EFI Short Term Mobility Grant: **ABSTRACT**

Payment for ecosystem services: zooming in on the European context

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Global changes occurring in the last couple of decades have increased the gap between a rising demand and a falling supply of Forest Ecosystem Services (FES). Growth of the world's population and its incomes have caused increases in the societal demand of FES, while also enhancing the pressure on the supply of FES through the conversion and degradation of forest ecosystems (EEA, 2015). Consequently the FES provision capacity by forest owners is not always responding to the societal demand for them. Unless efficient policy and economic instruments are designed and implemented, it would be difficult to fill the increasing gap between demand and supply of FES.

Hence, it is important to support and encourage public and private forest owners in managing their forests in a sustainable way. Indeed, there is the necessity to respond to new demands for FES that go beyond the traditional ones. This is why it is ever more important to design and implement innovative mechanisms, enabling them to support the provision of a higher spectrum of FES, including regulating and cultural ES (Kemkes et al., 2010).

Several policy and economic instruments have already been implemented and analysed worldwide, but there is no common understanding concerning their classification (Froger et al., 2015). One distinction is between market-based instruments (MBIs), identifying instruments based on monetary transactions (Pirard and Lapeyre, 2014), and non-market-based instruments (n-MBIs), i.e. instruments that are not market-linked (Lapeyre et al., 2015). Within MBI, Payment for Ecosystem Services (PES) are among the most studied. According to the revised definition given in Wunder (2015), PES involve "*voluntary transactions between service users and service providers that are conditional on agreed rules of natural resource management for generating offsite services*". PES were to deal with the trade-offs between development goals and the societal needs, on the one hand, and the environmental goals and sustainable management of natural resources, on the other.

Wunder et al. (2018) composed a new global PES dataset with information from 70 different schemes. The majority of them are implemented in Latin America, North America, Asia, and Africa, whereas only 6 cases were implemented in Europe. The lower number of cases representing Europe is probably due to some contextually related features, such as the prevalence in the continent of large protected areas, the presence of large state forests and fragmented private forestland, and a low willingness to pay for the provision of FES due to the societal vision that it should be a public responsibility (Wunder et al., 2019). However, there are also some European PES case experiences that have not yet been captured in the global PES mainstream literature.

The main aim of the proposed Short-Term Mobility Grant is to extend the dataset of PES schemes from Wunder et al. (2018) by incrementing the European cases and analysing them under the pre-established contextual framework. As a starting point, the results of the Horizon 2020 project SINCERE (MBIs and nMBIs inventory under WP1) will be used. Within SINCERE, we had taken stock of innovative mechanisms implemented in Europe for FES provision. A further literature review and a further consultation of other updated databases will be done in order to gather all database-required variables for those cases, and possibly expand the research towards new cases. The next step will be an analysis of these European cases in line with the study undertaken in Wunder et al. (2018).

Implementing this work under the direct supervision of Sven Wunder at EFIMED will make it possible to properly identify and characterise PES scheme according to a common set of criteria, avoiding the considerable confusion present in the literature, and strengthening the capacity to distinguish narrowly defined PES schemes from broader PES-like schemes. Moreover, the possibility to work closely with the team of EFIMED, will allow me to analyse in greater detail the methodology used in Wunder at al. (2018).

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