



## **KNOWLEDGE GENERATION AND EXCHANGE IN ORGANIC FOOD AND FARMING RESEARCH**

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# Outline

- Introduction to TP organics
- Why focus on knowledge?
- Four models of knowledge management
  - Linear to joint production of knowledge
  - What knowledge and what actors?
- Towards a European ecological knowledge systems

# From vision to implementation



Meetings & Workshops

Organic Farmers

Processors & Retailers

Civil Society

Organisations

Scientists

Consultations

SMEs

NGOs

TP Organic supporters

# 3 Themes & cross cutting issues

17 Key challenges  
61 Topic suggestions

Food quality  
and health

Eco-functional  
intensification

Empowerment  
of rural areas

Climate change,  
water,  
bio-diversity  
knowledge

Principles of  
health, ecology,  
fairness and care

# Implementation Action Plan (2010)

Organic food and farming represents a unique systems approach.

This brings a coherent set of innovations

- Further developing a participatory approach for knowledge generation and knowledge management
- First ideas for the FP8 research and collaboration
- Co-operation and networking



## The main points of TP Organics with regards to the bio-economy concept and Action Plan

**A bio-economy concept and action plan should have a much broader scope:**

1. Capturing all the innovative potential of the **whole agriculture and food sector** (not just the life sciences) but also other agriculture and farm management research capacities, and the innovative potential of SMEs etc.
2. Delivering **social benefits and public goods**.
3. Maintaining and further developing the organic food and farming concept and identity to **create a transparent relationship between producers and consumers**.

## Shaping the next EU Research Framework Programme

- **Eco-functional intensification.**
- **The economics of high output/low external input farming.**
- **Health care schemes for livestock.**
- **Resilience and “sustainagility”.**
- **From farm diversity to food diversity to the health and wellbeing of citizens.**
- **Creating centres of innovation in farming communities.**

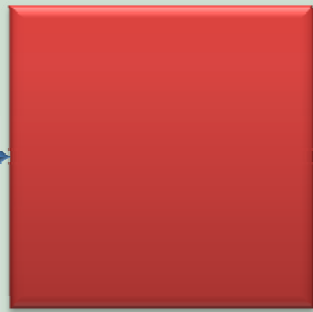
# Why focus on knowledge management?

- Knowledge drives innovation
- Important factors for competitiveness
- Also for agriculture
  - IAASTAD report refers to AKST (Agricultural Knowledge, Science and Technology)
- And especially for organic
  - Low-input and organic agriculture replaces inputs with knowledge and management

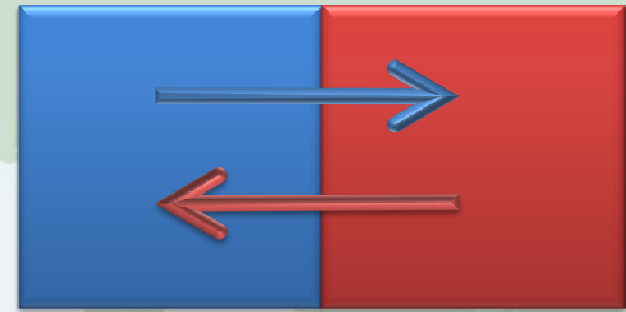


# What knowledge?

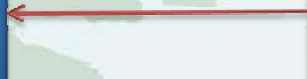
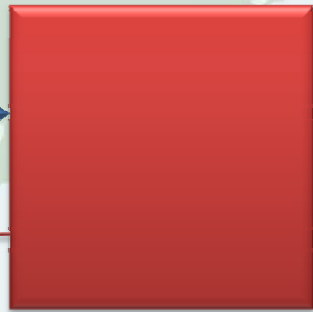
- Research knowledge (numbers/models)
  - Soils, plants, animals
  - Agro-ecology
  - Life-cycles and interactions
- Context knowledge
  - Markets and supply chains
  - Profitability and policy
- Experience (traditional knowledge)
  - In situ observation
  - Specific conditions



The linear model



The collaborative model



The feedback model



The joint production of knowledge model



Knowledge Producer



Knowledge User

After RELU (2007)

# European examples of participatory research

- Participatory breeding networks (various)
- Coaching for strategic decision (DE)
- Stable schools reducing anti-biotic use (DK)
- Organic weeds project (UK)
- Financial and other benchmarking, such as Organic System Development Group (UK)

# Why participatory research does not work?

- Who is in charge?
  - Neither farmers nor researchers/funders can set the agenda
- Multiple variables and multi-functional outputs
- Lack of management of expectations
  - Time input of farmers/stakeholders?
  - What data, what access?
  - Who has IP
- Lack of institutions fostering rigour in participatory and systems research

# Actors in joint knowledge production



# From the beginning to end

- ✎ Research needs (TP organics consultations)
- ✎ Setting research agenda
  - Designing the research activities
  - Experiments and implementation
- ☑ And finally: Putting it into practise



**Time and money**



# When is participatory work successful?

- ☺ Stakeholders are satisfied
- ☺ Make full use of the results
- ☺ Stakeholders keep their independence and their sovereignty of knowledge and property rights
- ☺ Real improvements in sustainability
- ☺ Transferable findings

# Diversity as an obstacle to knowledge sharing

- Multi-functionality a core strength of organic
- Diverse geo-geographical conditions
  - Soils and climate
  - Access to markets and inputs
- People diversity
  - Diversity of business and personal goals
  - Culture and traditions
- What knowledge is generic, what specific?



# Conclusions

- “Technology-transfer” no longer applies
- Agriculture is a human activity
  - Humans interacting with specific environment
  - No one-size fits all research model
- Implications for researchers
  - Not research FOR farmers
  - But working WITH farmers (and other interest groups)

# The challenge according to IAASTAD

How to manage effectively

- Collaborative generation of knowledge
  - among increasingly heterogeneous contributors
- Flow of information
  - among diverse public and private organizational arrangements

Step by step

if we know in which direction to go