

ECUADOR

Decentralised environmental payments

Historically, programmes for environmental payments in Ecuador were implemented in a decentralised manner, that is, at the local level and without central government coordination. The Pimampiro Municipal Watershed Protection Scheme and the Forests Absorbing Carbon Dioxide Emissions Forestation Program, PROFAFOR have become models for successful local level PES programs in the region. More recently, Ecuador has developed national PES programmes, e.g. the Socio Bosque programme.

Pimampiro

In 2000, as part of a forest management plan, the municipality of Pimampiro set up a system of payments covering the Palaurco River upper watershed that delivered drinking water to Pimampiro residents. A drought in 1999 and the subsequent construction of a canal to increase water flow provided an opportunity to introduce PES – the dramatic improvement in local water supplies greatly increased the Willingness to Pay (WTP) of commercial and domestic water users. The recipients of PES were 27 households owning 638 hectares of land upstream. The PES programme was designed to halt and reverse the conversion of forests and native Andean alpine grasslands to annual crops and pasture which adversely affected the supply and quality of water downstream.

Currently, 19 Nueva América households (70% of targeted household) participate in PES, with 550 ha enrolled (87% of targeted area). PES contracts initially lasted for five years, but were renewed indefinitely in 2005. Households receive US\$6/year/ha for intervened forest, US\$8/year/ha for mature secondary forest, and US\$12/year/ha for primary forest. Payments are financed by users through a 20 percent water consumption surcharge on 1350 families in Pimampiro with water meters, in addition to the interest (US\$500 per annum) generated by a water fund of US\$15,000.

PROFAFOR

PROFAFOR is an Ecuadorean company created by the Forests Absorbing Carbon-dioxide Emissions (FACE) consortium financed by Dutch electricity companies to offset their carbon emissions. Since 1993, over 22,000 hectares of land under 152 contracts have been afforested or reforested, mostly in the highlands of coastal areas, resulting in approx. 2.23 million tons carbon sequestered.

Following contract signature between landowners and PROFAFOR, landowners plant trees to (re)establish and maintain tree cover. Contracts were initially valid for 15-20 years, but are now normally valid for 99 years.

Initial payments of US\$100–150/ha for seedling production and plantation cover roughly 80 percent of estimated plantation and management costs. The remaining 20 percent is paid after three years contingent upon a minimum survival rate of 75 percent. Participants receive in-kind benefits from forest by-products (thinning, pruning). The most important incentive is the receipt of 70 percent of revenues from the sale of harvested trees at the end of the cycle (15–20 years). If they reforest the area, as stipulated in the 99-year contracts, they receive the full revenue. However, if landowners fail to replant, they must pay 30 percent of sales revenues to PROFAFOR.

Replicability

The NGO that assisted in establishing the PES scheme in Pimampiro is replicating its experience in other municipalities (El Chaco and Celica). In other cases, spontaneous replication is occurring, e.g. emerging PES-like programmes in El Angel and in the municipalities of Loja and Zamora. Overall, in Ecuador, an additional handful watershed protection PES programmes are being implemented while another is currently being designed.

Impact on biodiversity

Both Pimampiro and PROFAFOR have been effective in reaching their environmental objectives and have shown high levels of additionality and low leakage effects. Both schemes have improved the welfare of participants, mostly through higher incomes. In the Pimampiro programme, not only has deforestation been halted, but native vegetation cover has increased significantly.

While reforestation under PROFAFOR was not able to keep up with FACE's original rather ambitious schedule, the 22,287 ha planted in the 13 years since its inception constitute almost half of all reforestation in Ecuador. The biodiversity impact of PROFAFOR is less significant than that of Pimampiro because only rapid growth exotic tree species (pine and eucalyptus) were planted initially. However, more recently native tree species are being experimented with.

Lessons learned

Success has been attributed to a focus on targeted ecosystem services and strict conditionality.

PES programmes should complement rather than replace more command and control measures for environmental conservation.

While there was no specific pro-poor mechanism built into the programmes, in general, the poor did benefit through net income gains. Moreover, as both schemes focused on economically marginal lands where the poor generally operate, it is likely that most relevant disadvantaged groups had access to the PES schemes.

Users of ecosystem services and landowners continue to have different interests – these differences are bridged by PES through compensations but they do not vanish. Service users will need to continue to pay for ecosystem services for the services to be sustained.

Sources: Wunder and Alban (2008); Wunder (2010).