



Session 2 - Farmers' perception of ecosystem services

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- Overview of work performed by all case study partners;
- Coordinated and summarised in various reports that will be made available on the QuESSA website by Balint Balazs, Jozsef Kiss, Philippe Jeanneret, and myself.

Deliverable D2.5

REPORT ON FARMER GUIDELINES

Deliverable D3.4

Report on the perception of benefits of selected ecosystem services

Deliverable D3.5

Report on “on-farm demonstrations” of the ecosystem services in case study areas





How did QuESSA assess farmers' perceptions to ES?

- On-farm demonstrations;
- Focal field farmers were involved in various activities throughout the project;
- Farmer guidelines based on research results were discussed with them for feasibility;
- Farmer interviews and focus groups were used to detect farmers' view on ESs.



On-farm demonstrations





Socio-economic analysis

- **Hypothesis 3:**

It is possible to develop a common understanding among farmers and scientists about the meaning of ESs.

- **Hypothesis 4:**

Conventional farmers appreciate economic benefits while organic/low-input farmers have eye for indirect, non-economic, benefits of ESs.

- **Hypothesis 5:**

Farmers generally perceive and appreciate more the local, on-farm, benefits of ESs than wider ES to society.





Results following focus groups

Hypothesis	Response following focus groups
It is possible to develop a common understanding among farmers and scientists about the meaning of ESs.	CONFIRMED– expect for one of the Italian groups.
Conventional farmers appreciate economic benefits while organic/low-input farmers have eye for indirect, non-economic, benefits of ESs.	Most partners could not attract organic farmers to verify this completely. Relevant differences found between old and young farmers, hobby farmers, etc.
Farmers generally perceive and appreciate more the local, on-farm, benefits of ESs than wider ES to society.	CONFIRMED in most countries





Which ES are desired by farmers?

Case Study Country	Desired Ecosystem Service
UK	Crop yield
The Netherlands	Pest control by earwig
Estonia	Soil fertility
Germany	Soil fertility
Hungary	Multiple services
Italy	Soil fertility
France	Landscape aesthetics
Switzerland	Crop yield through ES





The desired ecosystem services

- Soil fertility seems of most concern to farmers.
- Increasing crop yield through increased functional diversity is a theme farmers are interested in but generally they are not sure this works and they fear more negative effects than positive effects.





Gaps in scientific knowledge

- **Complexity** of interactions between pests, beneficials, the environmental conditions and crop management.
- Lack of management indications for **multiple ecosystem services**.
- Lack of **functional traits** of individual plant and insect species.





Gaps in knowledge transfer

- Knowledge is often confusing and contradictory → no clear regional or national management guidelines can be made.
- Existing examples of 'success stories' are only locally applicable.
- Databases not easy to use for farmers.





Gaps in technical solutions

- Machinery may not be adapted to small scale vegetation management aimed at local diversification of mowing times. For example big machinery is used and this can only be done if there is no crop in the field → Short time window → uniform vegetation management.



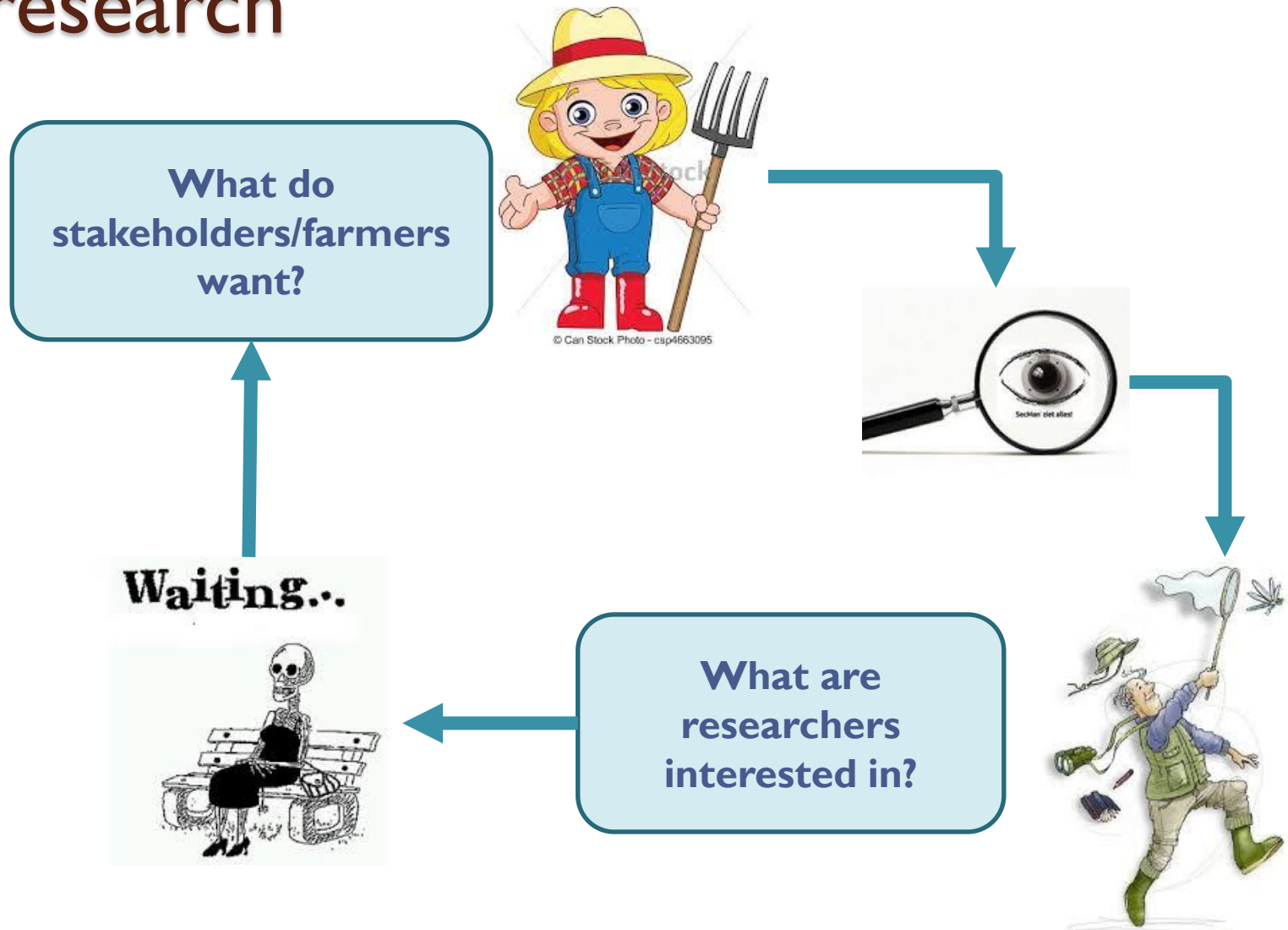


Conclusion

- ES provided by SNH not very predictable and only at local scale → more reasonable to develop **locally adapted policies to SNH** management based on ES desired and needed by local farming communities and society.
- Financial and technical support to farmers and SNH managers is needed for locally adapted SNH management.



Social acceptance of and support to research



Thank you for your attention

