

## Land stewards

### Location

**Country:** Italy  
**Scale:** regional  
**Region:** Tuscany

### Compensated /improved ecosystem services

Regulation of water flows

### Management

In Tuscany, in the area of Media Valle del Serchio, a public authority in charge of managing over 115 000 ha of mountain areas and about 1500 km of streams, has established agreements with about 40 farmers and forest owners in order to improve flood risk monitoring and control over 500 km of water courses within the mountain basin.

The scheme can be categorized as a public bilateral agreement, where the public authority directly pays (on behalf of taxpayers, through budget allocation) landowners for the provision of hydrological services. The scheme has carried out several workshops to negotiate with service suppliers and to define the design, the type and amount of payments. The payment is divided in two types, a flat rate for being part of the scheme, and on demand/service based payment.

Landowners usually contribute to remove trees and other sediments from riverbeds to avoid overflowing, together with the management of riparian vegetation. Land Stewards scheme has contributed efficiently to decrease the flood risk and the occurrence of water damage related costs, providing the society with an environmental benefit resulting from farmer training, organizational arrangements and networks. The alert and control system of landowners works through an interactive Information and Communication Technologies system which helps land owners report and alert the public authorities and eventually deliver hydro-geological risk control of the district. The scheme has also a high level of social co-benefits, providing an alternative source of income for marginalised landowners located in remote areas in the Serchio Valley. It also has improved the community participation in hydrological landscape management.

### Stakeholders

#### **Sellers or service providers:**

- Private farmers and forest land owners and local service cooperatives

#### **Buyers and beneficiaries of services:**

- The public authority - watershed management authority

#### **Knowledge providers:**

- Universities sometimes have helped the scheme design process but they have demonstrated to have a spot approach, focused on publishing rather than contributing to the territorial process

#### **Intermediaries:**

- Coldiretti (farmer association) provides support to work with farmers and University to organize the participation workshops and design

## Timeline

**Establishment year:** 2007

**Time horizon:** medium term

**Status of PES:** active

## Availability of economic data

The scheme makes use of CAP payments and EU structural funds to partially support the realization of some interventions.

The investment is very low, around 60.000 EUR per year. This small amount allows to provide a hydrological service in a vast areas.

Farmers and forest owners received a fixed payment (6.000 EUR per year during the initial phase and 4.000 EUR per year during the following years) for monitoring and evaluating the degree of risk and for providing an alert-report service to the public authority on any situation regarding slope instability or waterways obstruction.

According to the public authority, the scheme has allowed 80% saving on the annual total cost for management interventions in the area.

## References / Source of information

Leonardi, A. 2016. Characterizing governance and benefits of payments for watershed services in Europe. Dissertation thesis. 178 p.