IPM implementation as a mutual learning process

Dr. Irene Vänninen,
Principal Research Scientist (IPM and Knowledge Management)
MTT Agrifood Research Finland
Plant Production, 31600 Jokioinen
The object of activity* is the source of motivation for and the very reason of the activity: it drives and coordinates the actions of the individual(s) participating in the activity.

Object of activity for implementing IPM in the context of NAPs?

- a set of practices for managing agro-ecosystems
- ways of learning about agro-ecosystems
- ways of facilitating and supporting such learning
- resources

Transformation process: farmers must change their behaviour in order to achieve public goals.

Sustainable use of pesticides minimizes environmental and health risks

Who does what and how is this doing integrated?

Scientist/researcher-extensionist

Growers, other stakeholders, society = supportive institutional frameworks and actor networks

SUD 128/2009 EU = conducive policy context
Object of activity: what kind of IPM? Shared understanding of what is being implemented?

**Minimum fulfilling** of the requirements of EU framework directive, e.g. provide growers with static information sources by year 2013 and leave growers at those devices?

**Tactical IPM:** traditional, linear “add-on” transfer of uniform technology packages in the framework of the current agricultural knowledge system and cropping practices, with growers as the recipients of information and we, experts, as its suppliers?

**Strategic IPM:** Paradigm change which includes movement towards a new ecological knowledge system, new mutually beneficial roles of growers, advisors and researchers grounded on learning-by-doing and doing-by-learning and client-driven development of local solutions based on broad general principles?

Tools must be chosen according to the nature of the object!

Sustainable use of pesticides/minimized environmental and health risks
What is realistic in the context of the SUD as defined by the policy, resources for implementation, and the experience on previous successes of IPM implementation?

Are we forced to make a choice for knowledge transfer at the expense of knowledge creation when aiming at implementing IPM in the context of SUD?
Extension* is no more a persuasive device…(Garforth et al. 2003)

- …it should be management of knowledge and information systems so that farmers can get access to advice and information that will help them in their pest management decisions

- * extension=promotion of specific practices or technologies (Garforth et al. 2003. Improving farmers’ access to advice on land management: Lessons from case studies in developed countries. AgREN Network Paper 125. 24 p.)
Importance of learning

- People develop new knowledge by learning \(\rightarrow\) behavioral change (transformative change)

- Knowledge is personal and cannot be transferred (Röling, 1988).

- Schemes which facilitate learning, confidence building and motivation support knowledge creation instead of knowledge transfer:
  - When new skills and major strategic changes are required
  - When collective agreement or action is needed

Importance of learning

• "Tell me and I forget, show me and I may remember, involve me and I will understand."

• Don’t emphasize prescribed acceptable decisions and behaviours; instead build on broad principles and local development and client-driven solutions
How: participatory research contributing to IPM implementation

• Activity theory as a general principle and **Change Laboratory** as a tool for **local IPM innovations** and a **promoter** of participatory research  (Engeström et al. 1987)

• Strategic form of transformative intervention based on **expansive learning**
• Combines education, knowledge management and knowledge creation
• Aims to develop the features and linkages of the local knowledge system
• Combined with study of IPM concept formation in the process
• Beneficiaries-stakeholders: MTT, Pro-Agria, Univ. of Helsinki

*Participants of the 1st session of the Change Laboratory process in Finnish Ostrobothnia greenhouse cluster, spring 2011*
Participatory techniques and research → mutual learning of actors:

- Coordination
- Cooperation
- Co-construction: through reflective communication, the communities of interest reconceptualize an entire activity and their members reorientate their roles in the activity

Reorientation of roles for mutual learning:

• **Scientist** = not only an **expert**, but also a **learner**; needs new skills in facilitation of learning, conflict resolution and communication

• **Grower** = not only a **learner**, but also an **expert**; must be able to articulate her needs and be aware of available services

What is mutual learning in terms of interacting activity systems?

- **Boundary crossing** between activity systems

- At its best, it means finding and defining a **shared object** for interacting activity systems
Shared object of IPM implementation for the network of stakeholders’ activity systems?

Research+extension:
NB: Coordination also between these two!

Growers:

Potential contradictions between its components???
Thank you! and to:

- Greenhouse growers in Pjelax and Töjby villages in Ostrobothnia
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- Marco Pereira-Querol (same institution)
- Jenny Forsström, ProAgria ÖSL