Briefing

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Policy pointers

Investment in smallholder farming and sustainable land practice is a cost-effective way to reduce poverty and improve climate change resilience.

Voluntary carbon markets are an important source of investment in these types of projects, which act as a testing ground for public-private partnerships. However, they require clear rules and price stability.

Voluntary carbon standards like Plan Vivo and Gold Standard are working on reducing transaction costs to improve smallholder access to these markets and increase local benefits.

Scaling up requires an improvement to public-private partnership structures as well as legislation requiring companies to offset their emissions. This will stimulate market demand and increase carbon offset prices.

Carbon investors and smallholders: a symbiotic relationship

Our global economy faces major challenges. Climate change and poverty reduction are top priorities embedded in the UN Sustainable Development Goals (SDGs). These goals will define national and international policies for the next 15 years. Some independent carbon standards, such as Plan Vivo,[1, 2] have shown it is possible to achieve poverty reduction, reduce greenhouse (GHG) emissions and promote healthier local ecosystems. Alongside organisations with a similar ethos, they are in a position to align the interests of the private sector with the needs of smallholders, their local communities and their local ecosystems. However, legislation needs to be in place that requires companies to offset their emissions. This will revitalise demand and increase prices, thereby improving project viability, and this will encourage the market to scale up.

A symbiotic relationship

Climate change is an immediate concern. Billions of tonnes of GHG emissions are causing major temperature fluctuations, which raise sea levels and alter precipitation patterns. Everyone is affected but those with the least access to finance and adaptation technology, such as smallholders in developing countries, are hardest hit. The private sector is increasingly required to clean up its environmental footprint, and many companies are introducing supply chain efficiencies.

Markets are a source of the problem because the lack of regulation on GHG emissions is accelerating global warming. But markets can also be part of the solution by providing the platforms for implementing international agreements to reduce these emissions.[3]

Voluntary carbon markets have emerged as an option for companies to minimise their socio-environmental impacts. Working in partnership with local organisations, companies can offset their carbon emissions. This also allows them to promote their corporate social responsibility agenda by supporting small local farmers and communities. Companies in some supply chains, like coffee or cocoa, can also enter 'insetting' partnerships - buying offsets from their own suppliers. They benefit in three ways: (1) by offsetting their emissions, (2) by supporting action that improves climate resilience at farm level and thus reduces the procurement costs associated with climate impact management , and (3) by strengthening their connections with local suppliers.

The voluntary carbon market experience

Smallholder and community projects have the potential to play a major role in climate solutions through voluntary carbon markets. However, market access continues to be both costly and risky.

To be tangible solutions for combating climate change, these projects need to work at a much larger scale

For smallholders, access to any formal market is expensive.[4] Carbon certification is usually geared towards large projects such as energy or large-scale reforestation or forest protection. Its need for economies of scale restricts the range of projects to large and homogeneous areas and closes the door to smallholder and community projects. For smallholder projects, local benefits like food security and employment are even more important than the project's effect on climate change. This raises the cost and complicates these projects. On the other hand, the emphasis on local solutions opens up niche markets, which attract higher pricing.

Voluntary carbon offset prices have remained relatively stable compared to the global compliance market, where offsets cost as little as $0.5/tonne of CO2e (tCO2e). However, voluntary offset prices have been decreasing. In 2008, their average value hit a maximum at $7.3/ tCO2e. In 2014, average prices reached a record low of $3.8/ tCO2e.

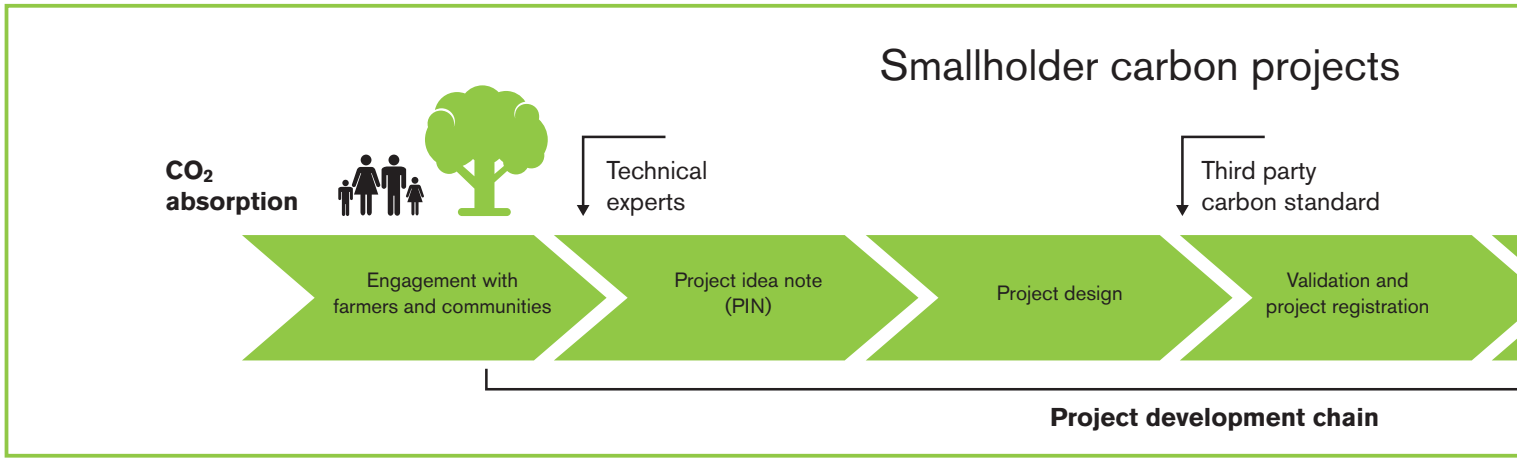
Corporate–market price disparity

By comparison, the shadow carbon price (the internal carbon price companies use within their GHG emission reductions plans) can be significantly higher. For example, reports from national and subnational jurisdictions range from $1/tCO2e in Mexico to $168/tCO2e in Sweden,[5] and $6 to $60/tCO2e for private companies in the United States.[6] This disparity between corporate and market prices suggests that current carbon offset pricing falls far short of meeting the costs of climate change. Legislative reforms are required as a buttress to support these markets. This would broaden the pool of offset buyers, bring market prices closer to shadow prices and reduce smallholder and community project risk.

A standard designed for small farmers and communities

For nearly two decades, Plan Vivo and its network of partners have connected rural communities to the voluntary carbon markets. Plan Vivo currently has over 50 projects in progress or under development in more than 30 countries and has channelled approximately US$9 million to rural communities. Admittedly this represents a small fraction of total carbon offset transactions across the world. Nevertheless, the standard offers a well-constructed and pragmatic framework for helping communities and smallholder projects access the voluntary carbon market. These suppliers are also in a position to offer other ecosystem service benefits such as biodiversity and water resource protection.

The activities promoted vary according to the needs of the smallholders and communities in which the projects are located. In every case, the standard takes a comprehensive approach to carbon offsets, seeking both to improve local earnings and safeguard ecosystems. Agroforestry activities, in which trees or shrubs are planted around or among crops or pasture, are a primary source of emissions reduction by Plan Vivo. The activities are designed to provide the farmer with a range of concurrent benefits — such as energy and food supply — while also protecting water sources and biodiversity. An increasing part of the portfolio now also covers forest custody and regeneration. It includes, for example, community forest



management in Indonesia with Fauna & Flora International and forest protection in the South Pacific Islands.

Plan Vivo and its partners are continually developing ways to cut costs and increase the benefit transfer to local participants. Monitoring, for example, is one of the greatest running costs affecting smallholder projects. But monitoring can also provide useful information back to the farmers, such as health of the trees. Plan Vivo is working with IIED, the University of Edinburgh andthe Ecosystem Services for Poverty Alleviation (ESPA) programme on the development of monitoring strategies that are accurate, cost-effective and provide local benefits.

A strong SDG score

The SDGs are a new, universal set of targets and indicators. UN member states are expected to incorporate them into their agendas and political policies over the next 15 years. They include a commitment to end poverty and hunger, improve health and education, make cities more sustainable, combat climate change and protect oceans and forests. The investment required will run into trillions. This will mean forming partnerships across the whole spectrum of society: government, the private sector, international and local NGOs, and communities.

The mutually beneficial, ethical partnerships promoted by Plan Vivo are well placed to support the implementation of at least seven of the SDGs, as outlined below.

SDG1: end poverty. Plan Vivo activities can cut through many of the roots of poverty through: (1) direct cash transfers estimated in proportion to the amount of carbon absorbed in the plot to provide short-term poverty alleviation, and (2) facilitating projects that build human and natural capital within communities, helping eliminate long-term poverty. Plan Vivo also operates in many places ignored by others. For instance, it works in remote locations or farms or in areas divided by conflict, where projects provide much-needed technical support in the design of the individual farm management plans. The farmers own the trees planted and are able to use and/or sell the timber in both the medium and long term depending on the species used. Some projects help communities establish small-scale timber workshops, and the local people are learning how to produce furniture or crafts.

SDG2: achieve food security. During the initial tages of a project, farmers and project developers hold regular meetings. Their objective is to design a management plan that will ensure the long-term survival of tree species without compromising family food security. Plan Vivo promotes a mixed portfolio of activities to spread risk. For example, different types of tree species are appropriate for timber, fruit, fodder and shade for intercropping, depending on what works best with the agricultural crops the farmers have available. Activities like beekeeping produce honey for household consumption or sales income while encouraging natural pollination.

SDG7: affordable and sustainable energy. A significant amount of timber is generated by removing branches to encourage tree growth and through the thinning process — when younger trees are removed to give space for others to mature. Many projects, such as Scolel Te in Mexico, also promote the adoption of efficient cook stoves. These are excluded from the carbon account but financed through the support of committed offset buyers either as donations or through agreements to increase the price per offset.

SDG8: Growth and employment. The introduction of carbon markets has created a major new supply chain. At the local level this includes project developers who carefully orchestrate the participation of smallholdings and remote farmers. They provide cash payments and technical support, and sell carbon offsets to international buyers. Community

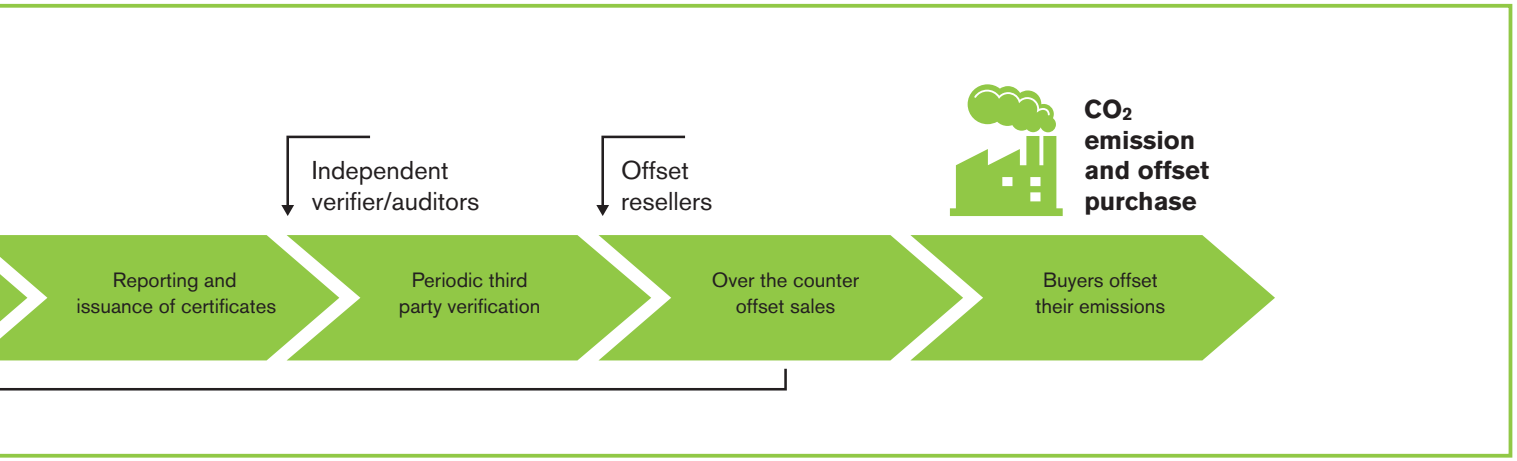


Figure 1. Smallholder and community carbon projects can work as effective vehicles delivering climate change solutions. However, the transaction costs within the network linking farmers to offset buyers can become unaffordable, obstructing market access.

monitoring creates jobs for forest technicians, many of them women, as well as young people eager to learn new technology skills. Demand for tree cultivation also promotes seed collection and the creation of local nurseries. All Plan Vivo projects are independently verified, and most of the voluntary carbon offset marketing is carried out through a growing network of retailers in the US and Europe.

SDG13: Urgent action to combat climate change. Reforestation, protection and management of forests help diminish the threat of climate change. Collaboration with the research and academic sectors, such as the ESPA project with IIED and Edinburgh University, have a role to play here: for instance, in helping develop rigorous and streamlined scientific methodologies employed to measure the environmental footprint of these activities in cost-effective ways. Once verified and validated, these reduced emissions become a tradable commodity sold in voluntary carbon markets. Companies and governments are then more confident in purchasing these offsets and can use them to meet emissions reduction targets.

SDG15: Protect biodiversity and ecosystems. The sustainable principles underpinning each management plan seek to balance food and timber cultivation while broadening the area of impact to other ecosystem services. Better farm management contributes to improved water retention and reduces sedimentation. Planting new trees, especially native species, helps rehabilitate degraded landscapes. The Yaeda Valley REDD+[7] project in Northern Tanzania is an example of a project working with hunter-gatherer communities to reduce pressure on existing forests while improving livelihoods. Projects like the Nakau Programme in the Pacific Islands put forward a "habitat protection" unit that promotes rainforest and mangrove protection to reduce indigenous community vulnerability to climate risks. This link to biodiversity conservation is also a key proposition for community forest management in Indonesia. It is currently piloted by Flora and Fauna International and shows great potential for being scaled up across the rest of the country.

SDG17: Partnerships for implementation. The increasing number of projects promoting reforestation, organic agriculture and cleaner energy technologies requires multiple partners along the value chain. These include farmers, technical and capacity-building specialists, project managers, office administrators, carbon experts (modelling specialists, auditors and certifying agents), offset resellers, and importantly offset buyers. Increasingly, project developers have become leading figures in the design of national public initiatives, such as Ecotrust in Uganda and Fundación Ambio in Mexico.

Conclusion: from road test to full fleet

These projects currently represent a small proportion of all carbon transactions across the world. However, they are needed to road test economic viability and explore the potential for nesting additional benefits like community rights and biodiversity protection. The action of voluntary projects and buyers makes an imprint on the carbon community and helps shape and inform global climate talks and policies.

But to emerge as tangible solutions for combating climate change, these projects need to work at a much larger scale, which will mean trade-offs, too, if local contact is reduced and the benefit share is compromised. The greatest risk, however, arises from plummeting carbon prices, as the existing pool of voluntary offset buyers may not be able to absorb the increased supply of offsets. This would drive prices ever further down, making a devastating impact on socially oriented carbon projects.

To inspire the creation of new carbon markets, new legislation needs to be introduced. It needs, for example, to encourage demand from the private sector in developing countries, and to bring carbon prices closer to the real social and economic cost of climate change.

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Notes

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