



**“Spurring Innovations for forest ECosystems
SERvices in Europe”**

2018-2021

Davide Pettenella, Sarah Adams, Giorgia Bottaro,
Mario Torralba, Georg Winkel, Sven Wunder



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101019122

www.sincereforests.eu



**SPURRING INNOVATIONS FOR FOREST ECOSYSTEM SERVICES IN EUROPE
(SINCERE)**



Sustainable forests for a sustainable future

Research and innovations for the services that forests provide to society	Novel policies and new business models to support forest services	Connecting knowledge and expertise from practice, science and policy across Europe and beyond	Local stakeholders play a key role in design, implementation and evaluation in eleven case studies
---	---	---	--

06/02/20 2



THE CHALLENGE

- People's demands of forests are dynamic and evolving
- Different ecosystem services might have synergies or require trade-offs
- Different responses from forest owners & managers: limited income from non-biomass services
- Partial conflicts and stalemate



Can be the starting point for innovation!

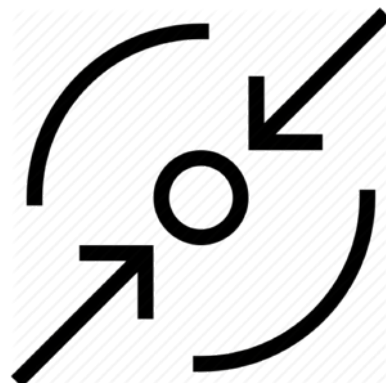
06/02/20

3



SINCERE OBJECTIVES

- Review and analyse **innovations related to forest ecosystem services**
- Develop, implement and analyse innovation action **case studies**
- Run a **Learning Architecture** for these innovations
- Synthesise knowledge & upscale findings into **transferable innovative mechanisms**
- Work towards a coordinated **European Policy Framework** for forest ecosystem services provision



06/02/20

4



SINCERE PROJECT OVERVIEW



Review and analyse innovations related to forest ecosystem services

Develops novel policies and new business models for FES

Links practice – science – policy

Supports 11 case studies in Europe, Peru and Russia

Co-learning architecture

Towards a European policy framework

06/02/20

5



WHAT WE DO

- Review and analyse innovations related to forest ecosystem services
 - Develop, implement and analyse innovation action case studies
 - Run a Learning Architecture for these innovations
 - Synthesise knowledge & upscale findings into transferable innovative mechanisms
 - Work towards a coordinated European Policy Framework for forest ecosystem services provision
- Scientific reviews and survey with landowners
 - 11 case studies: 9 across Europe, 1 Russia, 1 Peru
 - Stakeholder engagement, co-design, co-learning
 - New business models and policies; final conference
 - SynPol event, policy briefs

06/02/20

6



WHO WE TARGET

- Stakeholders linked / not linked to the Innovation Action (IA)
 - **Forest:** land owners and managers, forest users, local / public authorities, forest-owner associations, landscape planners
 - **Business:** entrepreneurs, investors, business community
 - **Policy:** local and regional policy makers
 - **Research:** scientific community
- National and international actors
 - Policy and decision makers, business organisations, international organisations, NGOs, Associations, selected national ministries, public authorities, universities
- Journalists and media professionals
 - Especially local media actors in the IA regions
- Civil society
 - Broader general public outside the IA regions



Review and analysis for Forest Ecosystem Services



CONNECTING SCIENCE, POLICY & PRACTICE

- **Inventory of Innovation Mechanisms in Europe**

Consulted DB:


- Ecosystem Market Place (EMP),
- Forest Carbon Portal (FCP),
- Ecosystems Services Partnership (ESP),
- The Economics of Ecosystem and Biodiversity (TEEB),
- Ecosystems Knowledge Network (EKN),
- Alpine Convention,
- Species Banking (SB),
- Domestic Carbon Initiative in Europe,
- Verified Carbon Standard Project Database (VCS),
- United Nation Economic Commission for Europe (UNECE),
- Oppla,
- ECOSTAR.



CONNECTING SCIENCE, POLICY & PRACTICE

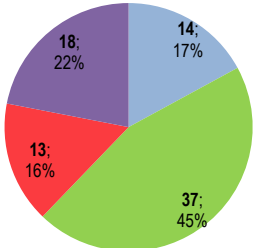
- **Inventory of Innovation Mechanisms in Europe**





CONNECTING SCIENCE, POLICY & PRACTICE

- Inventory of Innovation Mechanisms in Europe



Scenario	Count	Percentage
A. Provision of a new FES supported by an already existing mechanism	18	22%
B. Implementation of a new mechanism supporting a already existing FES	14	17%
C. Provision of a new FES supported by a newly-implemented mechanism	13	16%
D. An already existing mechanism or FES used for the first time in a different spatial context (relative innovation)	37	45%

- A. Provision of a new FES supported by an already existing mechanism
- B. Implementation of a new mechanism supporting a already existing FES
- C. Provision of a new FES supported by a newly-implemented mechanism
- D. An already existing mechanism or FES used for the first time in a different spatial context (relative innovation).

INNOVATION

1. Provision of a new FES
 Product / Service
 1a. Provisioning FES
 1b. Regulating FES
 1c. Cultural FES
 1d. Bundled FES*


Radical / Incremental
 Absolutely new /
 New for the area

2. Implementation of a new mechanism or improvement of a mechanism
 Technological
 2a. new technology
 Process
 2b. new way to capture value
 2c. new or more sustainable management
 Business Model
 2d. new internal organization
 2e. new targeted consumers
 2f. new communication strategy
 Social
 2g. new actors involved
 2h. new networks
 2i. landscape approach
 2j. transboundary project

* a combination of FES

Number of total IM cases according their scenarios of innovativeness.

06/02/20
11



CONNECTING SCIENCE, POLICY & PRACTICE

- Inventory of Innovation Mechanisms in Europe
- Synthesis report on best practice design and implementation of Payments for Ecosystem Services (PES) and other Innovation Mechanisms (IM)**



Spurring INnovations for forest eCosystem sERvices in Europe

Project no. 773702
 Start date of project: 1 January 2018
 Duration of project: 48 months

H2020-RUR-05-2017 Novel public policies, business models and mechanisms for the sustainable supply of and payment for forest ecosystem services

D1.4
 What works? State-of-the-art synthesis report about best-practice design and implementation of PES and other forest IM in the European context (T1.3)

Due date of deliverable: December 31st, 2019
 Actual submission date: December 31st, 2019
 Organisation name of lead beneficiary for this deliverable: European Forest Institute
 Dissemination level: CO

06/02/20
12



PERCENTAGE OF FOREST AND OTHER WOODED LAND UNDER MANAGEMENT CONTRACTS

Payments	Target	Realized (2016)	% Realized/Target
To support biodiversity (%)			
EU	2.1%	0.3%	16%
Italy	3.9%	0.2%	4%
To improve water management (%)			
EU	0.8%	0.1%	14%
Italy	0.8%	0.2%	19%
To improve soil management and/or prevent soil erosion (%)			
EU	1.3%	0.1%	9%
Italy	2.7%	0.2%	6%
To improve carbon sequestration and conservation *			
EU	1.1%	0.8%	71%
Italy	3.1%	1.7%	55%

Source: ERND (2018)

(*) : data referred not to the total forest and OWL, but to the total forest and agricultural land



CONNECTING SCIENCE, POLICY & PRACTICE

- Inventory of Innovation Mechanisms in Europe
- Synthesis report on best practice design and implementation of Payments for Ecosystem Services (PES) and other Innovation Mechanisms (IM)
- Demand for policy support report
- **Pan-European survey on forest landowners and managers' perceptions on FES**



Note: not the final representation of the answers



Learning architecture for innovation



CO-CREATION, CO-DESIGN & CO-IMPLEMENTATION

- Stakeholder mapping to identify key actors
- Local stakeholders in each region form Multi-Actor Groups (MAGs)
- MAGs involved in the design, implementation and evaluation of their case study, as well as learning from it, through facilitated meetings at key stages
- Co-Design event (Jan 2019) and Workshops (October 2019, Autumn 2020) facilitate cross-fertilisation and learning between case studies





Innovation Actions for Forest Ecosystem Services



SINCERE CASE STUDIES



◀ **Forests for water in Catalonia**
 Strengthening the link between forests and water to diversify the financing of forest management.
Spain



◀ **Club GREY HORSE: Multiple ecosystems services via forest renters**
 Multi-purpose lease by one lessee on a rented forest plot, to increase the economic efficiency of forestry.
Russia

▶ **ECOPAY Connect: Forest-habitat biodiversity payment scheme**
 Linking social and ecological benefits with economic aspects through the spread of FSC® certification.
Italy



▶ **Landscape and Recreation Value Trade**
 Compensation for forest owners for voluntarily enhancing the provision of landscape and recreational values.
Finland



◀ **The Mushrooms of Borgotaro IGP**
 Online platform to improve commercialisation of recreational permits for wild mushrooms' collection.
Italy



◀ **Paying for watershed services to cities in Peru**
 Reward for restoring ecosystems of a micro-watershed around a near-city lake via an increment in the urban water tariff.
Peru



SINCERE CASE STUDIES



Reverse auctions pilot for biodiversity protection, Denmark
Supporting the protection of biodiversity and landscapes as equal to the production of other services.
Denmark



Spiritual forests and forest kindergartens
Exploring spiritual forests and kindergartens, their related goods, benefits and uses, and their adapted management needs.
Switzerland

Understanding the health functions of peri-urban forests in protected areas
Evaluating health as a component of forest ecosystem services, developing payments for ecosystem services.
Croatia



Reverse auction pilots for forest ecosystem services in rural & peri-urban areas
An alternative approach to stimulate the generation of much needed forest ecosystem services in a densely populated region.
Belgium





New legal framework for forest ecosystem services for Bizkaia county
A new legal framework for forest and forestry to improve the provision, valuation and monitoring of ecosystem services.
Spain

06/02/20

19



Transferable innovation mechanisms



INNOVATION OUTPUTS

- Innovation Mechanism from each Innovation Action
- Synthesis of IA implementation → handbook
- Report on upscaling potential of Innovation Mechanisms
- Synthesis report on lessons learned in developing and implementing PES and other IM in Europe, in a global context
- Business package with business models and opportunities for Forest Ecosystem Service innovations



Towards a European Policy Framework for FES



POLICY OUTPUTS

- Science-policy-practice interaction throughout project
- Event: Synthesising results and delivering policy recommendations – SynPol (2021)
- Policy brief with suggestions for a coordinated European policy framework for supporting IM for the supply of FES



OUTCOMES & IMPACT



WHAT WE HOPE TO ACHIEVE

- Eleven Innovation Actions in distinct regional settings locally **align provision and demand for FES** and create benefits from environmental, social and economic perspectives.
- **Innovation Mechanisms, novel policies and business models are established**, which have benefitted directly from the SINCERE co-design process → documented and shared with target stakeholders
- Forest owners / managers (FES suppliers) and societal demanders have **increased knowledge and capabilities to innovate** at the frontier between FES supply and demand.
- Entrepreneurs have increased knowledge about sustainable **Innovation Mechanisms that are replicable or can be upscaled**.
- Potential to **bridge between forest ecosystem service providers and business partners** from other sectors are clearly shown → more likely to be established.

06/02/20

25



WHAT WE HOPE TO ACHIEVE

- Policymakers have access to **clear recommendations** on supportive and hindering factors **for the provision of FES**, based on actual cases, paving the way for a European support architecture for the provision of FES.
- European scientists, entrepreneurs and policymakers are **connected with global counterparts** in the development of IA cases in Peru and the Russian Federation.
- International activities and networking ensure that **Europe's contribution to the development of IM for FES is well-recognised** at a global scale
- **Public awareness about FES increases** in the communities local to the project → (perceived) increased demand for FES and uptake of services provided.
- **FES have an increased perceived value** as a viable instrument, as society looks increasingly towards a sustainable bioeconomy.

06/02/20

26



A FINAL MESSAGE: WE NEED TIME TO REFLECT, CONSOLIDATE AND SHARE OUR RESULTS



Thank you for your attention!



This project has received funding from the European Union's Horizon research and innovation programme under grant agreement No 770932



www.sincereforests.eu