

Mechanisms fostering environmental and social benefits from agriculture and forestry in the 34 PEGASUS case studies

A major element of the PEGASUS project are 34 case studies on initiatives enhancing the provision of environmental and social benefits by agriculture and forestry carried out in 10 European countries. The case studies explored in particular market-based and multi-actor mechanisms and approaches. The case studies applied a ‘Social-Ecological Systems (SES) framework’ (adapted from McGinnis and Ostrom 2014¹) alongside an action-orientated and transdisciplinary approach. The aims of the case studies have been to understand the mechanisms – particularly market-based and other collaborative mechanisms – that targeted land use and land management, as well as the various factors impacting on the development and the functioning of the initiatives and, through them, on the provision of environmental and social benefits.

Actors and factors driving the emergence of collective initiatives

We identified a wide range of drivers that triggered the emergence of initiatives. They often depend on the leadership and motivation of specific individuals or groups who has some knowledge, awareness or interest in preserving and enhancing one or multiple environmental or social benefits. In all initiatives studied, collaboration between primary producers (land managers such as farmers or foresters), private sector (commercial non-primary producers), public or civil society actors and NGOs is a key element in the mechanisms that support the provision of benefits. Figure 2 clusters the case studies according to the main actors and types of collaborations.

Environmental and social benefits targeted by the initiatives

The initiatives studied in PEGASUS have a clear focus on 3 out of the 19 identified ‘beneficial outcomes’: species and habitats, rural vitality, and landscape character and cultural heritage. Often they are delivered together. A reason for the under-representation of certain outcomes could be that there is less knowledge of their positive impacts, or that they are closely associated with others, e.g. pollination with species and habitats. The coverage in the case studies has to be regarded as a result of preferences and choices in the case study selection process, and cannot be seen as a measurement of importance or occurrence.

Mechanisms

There is a close linkage between the types of actors and the mechanism used to foster environmental and social benefits. Initiatives with a strong collaboration between primary producers and private actors use value chain approaches with labelling or certification (e.g. NL-1, IT-1, AT-1 – see table for case study codes), institutional structures and marketing activities. In a few examples, private actors have been found to engage in other type of mechanisms, such as training and advice or compensation schemes (e.g. FR-2). Public-driven initiatives are often based on spatial planning, designation of protected areas, or particular rural development and agri-environmental schemes. Land

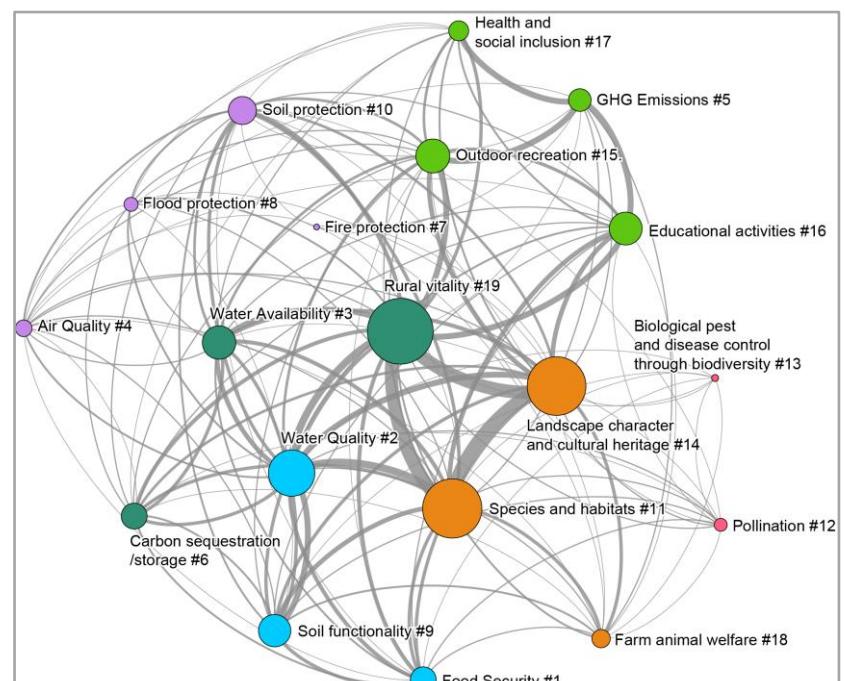


Figure 1 Joint provision of environmental and social benefits in the 34 PEGASUS case studies. Centrality measured (nodes of one colour form one cluster).

¹ McGinnis, M. D., Ostrom, E., 2014. *Social-ecological system framework. Initial changes and continuing challenges*. E&S. 19.



purchase and management through e.g. NGOs has been a strategy in some cases where other forms of collaboration were found too difficult to implement (e.g. CZ-2). Territorial approaches have been found across many types of diverse initiatives (e.g. AT-2, DE-1, FR-1, IT-4) and can be particularly successful in promoting a joint provision of a range of environmental and social benefits.

Figure 2 PEGASUS case study initiatives clustered by main (collaborating) actors



Further reading: Sterly, D Baldock, J Dwyer, K Hart, C Short, 2018. *Synthesis report on cross-cutting analysis from WP1-4. DELIVERABLE 5.1 PEGASUS - Public Ecosystem Goods and Services from land management – Unlocking the Synergies.*



No.	Case Study Title	Main mechanisms of the initiatives
Producer/land owner-driven		
IT-1	Processed tomato supply chain in the Tomato District of northern Italy	Interregional large-scale supply chain; innovative agricultural practices to reduce costs and increase crop competitiveness
IT-4	Niche products and tourism in Tuscany	Coordinated and integrated initiatives and policies, some CAP support for niche products and tourism in order to maintain and sustain the “rural identity”
PT-1	Montado extensive silvo-pastoral system in Portugal	Market drivers mixed with socioeconomic and political drivers and the need to ensure income are leading land managers to focus rather on short-term benefits, leading to intensification in grazing which have serious implications on montado loss.
PT-3	Intensive olive production in the Alentejo	Intensification in relation to irrigation infrastructure development, CAP subsidies, NATURA 2000 management
Private (non-land management)		
AT-1	Organic farming label in the mountain Murau region	Price premium for high quality milk from specific and localised production system
FR-2	Volvic water company, management agreements and agri-forestry	Provision of subsidies to farmers/foresters for appropriate land management and technical innovations to manage the risk of water contamination
NL-1	Grazing systems in dairy production	Branded cheese ‘Beemsterkaas’ is produced from defined outdoor-grazing systems
NL-2	Farmer, beer and water – sustainable agriculture and sourcing in Limburg province	Social platform (Farmer, Beer and Water) initiates sustainability projects aimed at conserving groundwater resources
UK-4	Care farms	Therapeutic use of farming practices; and an organisation, in the form of the Care Farming UK network
Producer – private sector		
IT-2	Bergamot, niche and organic products in Calabria	Consortia trying maintaining the economic viability of distinctive bergamot production through market integration and cooperation in the food chain as well as CAP derived aid
EE-1	Marketing of local, organic and farm food	Marketing of local farm, artisan and organic food from small-scale producers/processors through the shop-in-shop approach
EE-2	Grass-fed beef	Whole value chain approach (production-processing-marketing) of grass-fed organic beef led by farmers NGO Liivimaa Livaheis
FR-1	Agriculture and forestry in Pays de Langres, France	New quality labels in dairy production (PDO), territorialized farming systems, innovative forest management
NL-4	Skylark foundation: a farmers' association for sustainable arable farming, supported by supply chain partners	Sector based funding mechanism (farmers and production related companies) to improve management in intensive systems e.g. to support buffer strips along field margins in return for land to be leased elsewhere
Producer - citizens		
PT-2	Small scale peri-urban mosaic in Montemor-o-Novo	Collective action by farmers and the linkage with other actors; Raising awareness about the value of rural life and increasing appreciation of aspects of it. Reviving/re-establishing local supply chains and more direct connections between smaller-scale producers and consumers.
SI-1	Mountain wood certification project	Private initiatives connecting producers and consumers (re mountain wood)
Producer - public		
FR-3	Agriculture and forestry in Parc National des Cévennes	Permanently inhabited national park with UNESCO world heritage status, interactions with land managers
IT-3	Agriculture in natural parks in the Marche region	Agri-Environmental Agreement (AEA) with a package of RDP measures including advanced IPM techniques and information



		actions. Farmers adopt new techniques helped by local extension agency
NL-3	Nature management and regional planning in Drenthe	Landscape management through local actors ('Boermarke' institute) Bottom-up process: initiatives by local people are practically supported by a landscape management facilitator and financed by the municipalities and the region Drenthe
Citizens		
SI-3	Agriculture-based development strategies for areas hit by economic crisis	Spreading innovative farming practices; key are extension services, nature park organisation, and individuals
AT-2	S-E-S in the Biosphere Reserve Lungau (Salzburg region)	Biosphere reserve in combination with different support schemes
CZ-3	Letting forests to their natural succession in Liberec region	Enrichment of commercial forest to near-natural forest, purchase of land
NGOs		
AT-3	Mountain forestry and ESBO provision in mountain area Pinzgau	Forest management under the Federal Forest Act (ForstG 1975) and various other legislations
CZ-2	Birds and amphibians support on wet meadows	Ecological enrichment of managed grassland through modified irrigation system and nature-friendly agriculture on a private reserve „for birds and for the people“ (purchase of land)
SI-4	Nature conservation enabling social security in farming in Središče ob Dravi	Potential nature park establishment in riparian forest and mosaic landscape
UK-2	Hope Farm with intensive, sustainable arable farming in the east of England	NGO-owned and managed farm to test and demonstrate management practices to support and enhance farmland bird populations
Public		
CZ-1	Biodiversity rich meadows payment in CZ	Agreed tailoring of national and CAP measures (contracts) between administrations and farmers, NGOs filling the gaps in management – complementing the government incentives
DE-1	GrünGürtel Frankfurt (Green Belt Frankfurt)	Spatial planning in combination with nature conservation legislation and landscape protection
EE-3	State Forest Management Centre	Public management of campsites, study trails and educational infrastructure by the Estonian State Forest Management Centre
SI-2	Recreation in urban forests in Ljubljana, Slovenia	Mainly public management in a symbiotic relationship between owners, managers and visitors
Multi-actor		
DE-2	Traditional orchard meadows in Hessen/Baden-Wurttemberg	Surcharge initiative; value chain development based on organic certification and regional branding that can be connected back to traditional orchards
DE-3	"Regionalwert AG" Freiburg / Hamburg / Munich	Provision of capital for investments in organic farms and businesses through a citizen shareholder corporation
UK-1	WILD river basin management initiative	The strategy is to involve farmers and local communities in developing the understanding and commitment to the actions needed and sustained effort.
UK-3	North Pennines multi-stakeholder partnership for sustainable uplands	UK Lottery Funding for a Heritage Landscape Partnership project, to generate environmental and community benefits by encouraging organisations and agencies to work together on various local initiatives

