



## On viable models for enhanced forest ecosystem services provision

This briefing includes selected key observations from the SINCERE project regarding potentially viable business models for enhanced provision of forest ecosystem services (FES).

Observations are considered from the viewpoint of the forest owner as **supplier** or **seller** of the FES as well as from the viewpoint of the beneficiaries, the **user** or **buyer**. Crucially overall, the business models should improve the welfare of *all*

### Regulation and property rights delineation matters

Any business model must comply with the regulatory framework in which they operate, and thus the regulatory framework both constrains and underpins designs. In the case of FES, the regulatory delineation of property and use rights are particularly important for many services enjoyed by forest user groups.

- **Variation by country** FES which in some countries might be defined as a public good type, allowing for free access or consumption, might in other countries be subject to exclusion by the forest owner.
- If regulation also allows forest owners to expand **user's rights** and / or offer services that enhance the value of existing use rights, then viable business models may arise and are often in place for use values.
- For **public good** type of FES, **funding** is in general public or coerced from the private side through e.g. offset type schemes. Thus, focus should be on how such funds are spent most efficiently.

## Competition for PES provision can work



Figure 1 In the SINCERE auctions forest owners readily competed for biodiversity protection contracts

Competition, e.g. through tenders, for supplying goods and services for the public sector is widespread even for rather unique demands. However, competition is rarely used in schemes aimed at the provision of environmental public goods such as FES.

This is unfortunate as it may allow for increased cost-effectiveness by reducing information rents. It may even improve the price-quality trade-off for non-homogenous goods.

The practical findings from SINCERE experiments are that given proper design.

- **i)** Landowners will happily engage in a **cost effectiveness competition** for the enhanced provision of biodiversity and habitat protection.
- **ii)** landowners will offer their **own suggestions** on the type of effort if allowed.
- **iii) Price competition** may lead to considerable cost reduction potentials in the competition design.
- **iv)** This should be balanced against potentially **higher transaction costs** compared to alternative designs.

Thus, such competition-based designs may be a viable model for cost-effective provision of public goods from the viewpoint of a buyer, but also allow for voluntary buy-in from the supplier side.

Competition could emerge through the use of reverse auctions, as demonstrated in more cases in SINCERE, but may also be a part of e.g. offset schemes, as in the case of conservation banking.

## Donations can only be a supplement

- There are often many beneficiaries of the public good type FES and their **benefits may be significant**. For that reason, one could consider voluntary payments from such beneficiaries to be a viable funding model to enhance FES provision
- However, there is only a **limited incentive** for beneficiaries to pay, and a strong incentive to free ride. This was also the experience in SINCERE donation experiments.
- Thus, donation schemes for FES provision are in general not viable as a main strategy, but can only be a **supplement**.

## Expanding rights and services for on-site users will work

- Across Europe, the delineation between **forest users'** and **forest owners'** rights, use and property rights, vary considerably.
- Along any such delineation, there exist a potential for increased value of FES for both sides through **commodification of use right expansions** or the provision of services that enhance the value of existing services. There are numerous examples of this and SINCERE experiences with more novel services support this claim.
- They also illustrate that often **regulation** need to be in place to support which use rights and add-on services can be expanded and thus offered to users.
- **For example**, while forest funerals with urns is legal in some places, it is not allowed in others – and even more rarely are forest burials. Likewise, where in some countries, the forest owner may sell horse-riding licenses, other recreational uses may not be allowed at all, e.g. camp fires.
- Thus, while there are, in general, many viable models for enhanced FES provision against a payment from on-site users, each such model needs to account for **local regulations and demands**.



Figure 2: The open access rights can be the most efficient and value-creating model for many types of forest recreation

## Linking off-site users and owners may work

- Unlike the case of on-site user fees, there may also be viable models for enhanced FES-provision against payments from **beneficiaries using the service potentially far away** from the forest.
- This may be down-stream water users or residents benefitting from reduced flooding or avalanche risks. In such cases, the forest owner **cannot deny these users their benefits entirely**, but the forest owner may, through forest management, affect e.g. water quality or risk of flooding.
- If the provision of these FES is not taken into account in forest management, **society overall loses out**.
- In such cases, SINCERE experience and other examples show that **viable models for enhanced FES provision against a payment** from beneficiaries can work in practice.
- To **reduce transaction costs** and **coerce payments** among downstream users, suitable institutions may collect payments from beneficiaries.

## Concluding remarks on regulatory change

- All the above examples of viable models for improving societal gains from FES provision took as basis the **existing regulation** in any given context.
- However, it may be that for some FES the **current regulation**, e.g. property or use right distribution, is a **barrier** for the most valuable provision of FES to society.
- In such cases, **changes to regulation** may be the easiest and most transparent way of improving FES provision – whether by redistributing property and use rights or by allowing more room for market-based solutions.

