

# **Spurring INnovations for forest eCosystem sERvices in Europe**

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### On viable models for enhanced FES provision

In this information brief, we present selected key observations from the SINCERE project regarding potentially viable business models for enhanced provision of forest ecosystem services (FES). Our observations are posed both from the viewpoint of the forest owner as supplier of the FES and from the viewpoint of the beneficiaries, as overall the business models should improve the welfare of all affected.

#### 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 particular important for many services enjoyed by forest user groups. FES which in some countries might be defined as a public good type<sup>1</sup>, 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 private side through e.g. offset type schemes. Thus, focus should be on how such funds are spend most efficiently.

#### Competition for FES provision can work

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. Furthermore, ii) landowners



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

will offer their own suggestions on the type of effort if allowed and iii) price competition may lead to considerable cost reduction potentials in the competition design. This should be balanced against iv) potentially higher transactions 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

<sup>&</sup>lt;sup>1</sup> A public good is characterized by its non-excludability, which means that no one can be excluded from using the good and, by being non-rivalrous, which means that the good does not decrease in supply as more people consume the good.

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 in general are 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.

#### 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 loose 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 transactions costs and coerce payments among downstream users, suitable institutions may collect payments from beneficiaries.

#### Concluding remark on regulatory change

A final remark seem in place. 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 regulations, 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.



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