

Farm-centred learning in rural development

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Key questions

- How do farmers and researchers learn about the environment?
 - What different knowledges?
 - What types of informal research and learning are farmers carrying out?
- How can researchers learn with and from farmers?
 - Challenges for scientists of working with farmers

Farmer learning and knowledge

- Incentives and constraints to adoption
 - 'Re-bugging the system' RELU project
- Farmers adapt and experiment for their own context
- Context specific knowledge required for more complex and diverse farming systems
 - Farmers make holistic assessments using multiple criteria
 - Experiential learning

Farmer learning and knowledge (Cont)

- Implicit and tacit approaches to learning
 - Do new things to learn with out considering it an experiment
 - Learning from accidents
- Roles of advisors and other information sources

Other RELU projects recognising different knowledges

- 'Management of Soils'
 - Understand the views of different stakeholders
 - Promote dialogue
- Tools for interdisciplinary research on rural catchments
 - Different knowledges including lay knowledge
 - Importance of livelihoods and entitlements

Other RELU projects (Cont)

- 'Understanding Loweswater; A study to generate new understandings of ecological, economic and social interactions'
 - Different kinds of knowledge
 - Locally oriented methodologies for crossdisciplinary research
 - Dialogue amongst farming families, environment agencies and scientists
 - Recognising issues of problem ownership and definition

Learning with and from farmers

- Focus on how farmers make decisions
- Interdisciplinary with challenges of
 - communication,
 - research methods,
 - institutional expectations
- Farmer participatory research
 - Building on and monitoring the types of experiments that farmers are carrying out already
 - Understanding how farmers use different criteria
 - The challenge of statistical significance v relevance to farmer's contexts

Learning with and from farmers (Cont)

- Building relationships between farmers and scientists
 - Acceptance of different ways of learning
 - Power relations and trust
 - Role of farmer groups- formal and informal
- Building on farmers' own dissemination channels

The balance of researcher and farmer control in research

	Researcher managed and implemented	Researcher designed and farmer implemented	Farmer managed and implemented
Design	Researchers design study and control all treatments. Farmers rent or donate land	Researchers design study around farmers existing practices and observe	Farmers or advisors decide on trial design and evaluation criteria. Researchers observe
Methods of data collection	Researchers control all measurements. Farmers invited to offer their opinion	Researchers collect what quantitative data they can and get farmers' opinions through interviewing	Researchers document farmers'/advisors' evaluation/ reflections at certain points during the season.

Other RELU projects examining participation of farmers in research

- US/European 'watershed alliances'
 - Community participation / ownership of problems
 - Focus groups/interviews with farming communities
- 'Landscape Intervention Decision Support Systems'
 - Understanding the incentives for farmer to be involved in conservation
 - Listening to the views of farmers
- 'Large scale experiments'
 - Observational studies of farmers' land use as well as manipulative experiments

Conclusions

- Multiple sources of innovation
- Going beyond the hierarchical view of research and extension
- Farmers are actively experimenting in order to adapt farming to specific ecosystems
- Less intensive and lower external input farming face greater complexities and need to adapt to their specific context

Conclusion (Cont)

- Scientists need to recognise different knowledges
- Need to find ways to promote a dialogue
- Awareness of the limitations of lay knowledge and scientific method
- Learning from less developed countries