PEGASUS preliminary results and tools

Workshop on how to enhance the sustained provision of public goods through farming – a focus on the CAP

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16 November 2017

The Hague, Netherlands
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• New EU maps to explore linkages between farm management systems and the delivery of public goods/ecosystem services

• Adaptive methodological toolkit for practice

• Implications for policy and practice

• Some policy recommendations

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 633814
EU maps to explore linkages between farm management systems and the delivery of public goods/ecosystem services
EU maps - Research questions

- Which farming and forestry systems are located where in Europe?

- How does management intensity affect the delivery of public goods and ecosystem services?

- What information can be drawn to feed current discussions on policy (incl. the CAP) and the role of public goods and ecosystem services?
EU maps - Method

MAP: LIVESTOCK INTENSITY

MAP: CROP CATEGORIES

MAP: INTENSITY of MANAGEMENT

MAP: LIVESTOCK SYSTEMS

MAP: AGRICULTURAL SYSTEMS

5x5km EUROSTAT STATISTICAL DATA ON LIVESTOCK DENSITIES

5X5 km EUROSTAT 3Farm data on 60 CROPS

MACHINERY
FERTILISERS
PESTICIDES
IRRIGATION
SEEDS

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EU maps – Zoom in on North-West Europe

Management intensity in agriculture

Cropping systems

- Agroforestry systems
- Grasslands and meadows
- Mixed systems with prevalence of arable and grass
- Mixed systems with prevalence of permanent crops
- Specialist field crops
- Specialist forage crops
- Specialist fruits and citrus fruits
- Specialist Olives
- Specialist Vegetables, flowers and horticulture
- Specialist vineyards
EU maps to link farm management systems with the delivery of public goods/ecosystem services

Economic benefits
- Production of agricultural biomass for human or animal consumption

Environmental benefits
- Water abstraction by irrigation
- Natural pest control potential
- Eroded Soil Organic Carbon
- Pollination Potential

Social benefits
- Abandonment / Population (change)
- % Jobs in agriculture

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EU maps - all indicators (EU level)
Some overview statistics (EU level)

<table>
<thead>
<tr>
<th>Category</th>
<th>Soil Organic Carbon loss on agricultural soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist vineyards</td>
<td></td>
</tr>
<tr>
<td>Mixed systems with prevalence of perm. crops</td>
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<tr>
<td>Grassland and meadows</td>
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<tr>
<td>Specialist Olives</td>
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<td>Specialist Vegetables, flowers and horticulture</td>
<td></td>
</tr>
<tr>
<td>Agroforestry systems</td>
<td></td>
</tr>
</tbody>
</table>

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EU maps – Emerging key messages

For the CAP post2020 major efforts are envisaged to target the policy towards delivery of public goods and ecosystem services.

The presented data and maps can be useful to support future policy processes:

- EU data & maps allow the broad characterisation of regions & farming systems according to the provision of ecosystem services

- For the ESS examined, the management intensity is generally negatively related to provision of ecosystem services like pollination and avoidance of soil erosion

- The provision of ecosystem services depends also strongly on:
  - The region
  - The types of farming system
  - the presence of Green Infrastructure
Adaptive methodological toolkit for practice

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Adaptive methodological toolkit for practice

• Why do we need a toolkit?
  – Demand for proven methods to design and deliver projects

• What is the toolkit?
  – Collection of possible actions to aid development and delivery

• What is its purpose?
  – Illustrate experience of PEGASUS case studies for replication

• What does it look like?
  – Web-based decision tree with 4 stages; development to delivery
Adaptive methodological toolkit for practice

- The toolkit is structured around the 4 main stages of a project/initiative:

  1 & 2
  - Initiation
  - Preparation

  3 & 4
  - Development
  - Review
Adaptive methodological toolkit for practice

• Stages 1 & 2 – Initiation and Preparation has 4 sections:
  – A: Defining the area/system, the challenge and its context
  – B: Understanding the People and their Roles
  – C: Exploring Drivers and constraints
  – D: Finding Solutions to current challenges through linkages

• Stage 3 & 4 – Development and Review has 2 sections
  – E: Tips for a successful initiative
  – F: How to effectively review an initiative

• All supported by guiding principles to suit local circumstances.
  – The toolkit contains 18 core guiding principles across the 4 stages.

• Illustrated with examples from the PEGASUS Case Studies.
### Stages 1 and 2 – Initiation and Preparation

#### Section A: DEFINING THE AREA/SYSTEM, THE CHALLENGE AND ITS CONTEXT

<table>
<thead>
<tr>
<th>Principle</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>What is missing and what problem needs to be solved?</td>
<td>What exactly is missing or what kind of ESBO-related problem needs to be solved with common action? What opportunity can be seen which has not been taken? What was the trigger that started the thinking around the initiative or where did the idea come from in the beginning? What ‘area’, ‘place’ or ‘system’ was considered to be central to the project or initiative in order for a change to be effective?</td>
</tr>
<tr>
<td>A2</td>
<td>What is the situation that you are concerned about?</td>
<td>What is the situation within farming and/or forestry that you are concerned about? How do these activities relate to the levels of, and trends in, particular ESBOs? What might be the potential to change the situation for the better?</td>
</tr>
<tr>
<td>A3</td>
<td>What was the trigger and what is the challenge?</td>
<td>Why is the possibility of a multi-objective initiative to deliver a range of benefits being discussed now? How can this be articulated so that it is attractive to a range of actors and interest groups?</td>
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</tbody>
</table>
### Section B: UNDERSTANDING ACTORS AND THEIR ROLES

<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| B1 | Understanding the relevant actors and their interests | Key to the successful context for an initiative is a good understanding of the relevant actors; how they inter-relate; and how this affects the provision of environmental and social benefits, in their specific situation. All the relevant actors in the system need to be identified, and some contact made with them. They would normally include:
  a. land managers, farmers and/or foresters;
  b. those to whom they supply their products and/or those that they obtain their supplies from;
  c. those who (wish to) enjoy the environmental and social benefits that the farmed or forested land could forestry actions; and
  e. those whose policies or institutions critically affect the behaviour and ‘room for manoeuvre’ of these key actors. This could include policy-makers, support services, social or economic institutions to which the key actors belong, community leaders, those whose role has been to deal with difficult or disruptive local A gradual process which allows time to reveal and consider the main concerns and needs of different groups of actors, during a period when the idea for an initiative is first explored, can enable the identification of how these concerns and needs could be addressed or supported, through the initiative. This can help to build a common vision for what it might be possible to achieve together. |
| B2 | Bringing actors together | Ideally, actors should be brought together in a variety of ways, so that they can begin to exchange information and opinions concerning their role(s) in respect of provision, and their other priorities and needs. The precise sequence of how actors become involved, and when, will vary according to the local context, but the aim is that all need to be part of the process at some stage. Leaving key actors out of the process is likely to lead to problems as the initiative develops. As a general rule, those likely to be influenced by decisions should be included from the start. Of course not all discussions go smoothly, so plans might need to be changed in order to resolve disputes or to keep the majority on board. Bringing groups together should be approached carefully and with sensitivity to social dynamics. If there is an obvious individual who could act as a ‘bridging’ person – knowing two contrasting groups who don’t generally trust each other – that person can be invaluable for making the first moves to improve communication, and advising on how it might be most simply achieved. Equally an independant person can be a crucial mediator B3A. |
### Adaptive methodological toolkit for practice

**Stages 1 and 2 – Initiation and Preparation**

### Section C: EXPLORING DRIVERS AND CONSTRAINTS

<table>
<thead>
<tr>
<th>Principle</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>Understanding the linkages and connections between the different actors and the context in which they are set.</td>
<td>Understanding the multiple relationships and interactions between each type of actor and the provision of environmental and social benefits ESBOs is key to identifying potential change to improve the situation. DRIVERS will include economic, human and social, cultural, natural and institutional elements and trends, as well as appreciation of the ESBO by society and the public (is it growing, declining or low?). This builds on the Stage 1 and 2 activities. There are several aspects to consider here and they are covered in C1A-E</td>
</tr>
<tr>
<td>C1A</td>
<td>Economic viability</td>
<td>The economic viability and/or potential returns from different production systems, including requirements to management of relevant resource can be an important influence upon structural and technical change in a land-management sector.</td>
</tr>
<tr>
<td>C1B</td>
<td>Local Social factors</td>
<td>Social factors can be an important driver or motivator for change. The need to provide a brighter future for the next generation can stimulate action; as can a feeling that others need our help.</td>
</tr>
<tr>
<td>C1C</td>
<td>Cultural heritage and tradition</td>
<td>Culture, heritage and tradition can be a source of pride and energy for positive developments – where individuals or communities see a value in strengthening and preserving customs and traditions unique to a particular place or landscape; or protecting key features and symbols of regional or local identity.</td>
</tr>
<tr>
<td>C1D</td>
<td>Signals from wider society</td>
<td>What are the signals from society towards collaborative activity and how does this impact on actors’ preferences (e.g. for cooperation, reciprocity, trustworthiness) Are the signals “loud enough” in the society/between stakeholders, or is this hidden? (this is one of the key prerequisites of healthy society, when actors can recognise each others’ preferences and aptitudes – this is regarded as negative feature of society in Czech Republic, while a large number of studies show that as an important factor for collective action success).</td>
</tr>
<tr>
<td>C1E</td>
<td>Natural variables (e.g. climate, disease)</td>
<td>Natural variables like climate and disease can also be important influences or drivers of practices – e.g. where increasing presence of herbicide-resistant weeds in arable crops stimulates farmers to look for alternative husbandry techniques and learn more about soil management for crop health.</td>
</tr>
</tbody>
</table>
Adaptive methodological toolkit for practice

Here is an example to illustrate how the toolkit works:

Processed tomato supply chain in northern Italy (IT1)

Problem:
- High use of water & soil
- Challenges with fertiliser etc.
- Demand for healthy food

Trigger:
- Impact on economic sustainability
- Attractiveness of joined up solution

Action:
- Linking different people in production chain
- Series of meetings and activities

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Adaptive methodological toolkit for practice

• Feedback: We would like your feedback on the toolkit
  – What is the best way to make the toolkit accessible to the people and organisations who need it?
  – What experiences do you have of toolkits that we can learn from?

• Timescale: will be ready by the end of the project
  – Launch in January 2018
  – Chance to discuss over lunch-time session
Implications for policy and practice
Implications for policy and practice: current situation

• There is a range of drivers of ESBO provision in rural areas – policy is only one of these
  – Interplay between policy, market drivers and collective action over time is key

• Current policies have weaknesses e.g.:
  – Difficulties in bringing about long term shifts in behaviour amongst farmers/foresters – motivation and knowledge gap
  – Encouraging collective/collaborative action currently limited: fear of adding a further layer of complexity – governance issues, more transaction costs, admin burden, etc.
  – Strong reliance on budget for incentive schemes (mainly CAP)
  – The lack of connection with the market and private entrepreneur solutions

• Regulation can be a powerful driver in some specific cases:
  – improving water quality in catchments,
  – safeguarding biodiversity

• Policy alone is often not sufficient to trigger action
New approaches required

- Increasing engagement and commitment to ESBO provision amongst stakeholders at all points in the policy cycle
- Greater investment in fostering collective approaches, including in territorial and local supply chain initiatives
- More emphasis on stakeholder consultation and wider engagement, including in project delivery (social capital investment)
- Adjust policies (EU/national) to enable:
  - Greater use of facilitation
  - Support for innovation
  - Greater focus on outcomes and results
  - Pilot projects
  - Working with the private sector
- Greater coherence and less overlap between policy tools
- Build on the Cork agenda – greater programming and tailoring of policy to local / regional priorities and issues
More emphasis on collective approaches

- **Rationale**: to achieve action at the landscape/territorial scale or along supply/value chains; to sustain practitioners’ engagement in the long run
  - More sustained commitment, greater sense of ownership of all those involved
  - Better identification of synergies and trade-offs between objectives
  - More tailored and effective design of tools and mechanisms to achieve the commonly agreed objectives

- Governance issues critical: challenges of
  - potentially higher transaction costs
  - maintaining clear accountability
  - building trust and possible uncertainties over outcomes

- Individual group dynamics vs. local, regional, national and wider EU needs (balance required to ensure effective outcomes for public goods and ecosystem services)

- Many parts of the EU historically-less inclined to engage in collective approaches, e.g. CEE countries

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Collective approaches – emerging ideas

- Mainstreaming collective action in policies, esp. RDPs – to become the norm rather than the exception
  - Joined up, multi-actor initiatives to become more widespread
  - Particularly for action across a territory/landscape or along supply/value chains
  - Availability of single measure might be insufficient, as the last reform showed
  - Need to make sure the support necessary is available and sufficient to cover the actions required

- Consider a mix of top-down guidance with bottom-up approaches, to guide the direction of the collective action and ensure what is being delivered is in line with landscape- or regional-level objectives.

- Use funding to increase the use of advisers and facilitators to support the setting up of new / help increase the role played by existing collective initiatives for ESBO provision

- Greater opportunities used to pilot new approaches to build up new ideas and initiatives where collective action could be applied – remove the fear of failure - e.g. collaborative approaches to managing Natura sites.

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Better deployment of market mechanisms

• **Rationale:** to sustain practitioners’ and consumers’ engagement in the long run; to increase resources for ESBOs and reduce reliance on public budget
  + Encourages farmers to see ESBO provision as something that can be rewarded via the market, not simply via contracts
  + Highlights the alignment between consumer demand, production, and society’s demand for ESBOs
  + Provides a more stable, long term, private source of financial support for land management through private companies and markets
  + Private actors down the supply chain have great market power and can have a wide ranging and rapid impact on ESBO provision. By altering their business practices, they can establish new norms.

  - **Green washing**, risks of vagaries or impermanence in markets
  - Cultural and political entities may be reluctant to involve non-public actors to deliver public policy objectives; accountability issues
At EU/MS level, agriculture and forestry policy instruments and measures should seek, where it makes sense and with appropriate safeguards, to involve private actors on a much more generalised scale:

- Involvement in the design of RDPs and regular reviews of progress on their delivery?
- Examine potential market opportunities that would fit alongside national/regional ESBO priorities and delivery?
- Blend private and public money to achieve desired outcomes – scaling up and in different institutional settings
- Ensure primary producers (farmers, foresters) receive a fair share of the market premiums associated with the delivery of the ESBOs they provide
- Find ways to incorporate an environmental dimension within currently economically focused groups – e.g. producer groups / inter-branch organisations etc

Apply more market-like thinking to policy:

- Focus on performance, results and outcomes
- Mechanisms for purchasing ESBOs – e.g. auctions
- Use private actors’ marketing knowledge to motivate practitioners’ behaviours to deliver policy objectives, e.g. rewards for first movers – higher payments, free training / resources,
- More tailored advertising of policy measures available to practitioners linked to relevant priorities, issues and related benefits in a local area.
New dynamics in rural development – our recommendations

• Engender a cultural shift to fundamentally increase ESBO provision on a far larger scale than currently – social dimension becoming more central, motivating behavioural change and long-lasting action

• Follow Cork 2.0 with a new strategic refreshment of key aspects of rural development policy with strong focus on ESBO delivery
  – Mid-term reprioritisation of RDPs – in light of enhanced AIRS
  – Give appropriate attention in the CAP post 2020 strategic and regulatory framework (legal solutions, prioritising)
  – Develop more guidance on the legal and strategic frame for purchasing ESBOs, e.g. auction based approaches

• Shift towards an emphasis on collective approaches alongside the development of more market and results based policy focus; matching adjustment to CAP financial control systems.

• Multi-actor engagement and collective action to become the norm rather than the exception

• Enhance stakeholder engagement in the review of RDPs and future planning, expand space for local and pilot schemes
Thank you for listening!

For more information, contact us!

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