The co-innovation work in PURE-IPM

Towards innovation-driven research projects

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IPM: what and why

- Pesticide use in agriculture: risks for environment and public health (users, consumers)
- EU policy (SUD): reduce pesticide use and impact by means of Integrated Pest Management (IPM).
- IPM: management strategy
  - Prevention
  - Decision support
  - Interventions
    - Non-chemical
    - Chemical

Photo: Jens Erik Jensen

PURE-IPM

- PURE-IPM: FP7 research project *'providing IPM solutions for selected EU farming systems'*
- Specific work package dedicated to exploration of co-innovation approach in four pilots:
  - Wheat-based systems: DK, F
  - Outdoor vegetables: D, NL
- Aim: development of the approach
  - action research

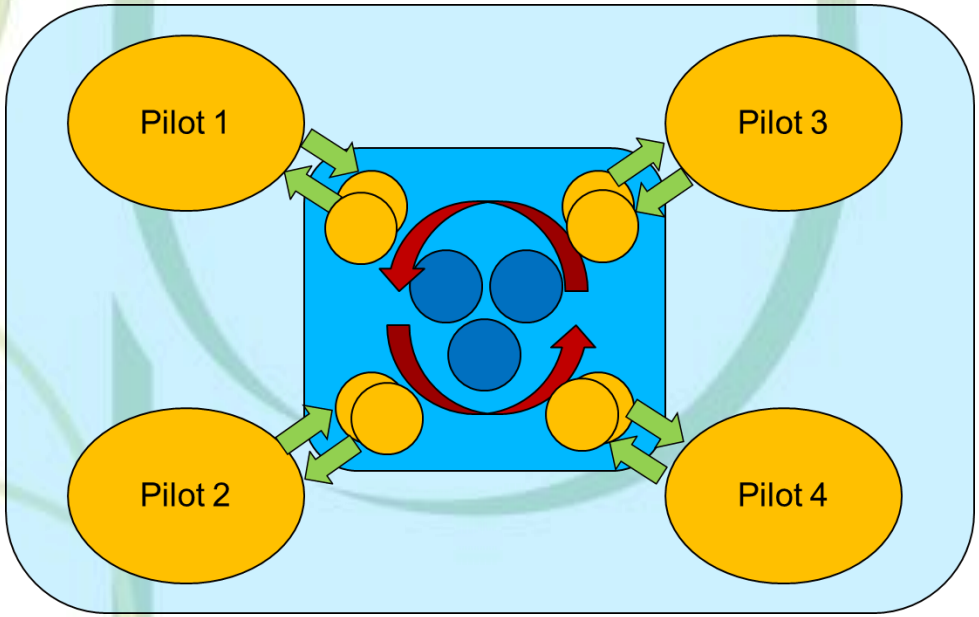
Co-innovation

- Characteristic
  - challenge or problem driven, focus on innovation
  - a multi-actor process, based on equality, different expertises
  - a social learning process
- Requires a different management approach
  - Exploration of challenges, agenda setting, system context, stakeholder involvement etc
  - Skills and tools

- Innovation:
  the implementation of a new practice that contributes to long term business continuation

Co-innovation pilots

- To develop a new practice for advisors & researchers:
  - Provide basic training, coaching,
  - Organise monitoring
  - Share learning
  - Group work as pilots
  - Monitor and evaluate: Action research



- Structure
  - Two persons/pilot interact with
  - Core team with facilitator, monitor and trainers (on demand)

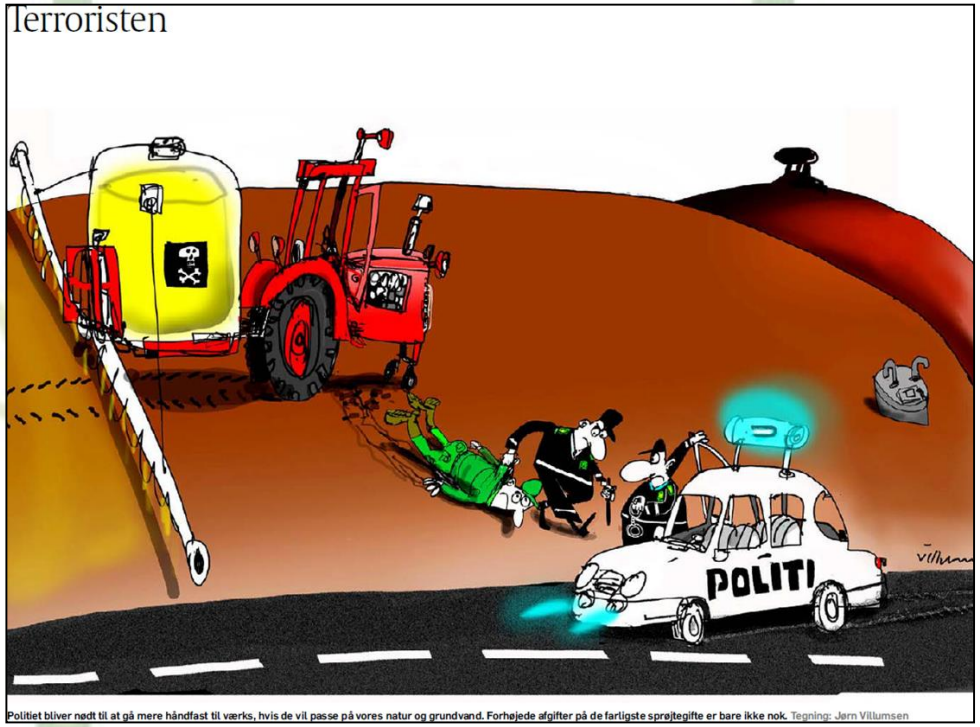
How we started

- Basic point of view:
  - IPM is a farmer-driven innovation in a
  - multi-actor context (public and private demands)
  - It is therefore multi-objective (economy agronomu=y ecology etc)
  - Pest management is integral part of the farming system
  - Start with farmers outlook on the future
  - Capture ideas and innovations

Denmark: facing the future

- Workshop with farmers and advisors
- Societal pressure on pesticide use
  - Scenario: ban on pesticides in the (near) future?
- Main problems perceived
  - Weeds
  - Diseases
- Solutions:
  - Wider row cropping
  - Mech. weed control
  - Variety mixtures

From a Danish newspaper



Denmark

- Main question of the farmers:
  - What are the practical, agronomic and economic effects?
  - Can we influence society, policy and farmers with this approach (experimentation and communication)?
- Different on-farm experiments:
  - With parts of the concept on different farms
  - Facilitated by advisors
  - Exchage experience
- Communication:
  - Open field day for farmers (mechanical weed control)
  - Presentation of farmer for coop board

Denmark

- Summer/autumn 2012 very bad weather conditions:
  - spraying unavoidable
- Yield result almost comparable to ‘standard’
  - Not bad, but still with spraying
- Issues:
  - Equipment
  - Practical skills
  - Impact at farm level (other crops)

France

- Start: INRA suggested management extensification, rejected by farmers (existing network)
- In 2012/13: co-design workshops for individual farms (research, advisory, farmers)

- Follow-up: different tracks
  - On-farm (implementation, experimentation)
  - Research / dissemination (general agronomical results)
  - Development of co-design approach (Reau *et al*, 2013)

Some reflections

- Co-innovation requires good facilitation
  - skills of facilitator and tools
  - different attitude needed from researchers and advisors
  - training & coaching

- Key elements
  - Exploring the future,
  - System context,
  - Stakeholder involvement,
  - (Co) design
  - Experimentation (conditions for)

facilitate learning,
reflexivity
dynamic learning agenda,

Project set up should allow dynamic approach

More reflection

- What's the role and function of (scientific) research for innovation in practice?
  - ITS NOT THE STARTING POINT
  - Research can have an important role (sometimes limited)
  - It starts with the challenge that is adressed
  - Providng input in the dialogue (status quo knowledge)
  - Listen and pick up innovations
  - Knowledge and innovation agenda
  - Engage in co-design and experimentation
  - More attention needed for innovation context
  - Research is not solely responsible for solutions and implementation, stakeholders need to be involved
  - Different actors different expertise different roles, respect that.

Co-innovation is not...

But it is...

Work in progress

With adequate road map, skills and tools
It can deliver lasting results.