

Organic Farmers' Experiments – learning local knowledge in Austria, Israel and Cuba



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Overview

- Introduction
- Administration
- Methods
- Field research in Cuba
- Findings

Introduction

- Farmers' experiments have always been part of farming
- Adaptation to changing agro-ecological and socioeconomic conditions
- Why organic farmers?
 - defined organic farming long before the formal research
 - have always researched topics relevant to their production systems
 - have been responsible for many of the advances and innovations in organic farming
 - have become leaders and experts in this field
- To learn from this highly dynamic, innovative and successful movement





Aims

Study aims

- Identifying the motives, topics, methods and outcomes of organic farmers' experiments
- Understanding the factors associated with variation in organic farmers' experiments within and among sites
- Understanding the links between organic farmers' experiments and the local agricultural communication systems.

Project aims

- Inserting topic into scientific discussion
- Inserting the topic into lectures of BOKU
- Networking on this and related topics



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Memorandum of understanding

- Inter-Institutional scientific and academic exchange
 - University of Natural Resources and Life Sciences, Department for Sustainable Agricultural Systems
 - Experimental Station "Indio Htuey" (EEIH), University of Matanzas "Camilo Cienfuegos", Cuba.
 - National Institute for Agricultural Sciences (INCA), Cuba.
- Additional counterparts
 - Forschungsinstitut für Biologischen Landbau (FiBL), Switzerland
 - Research Institute of Tropical Fruit growing (IIFT), Cuba



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Labor & financial support

- 3 PhD students
- 4 MSc students
- 4 Cuban PhD students
 - Link to already ongoing PhD projects
 - Additional funds



- Fond zur Förderung der wissenschaftlichen Forschung (FWF)
- Stipendium für kurzfristige wissenschaftliche Arbeiten im Ausland (KUWI)
- Österreichische Forschungsgemeinschaft (ÖFG)
- Institut für Ökologischen Landbau (IfÖL)

Methods

- 10 months field research (2007, 2008)
- Mixed methods approach
 - Qualitative phase
 - 69 Semi-structured interviews during several visits
 - 34 Expert interviews
 - Purposeful selected sampling combined with snowball sampling
 - Quantitative phase
 - 34 Questionnaires
 - Random sampling
- Informal interviews, key informants, participant and non-participant observation, research diary, field notes



Field research in Cuba

- Kick off meeting and intermediate workshops
- Becoming familiar with Cuban (research) conditions
- Starting with exploratory interviews
- Interviews in company
- Limited access to (certified) organic farmers
- Bureaucracy
- Transport
- Communication





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Findings

Farmers' experiments and innovations in Cuba



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- Response to the economic crisis after the collapse of the socialist system
- Resource scarcity triggers innovative behaviour
- Farmers had to be innovative to overcome the crisis
- Opportunities for experimenting
 - Government supported sustainable agriculture
 - Urban agriculture movement
- Term „to invent“ is embedded in culture and parlance





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Example

Irrigation system



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Sawing machine



Biogas



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Disc plough



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Communication system



Farmer to extension agent



Cooperative meetings



Workshops



Farmer to farmer



Knowledge exchange encounters for Cuban farmers



Field visits

Biodiversity/innovation fairs



Conferences



Forum of science and technology



Institutionalizing farmers' experiments and innovations



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**Agricultural administration
provides favouring conditions**

**Organizational
learning**

**Upgrading farmers'
experiments
and innovations**



**Farmers'
participation**



**Institutional
acknowledgement**



Conclusions

- Cuban policy acknowledges social participation in knowledge development
- Acceptance of farmers' contribution by parts of scientific community
- Farmers' active participation improves dissemination processes and increases applicability of innovations
- Hierarchical structures sometimes hamper knowledge dissemination
- Information is disperse and access is limited
- Learning opportunities for farmers, scientists and extension agents
- Improving social knowledge pool
- Contribution to technological sovereignty
- Increasing adaptive capacity of farmers
- Building resilience

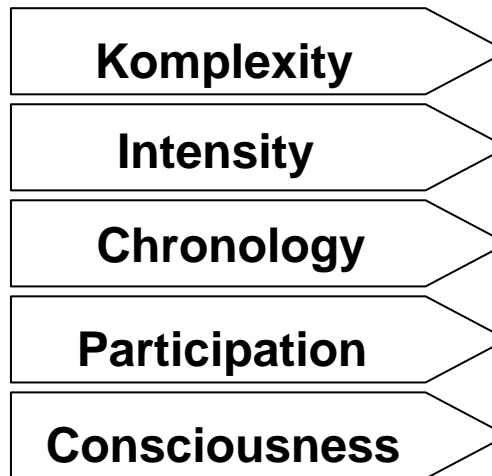
Farmers' experiments and innovations in Cuba



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Passive

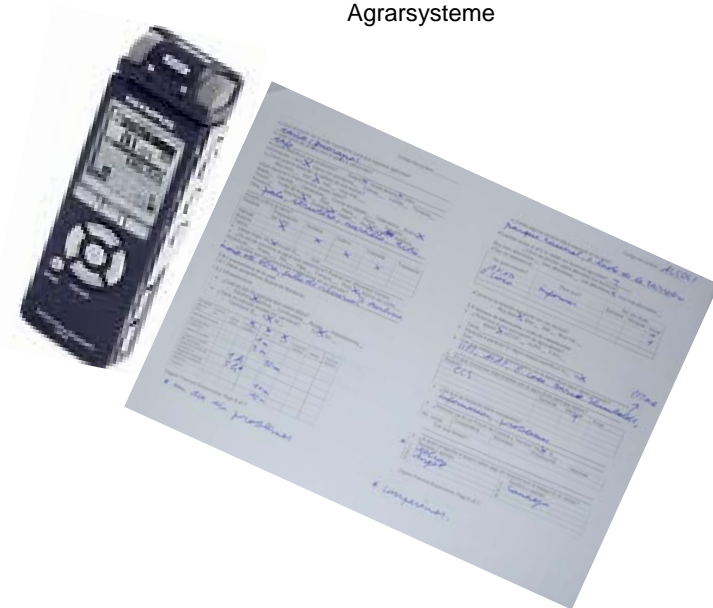


Active



Methods

- Same methods in Austria, Israel and Cuba
- Emic perception of farmers and experts
- Recording after Prior Informed Consent (PIC)
- Anonymity and confidentiality



Effective Microorganism



Processing



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