

### How to attract PES investment from businesses?

A new study has looked at why and how much private sector companies are prepared to invest in Payment for Ecosystem Services (PES) schemes for tropical forests. Understanding companies' motivations and expectations can help develop new sources of funding for PES schemes from the private sector, increasing the area of tropical forest conserved worldwide.

PES schemes can allow companies to pay to help conserve an ecosystem, to ensure that the service they depend on for their business is not at risk of disappearing, to secure access to biological resources, and to demonstrate environmental responsibility. PES schemes to conserve tropical forests are a relatively new concept and little attention has been paid thus far to examine the factors that influence whether or not businesses participate voluntarily.

Using a detailed questionnaire and a complex statistical model, the study compared the hypothetical 'willingness to invest' (WTI) in tropical forest ecosystem services by 60 international and Costa Rican companies. The researchers focused on four ecosystem services: conservation of biodiversity, absorption of atmospheric CO<sup>2</sup> (i.e. carbon sequestration), provision of water quality by filtering, flow regulation and prevention of erosion (i.e. watershed protection), and preserving scenic beauty.

In total, the companies were willing to invest in conserving the equivalent of 878 km<sup>2</sup> per year of forest by purchasing 'certificates of sustainable forestry'. This equated to paying €2.16 million per year for carbon sequestration, €143,000 for watershed protection, €21,900 for biodiversity conservation and €11,500 for scenic beauty.

Costa Rican firms were willing to invest up to 7.5 times more than international companies (per year and per hectare) for watershed protection, biodiversity conservation and scenic beauty, reflecting a greater interest in protecting their national ecosystem services with local benefits. The difference was less pronounced for carbon sequestration, which is more relevant on a global scale.

The results also revealed differences between companies in different sectors, such as higher WTI in consumer companies (consumer staples, discretionary staples and health care) than industrial companies (those active in the energy, materials, industrial and utilities sectors).

However, the number of participants in each sector was relatively low, and a greater number could provide more certain results.

Surprisingly, non-financial motivations (i.e. human welfare and ecological responsibility) and indirect-financial motivations (i.e. image benefits) were the biggest influences on WTI for all ecosystem services. Direct financial benefits (i.e. increased income, cost reductions and client demand) had very little influence. However, non-financial and indirect-financial motivations are unlikely to be enough to convince less environmentally-conscious companies to invest in PES, thus the potential financial rewards need to be highlighted as part of any marketing strategy, say the researchers.

In some cases, previous experience of biodiversity projects had a negative effect on WTI, possibly implying ineffective PES projects and strategies in the past. The existence of an independent intermediary between private companies and forest managers to ensure that money is spent in the most effective ways was also an important deciding factor for international firms.

**Source:** Koellner, T., Sell, J. & Navarro, G. (2011). Why and how much are firms willing to invest in ecosystem services from tropical forests? A comparison of international and Costa Rican firms. *Ecological Economics*. 69:2127-2139.

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