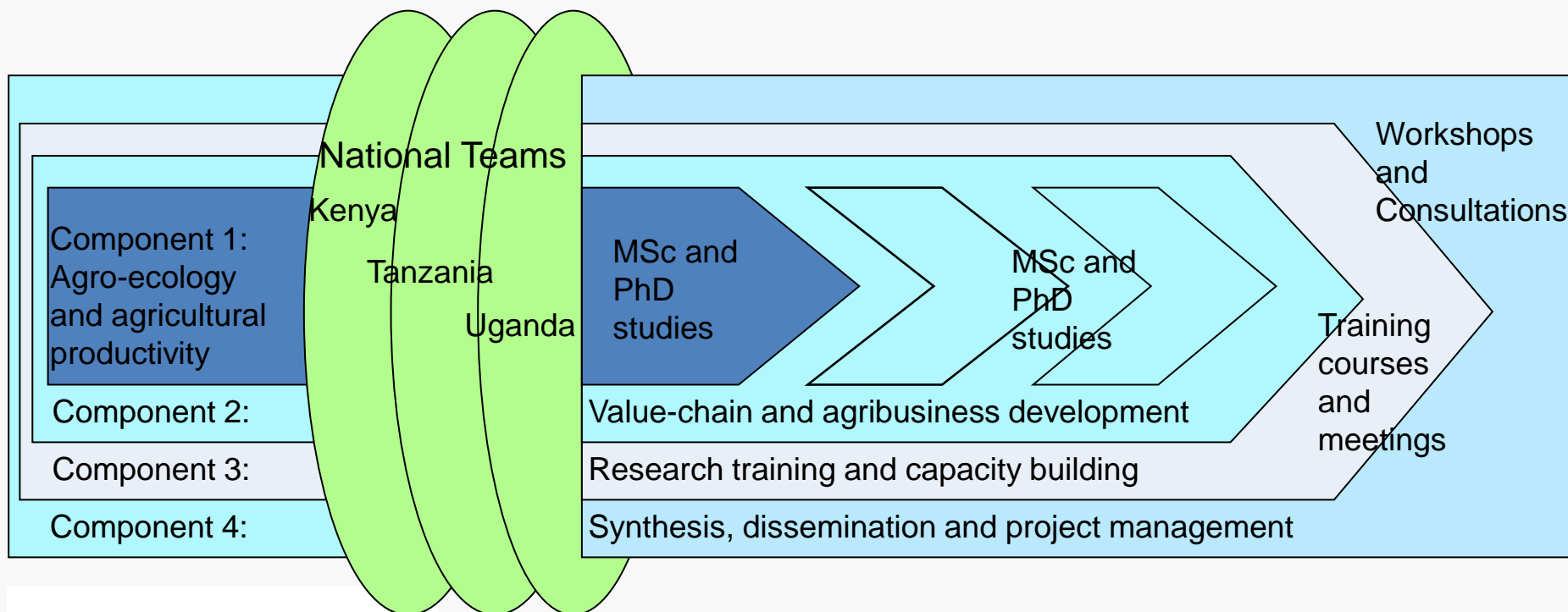
Non composted Faba bean
Akab Se'at, 2003

Yields have risen from less than 500 kg/ha on non-compost treated fields to around 2,500 kg/ha when compost is applied.

Figure 1: Average yields for grain and straw for all crop samples, Tigray, 2001-2006



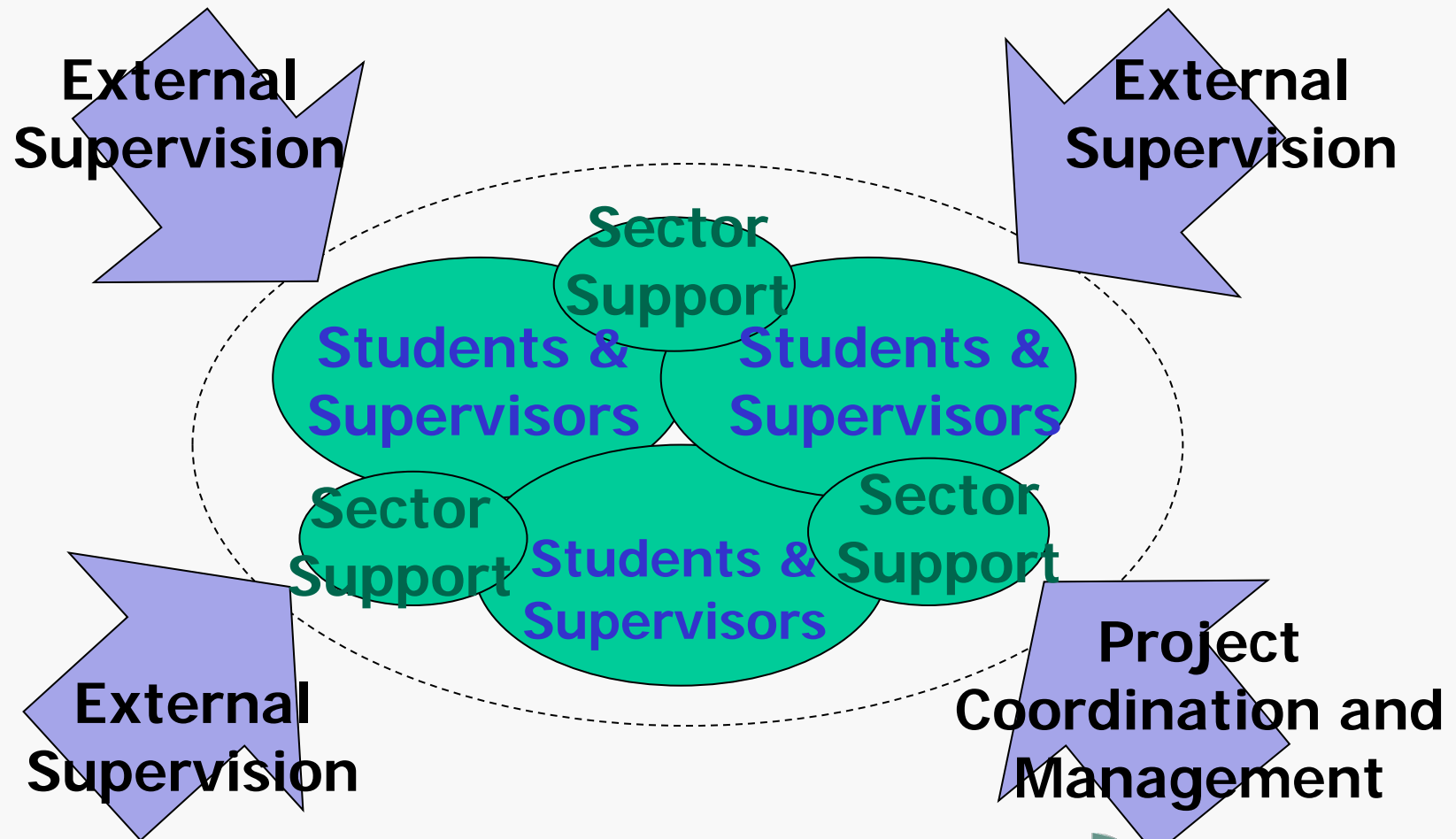
ProGrOV – Components/sub-projects



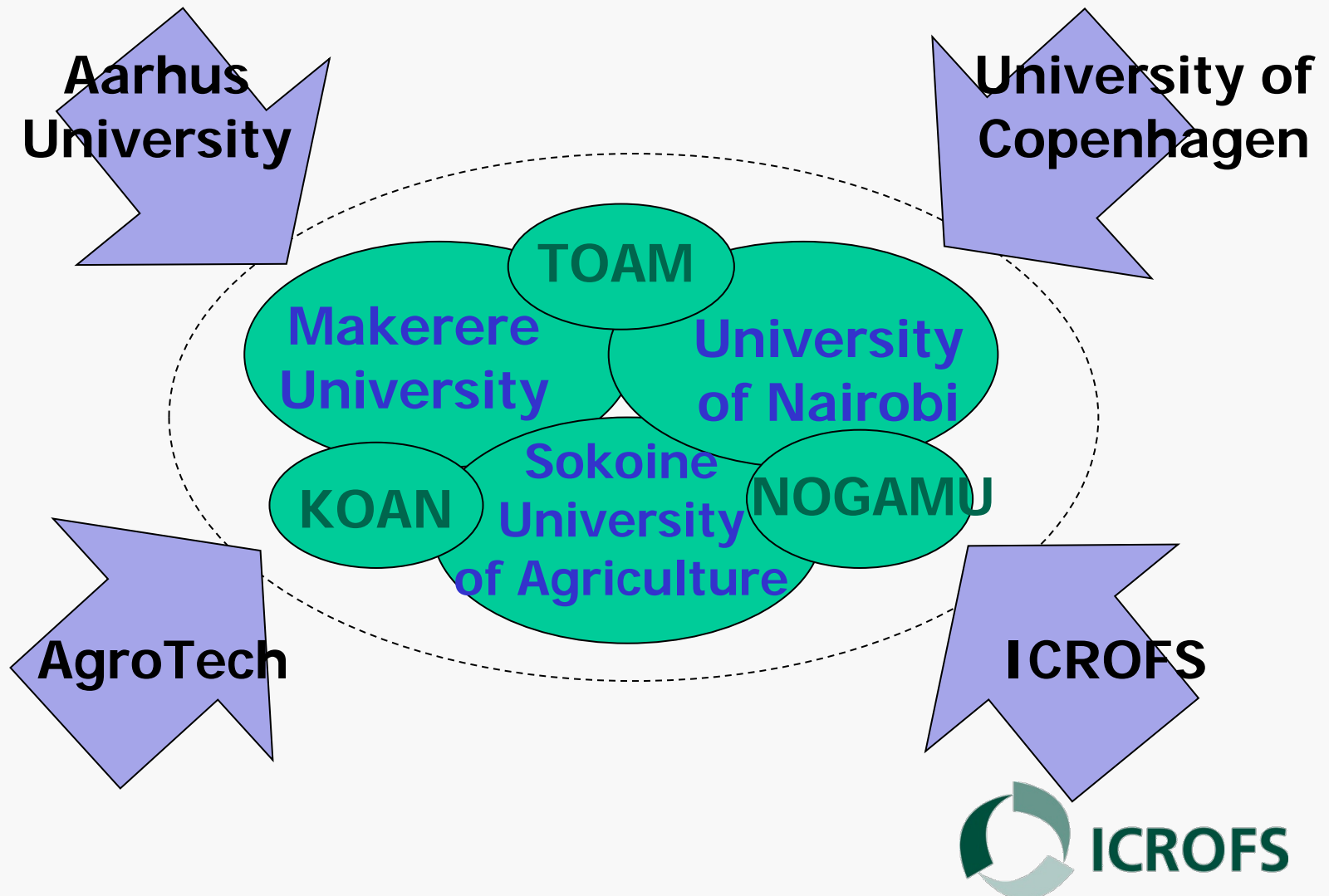
National teams:

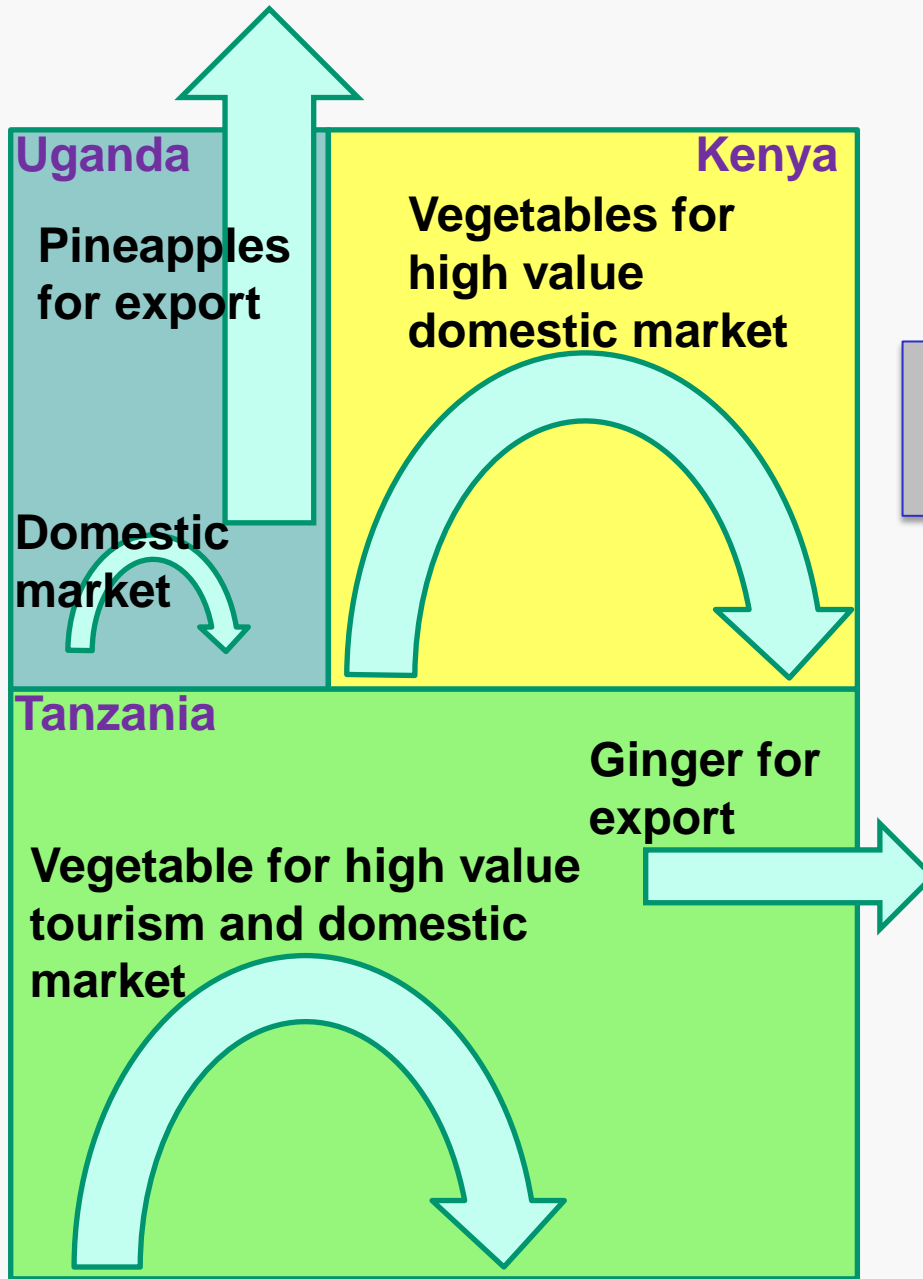
3 researchers/PhD supervisors and a representative from the local organic organization

The ProGrOV platform for R&D in agroecological/organic food systems



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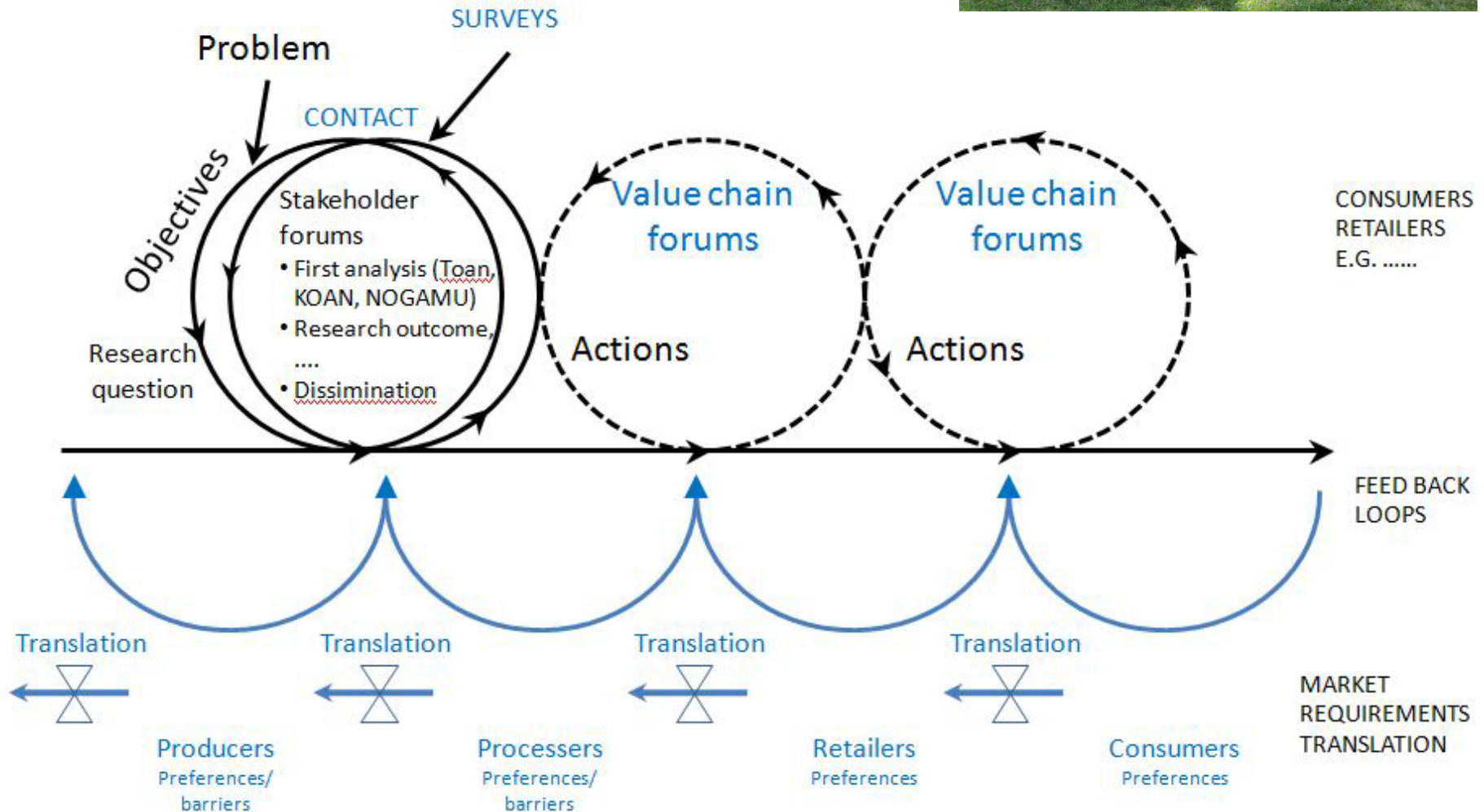




9 PhDs
6 MScs



ProGrOV's value chains approach



Organisation and governance of chains



Organic production in Lushoto Usambara Mountains, Tanzania



**Self-organized group of about 247
smallholders**

Organic, but not certified

**Selling directly to hotels & flight catering in
Dar-es-Salaam**

**Two truckloads of organic vegetables
every week**



Biggest challenge is transport:

- Long distance - more than 350 km
- No cooling of truck

Competition from exporting companies

Potential and Challenges for Accessing high value markets – feedback from stakeholders



The tourism sector

Potential:

- Environmental branding of the sector
- Cultural branding of the sector
- Network structure of food suppliers

Challenges:

- The image of Africa being organic by default
- The vision of what tourists want to eat
- The seasonality of the tourism
- Seasonality and perishability of agric. products

Potential and Challenges for Accessing high value markets – feed back from stakeholders

Local high value markets

Potential

- A market in development
- Branding via chefs and media

Challenges

- Fragmented markets, little market information
- Limited organic outlets
- Support - knowledge and organization
- Certification and PGS are poorly developed
- Limited market awareness of organic products



Survey by MSc
Josphat Njenga



Thank you