

Smallholders and payments for ecosystem services

Using the right tools, payments for ecosystem services (PES) in carbon schemes can offer real benefits through improved land management practices – not just for smallholders, but for others along the value chain.



In brief

Payments for ecosystem services (PES) is a mechanism that rewards landholders and communities for managing their natural resources more sustainably – such as through carbon sequestration, maintaining water quality or protecting biodiversity – while sharing the costs with those who benefit. To succeed in smallholder and community projects, PES projects need to improve farm productivity while managing associated costs – and clear project design and monitoring are essential for generating legitimacy and credibility. But the associated costs are a major challenge for these projects that struggle to reach economies of scale.

Why now?

There is real demand for ecosystem services globally. In 2013, demand for forest-based carbon offset certificates grew by 17 per cent – that equates to US\$192 million (Peters-Stanley and Gonzalez, 2014). For example in Bolivia, water utilities compensate farmers for protecting watersheds, while in Costa Rica, Mexico and Ecuador governments pay landowners for forest protection.

However, linking farmers to those who benefit from biodiversity protection or carbon sequestration is not always simple. Buyers are usually located far from the farmers in question and the 'commodities' they purchase are difficult to measure and convey. In addition, transaction costs are mostly linked to administration and monitoring strategies that offer reassurance along the value chain that those land-use practices will actually deliver ecosystem services.

How can smallholders effectively link to buyers in an international market? What monitoring strategies work for smallholder carbon projects? And do offset certificate buyers trust these strategies to be effective?

Our project

Streamlining Monitoring in Smallholder and Community PES Projects (SMS-PES) is a joint project examining key factors that impact on the success of smallholder PES projects.

Monitoring strategies: the project is assessing monitoring strategies for smallholder carbon projects in terms of scientific robustness, costs, equity and legitimacy. A choice experiment will also examine the way monitoring is perceived by offset certificate buyers and whether this affects their willingness to pay.

Plan Vivo: focusing on the experiences of the Plan Vivo Standard, a tried and tested certification framework, the project is also examining the process of accessing international carbon offset markets. Plan Vivo helps rural smallholders and communities to generate payments for ecosystem services by managing their natural resources more sustainably.

Value chains: the project is also exploring how value chains can help us to understand the dynamics of product flows associated with ecosystems, key actors and their relations – and what impact PES from carbon has on other farming activities.

Ecosystems, business models and value chains

One tool for exploring the factors influencing the success of smallholder PES projects is the business model canvas. Developed by Alexander Osterwalder, it describes the rationale of how an individual firm creates, captures and delivers value. By providing a 'visual picture' of the organisation – or the farmer's business model – and potential

bottlenecks and (financial) imbalances, it can facilitate a dialogue between farmers and development and business actors. As a result, a clearer picture emerges of how business processes can support social development and ecosystem services.

How, what, who and how much?

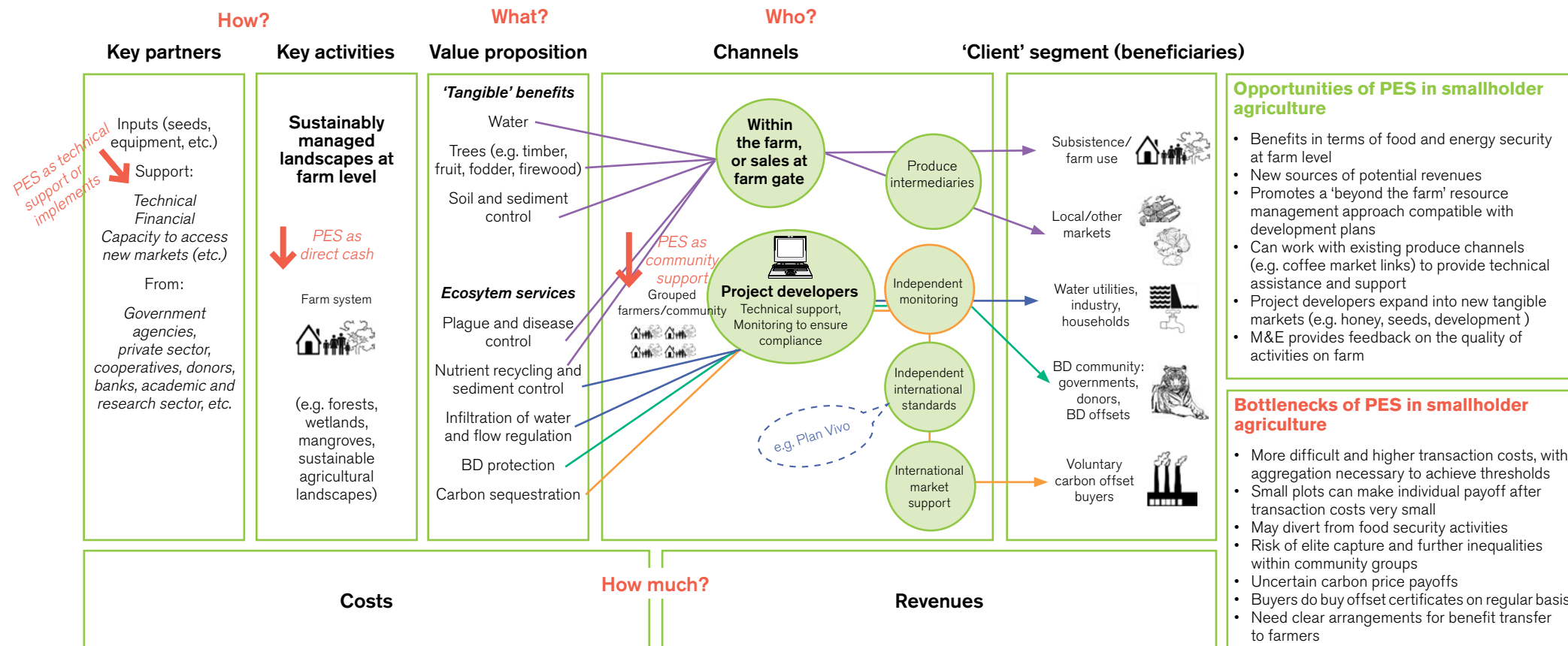
The business model canvas also helps us to understand how PES 'fits' with the process:

- Who are the key actors in the chain and what are their relationships and roles?
- What are the boundaries of the system?

- What is the flow of goods, services, payments and information along the chain?
- What are the linkage points, gaps or blockages between actors?

The value chain can also help to identify the partner network, whose objective is to support, intervene or assist the different links of the chain and facilitate the development of the business. These private or public partners are not included in the value chain's core stages but occupy a critical role in the functioning of the business. They enable the chain to operate efficiently, and are vital to ensuring the delivery of ecosystem services.

Understanding those business models and their capacity for and resistance to change is key to the successful linking of small-scale producers to coordinated chains with sustainable trading relationships. This includes, for example, insights into what costs can or cannot be handled by the value chain and what other players may be necessary.



Source: based on CIAT's link methodology for inclusive business models and the IIED-HIVOS-CIAT PES Learning Project.

Key:

- Flows for 'traditional' products (coffee, vegetables)
- Downstream benefits for water
- Biodiversity links
- Links to carbon markets
- The Plan Vivo Standard
- ➔ Form that PES may take

Key factors influencing success

The project is exploring the impact of three key factors on the success of smallholder PES projects: the role of project developers and the importance of credibility and monitoring and evaluation.

Project developers

Project developers provide essential technical support and reduce transaction costs. They ensure delivery of carbon sequestration to offset certificate buyers, on-farm benefits to farmers and that farmers and communities are paid. The project is examining the experiences of successful developers (e.g. Ecotrust in Uganda or Taking Root in Nicaragua) who operate within existing produce channels and ally with governments and other groups.

Credibility

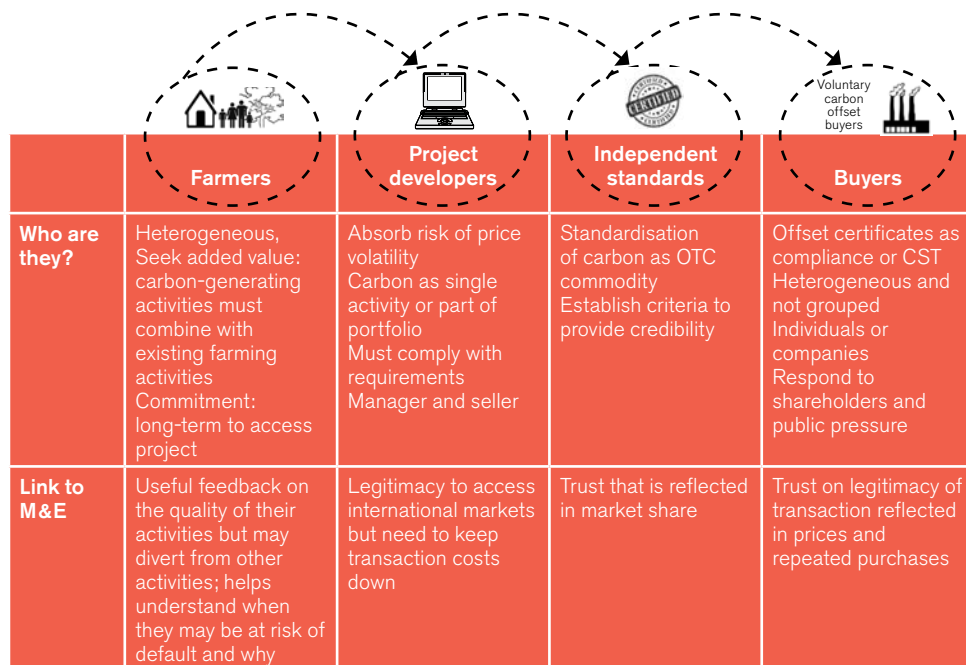
This project is also investigating the importance of credibility and legitimacy in successful PES

projects. Buyers' trust in existing systems and credibility along the value chain is key to accessing international streams of revenue. It comes from understanding product creation and delivery, and from clear project design and monitoring and evaluation (M&E). It requires accuracy, transparency, fair participation and feedback channels, accessible resources, and fairness in terms of bearing the risks associated with non-compliance.

Monitoring and evaluation in PES

A good monitoring strategy should influence how every part of the project cycle operates. This project is investigating the different ways in which M&E can affect the success of smallholder PES projects, from influencing decisions about payments to farmers and informing certification processes, to feeding back into project adjustments and improving the accuracy of carbon estimates over time. How does a good M&E strategy inform what kind of data to collect, how often, and how the analysis is done? And how does this feed into the certification process?

Monitoring and evaluation (M&E) and credibility along the value chain



Who's who?

Streamlining Monitoring in Smallholder and Community PES Projects (SMS-PES) is a joint project involving IIED, Edinburgh University, the Plan Vivo Foundation, Ecotrust in Uganda and Fundación Ambio in Mexico. Funded by the Ecosystem Services for Poverty Alleviation (ESPA) Programme, results from this project will inform project practitioners, policy makers and the wider research community.

Get involved

Visit our website www.iied.org/markets-payments-for-environmental-services

Get in touch with a member of our team to find out more about the project:

Ina Porras, IIED: ina.porras@iied.org

Chris Stephenson, Plan Vivo Foundation:
chris@planvivofoundation.org

Find out more

Read more about IIED's work on smallholders and payments for ecosystem services (research papers, policy briefings and blogs) here: www.iied.org/markets-payments-for-environmental-services

Find out more about the ESPA Programme including other research and funding opportunities: www.espa.ac.uk

If you would like to learn more about existing smallholder and community carbon projects, including how to apply for a new one, visit the Plan Vivo Foundation website:

www.planvivo.org

Read more about value chains:

<http://tinyurl.com/linking-smallholders>

Find out more about our partners:

www.fundacionambio.org

www.ecotrust.or.ug

Funded by:



Project Materials

Sustainable Markets

Keywords:

Payments for ecosystem services, value chains, smallholders, monitoring, carbon markets

Photo credit:

Malawi: Trees of Hope.

References Peters-Stanley, M. and Gonzalez, G. (2014) Sharing the stage: state of the voluntary carbon markets 2014. Forest Trends' Ecosystem Marketplace.