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Why carbon finance is critical in underpinning the transition to sustainable agriculture and land use

Navigating a more constrained funding environment

Public and philanthropic funding for agriculture and climate adaptation is under pressure, with preliminary OECD data showing a 23.1% decline in official development assistance in real terms between 2024 and 2025 (OECD, 2026), while the United States announced the cancellation of 83% of USAID programmes, representing approximately 5,200 contracts, in March 2025 (CBS News, 2025). These cuts add to a long-standing shortfall.

Agriculture and food systems generate nearly a third of global greenhouse gas emissions, yet climate finance directed towards the sector has consistently fallen short of its contribution to global emissions and its mitigation and adaptation needs. According to the Climate Policy Initiative, the sector received an average of about USD 95 billion a year in 2021-2022, just 7.2% of global climate finance. To meet climate goals, the sector would need around USD 1.1 trillion a year to 2030, roughly twelve times what it receives today (Climate Policy Initiative, 2025).

The structure of global climate finance for agrifood systems matters as much as its size. Most of it is public (78%), increasingly from domestic governments and national development finance institutions, while private finance accounts for only 20%. Debt makes up 62% of flows and grants only 18%. Adaptation receives just 14%, and on-farm solutions such as soil carbon management and agroforestry receive minimal support (Climate Policy Initiative, 2025). Closing the gap will therefore require more private capital, better use of scarce concessional funds, and instruments that reach the farm.

Carbon markets are one of these instruments, increasingly recognised as an additional source of finance for agriculture. Because they pay for verified results over many years, they can reduce risk for other investors, help keep financial mechanisms running beyond the initial investment, and mobilise wider climate finance.

As grant funding declines, donors, governments and investors are looking more closely at instruments that pay for results: carbon finance tackles a tangible impact. A carbon project earns credits for each tonne of greenhouse gas emissions it avoids or removes. Crediting periods often run for decades, so the revenue can keep paying for training, maintenance and payments to farmers long after the initial investment. Grant-funded farm programmes have often struggled to sustain results at this stage.

Carbon finance is not a complete solution, and we design projects with its limits in mind. Credits are issued only after independent verification, so revenue arrives well after the initial investment. Prices and policy rules can shift over a crediting period,

and carbon revenue alone rarely pays for new equipment or planting. Part of a developer's job is to bridge that gap: securing advance commitments from buyers, combining carbon revenue with blended or consumer finance, and structuring projects so that farmers are not left carrying the risk.

Mitigation and adaptation on the same farm

In most sectors, a project either reduces emissions (*Mitigation*) or helps people cope with climate impacts (*Adaptation*). Farming rarely fits neatly into one box. Practices that store carbon in soils or trees often also help soils hold water, protect against erosion and keep yields more stable in dry years (IPCC, 2022). Biochar in an orchard, trees planted on a degraded plot, and a solar pump that replaces a diesel engine all reduce emissions while making the farm more resilient.

This is particularly relevant given the persistent challenges of financing adaptation activities, whose economic and societal benefits are often diffuse, long-term and difficult to capture through conventional revenue streams. Carbon finance offers an opportunity to mobilise additional investment by generating revenue from measurable and verifiable emission reductions, while supporting broader adaptation and resilience outcomes.

However, the credibility of this approach depends on ensuring that emission reductions are real, additional and conservatively quantified, with wider adaptation benefits recognised as complementary outcomes. This matters because adaptation finance for agrifood systems remains scarce and is delivered mostly through public grants and low-cost debt (Climate Policy Initiative, 2025); carbon revenue can complement it, not replace it.

The farm as an ecosystem

Carbon finance can work on a whole-farm approach rather than isolated interventions. When interventions are chosen one at a time, they tend to produce small volumes of credits at a high cost per tonne and do little to change how the farm works. When they are planned as part of a wider strategy considering more smallholder farmers, they can share partners, monitoring and finance, and add up to lasting change.

A whole-farm approach encompasses land use, energy, water, livestock and crop residues and address how these elements may fit together and plans interventions in a sequence where each one strengthens the next. For many smallholders, a single, well-understood technology, such as an efficient cookstove, a solar pump or a biogas digester, is the most practical entry point. It delivers visible benefits quickly, builds trust with farmers and project partners, and can open the way to broader changes in how the farm is managed. New technologies make a whole-farm approach measurable, a simple framework makes it practical, and the examples show it is already happening. The whole-farm approach aims to identify opportunities for complementary interventions that can be progressively scaled across farms and farming communities.

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How to address agricultural emissions at the farm level

What drives emissions at the farm level

Agriculture, forestry and other land use produced an average of 11.9 billion tonnes of CO_2-equivalent a year between 2010 and 2019, about 21% of global net emissions from human activity. The sector's share is much higher for methane (41%) and nitrous oxide (69%), two powerful greenhouse gases (Table 1; IPCC, 2022).

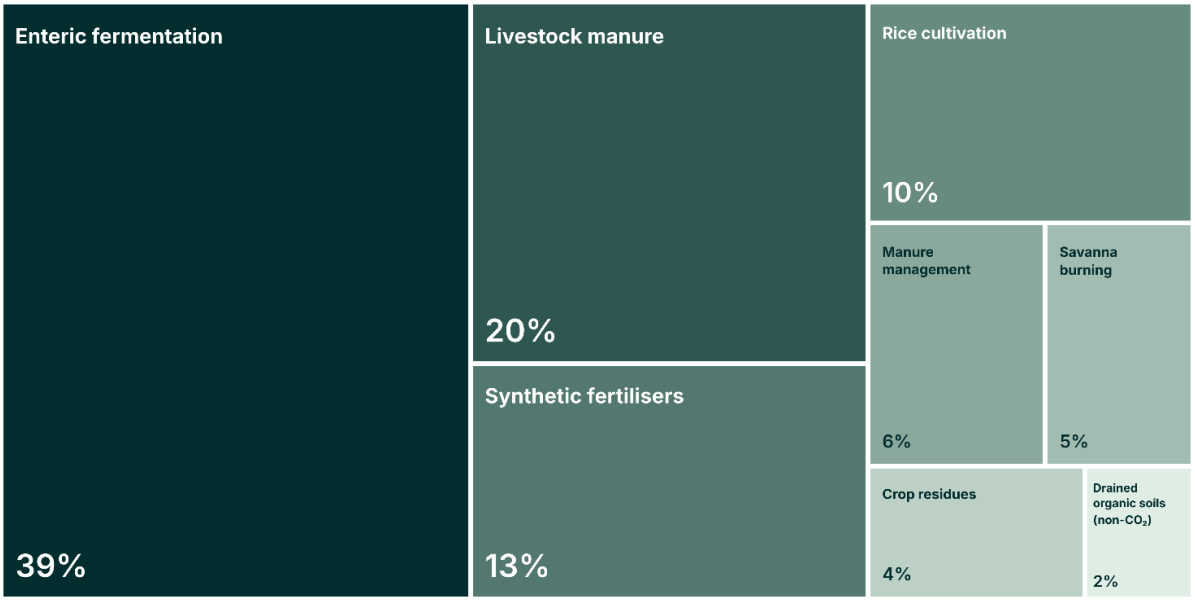
Table 1. Net emissions from agriculture, forestry and other land use, annual averages 2010–2019

Gas	Sector emissions ($GtCO_2e/yr$)	Global net emissions ($GtCO_2e/yr$)	Sector share
Carbon dioxide (CO_2)	5.9 ± 4.1	42.0 ± 29	14%
Methane (CH_4)	4.2 ± 1.3	10.2 ± 3	41%
Nitrous oxide (N_2O)	1.8 ± 1.1	2.6 ± 1.5	69%
Total	**11.9 ± 4.4**	**55.9 ± 6.1**	**21%**

Source: IPCC (2022), Sixth Assessment Report, Working Group III, Chapter 7, Table 7.1.

On the farm itself, digestion in cattle and other ruminants (enteric fermentation) is the largest single source of emissions at 39%, followed by livestock manure (20%), synthetic fertilisers (13%), rice cultivation (10%) and manure management (6%) (Figure 1; FAO, 2020).

Figure 1. Sources of global farm-gate emissions



Source: FAOSTAT Analytical Brief 18 (FAO, 2020). Shares of global farm-gate emissions.

In a whole-farm approach, interventions are designed to complement one another, creating synergies across agricultural activities while delivering multiple environmental and economic benefits. For example, a biogas digester using livestock manure can reduce methane emissions, provide renewable energy for farm operations and produce digestate that can partially replace synthetic fertilisers.

To better understand these opportunities, interventions can also be categorised according to where emission reductions occur in relation to the farm gate:

- **Before the farm gate:** what farmers need to get started, such as finance, land preparation, seedlings and guarantees.
- **On the farm:** the core changes in production, such as regenerative practices, agroforestry, livestock and manure management, and on-farm energy and water systems.
- **After the farm gate:** collection, processing, storage and access to markets to sell agricultural products.

Which emission reduction opportunities exist across the farm?

Most farms combine several land uses and activities: fields and pasture, patches of forest, degraded plots, livestock, buildings and the energy that runs them. Each part offers different opportunities to reduce or remove emissions, and different interventions can address each using different carbon methodologies. To better illustrate and understand all the different projects that can happen across the whole farm, Figure 2 presents a simple framework that maps the different farm elements and the interventions that can be applied.

We divide the farm in six interconnected units, grouped into Land Based and Infrastructure clusters units and crosscutting solutions and enablers.

Land Based Cluster

1. **Productive Land Unit:** it is defined as the crop or grassland area in a farm, where seasonal or permanent crops and plantations are located.
2. **Preserved Land Unit:** it is represented by all the areas that are preserved, or should be preserved in a farm, including water bodies, forests or other natural ecosystems.
3. **Degraded Land Unit:** this should be a transitory unit, and it is represented by low productivity or unproductive land. Any degraded land should either be converted into productive land or conservation land.

Infrastructure Cluster

4. **Production Process Unit:** farmers have multiple processes in their property that will require machinery, infrastructure, and processing capacity. This unit covers all the infrastructure and process related to the core activity of the farm (this unit excludes the land itself).
5. **Farmhouse Unit:** Many times, forgotten. Every farm has at least one farmer and his/her family, who deserves a decent life, with proper access to all basic needs (shelter, clean water, energy, waste management, clean air, etc.).

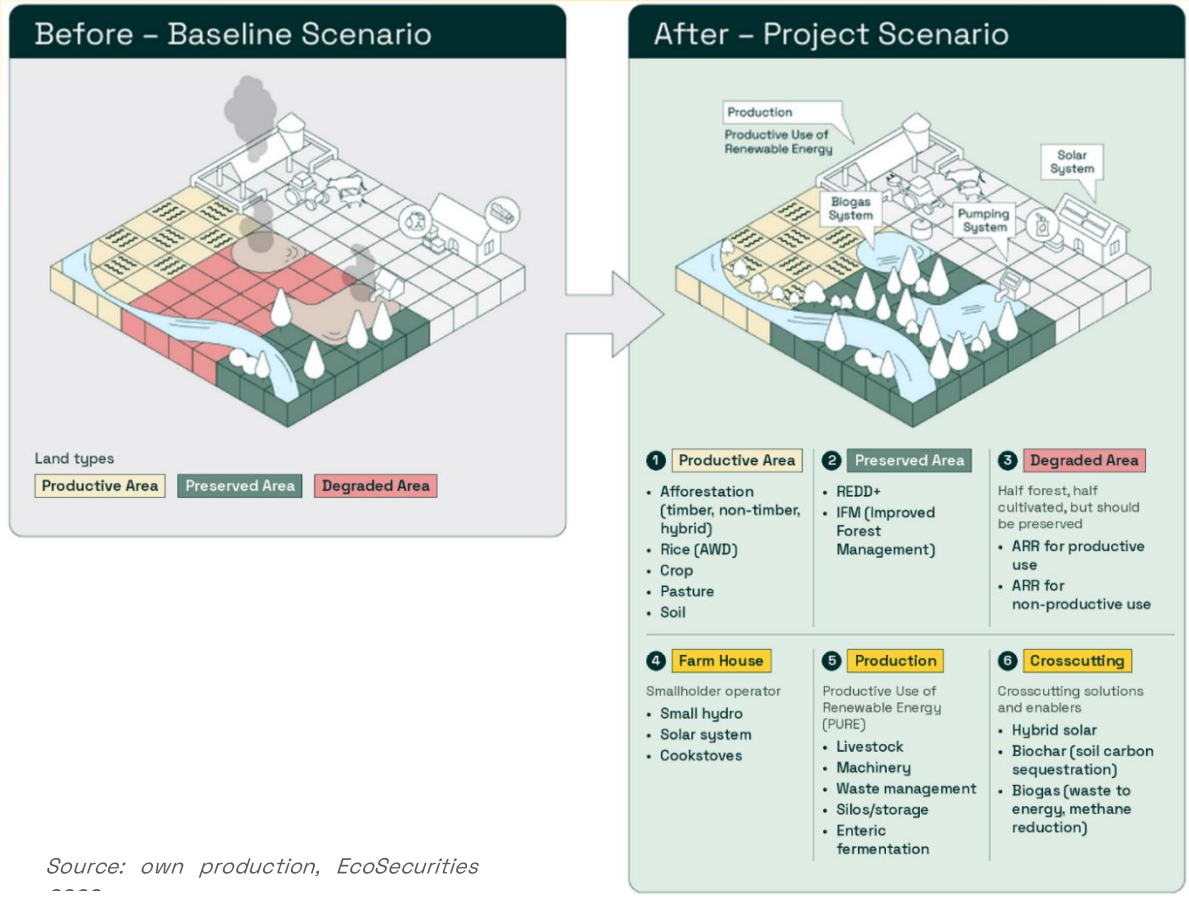
6. Crosscutting solutions and enablers

Crosscutting solutions and enablers link several units of the farm. Crosscutting solutions turn an output from one unit into an input for another: crop and processing residues become biochar that improves soils on productive land, and livestock manure becomes biogas for cooking and energy, with the remaining digestate used as fertiliser. Enablers are the systems that make interventions possible across all units, such as digital monitoring, farm records, access to finance, and the training and organisation provided through cooperatives.

The figure below shows the six units at the same farm twice. The **baseline scenario** reflects conventional farming practices, where emissions may arise from livestock, agricultural waste, land management with part of the land degraded and forest areas under pressure, open burning and fossil fuel use, with limited measures in place to reduce emissions or enhance carbon sequestration.

The **project scenario** illustrates the same farm, once a combination of interventions to reduce emissions or enhance carbon sequestration is in place. A carbon project quantifies the emission reductions achieved relative to the baseline scenario using an approved methodology. That difference, verified by an auditor and calculated with an approved methodology, is what earns carbon credits.

Figure 2. From baseline to project scenario: land types and areas of intervention



Source: own production, EcoSecurities

One very important element to highlight, is that interventions and opportunities for emission reduction in a farm go beyond crop management. We will list a series of potential interventions on each of the six units of a farm, with some of them being cross-cutting interventions affecting many units.

The section below presents typical interventions on each of the units, as well as some concrete real cases implemented across the world.

Types of land interventions (1-3)

1. **Productive area** is land in active use for crops, pasture or timber. The aim is to keep it productive, or increase its productiveness while lowering its emissions and increasing its carbon stocks. Interventions in productive areas can impact CO2 emissions, CH4 emissions and N20 emissions.

   Typical interventions include planting trees for timber, non-timber products such as fruit, or both, increasing the stocks of carbon in the above ground biomass; alternate wetting and drying (AWD) in rice paddies, which reduces methane released by flooded fields; better management of crops, pasture, and soil, which builds soil carbon or

improved used of fertilizers, including the replacement of chemical fertilizer for organic ones, which will reduce the N20 emissions.

In Argentina and Paraguay, the Carbono Rural projects (VCS 3938 and VCS 4746) work with cattle ranchers to restore degraded pastures through better grazing management, which rebuilds soil carbon. It uses Verra's VM0042 methodology for improved agricultural land management, using soil sampling combined with modelling to quantify stored carbon. Ranchers enrol individually under a common project, so one registration and monitoring system serves many properties, with Soilwatch providing technical and monitoring support in Argentina. EcoSecurities is the project proponent and manages development, registration and the sale of credits. The Argentine project, registered in 2026, is expected to generate approximately 27,000 tCO_2e in annual emission reductions, while the Paraguayan project is estimated to generate around 874,000 tCO_2e per year.





Carbono Rural, improved agricultural land management in Argentina and Paraguay (EcoSecurities).

2. **Preserved areas** are standing forests and ecosystems that still hold large carbon stocks but may be at risk of clearing. Here the aim is to keep that carbon in place. REDD+ projects reduce emissions from deforestation and forest degradation compared with what would have happened without protection. Improved forest management (IFM) changes how a forest is managed, for example by extending harvest cycles, so that it stores more carbon over time.

In Paraguay, the Panambi REDD+ project protects native forest in the Chaco, across the departments of Alto Paraguay, Boquerón and Presidente Hayes, earning credits for deforestation that is avoided compared with the expected baseline. It uses Verra's VM0007 methodology for reducing emissions from deforestation and forest degradation and is expected to avoid about 110,000 tCO_2e a year over a 30-year crediting period that began in 2023. EcoSecurities is the project proponent, and the project was registered with Verra in October 2026 following validation by Earthood. Located in the same region as Carbono Rural, it shows how protecting standing forest and improving grazing on nearby ranch land can be planned together across one landscape.



Panambi REDD+ project (EcoSecurities).

3. **Degraded areas** are unproductive or with very low productivity land, with needs of support/intervention to change their status. Degraded lands are vast across the world but should be avoided and remediate, being transformed into Productive land or Conservation land. Programs that promote the recovery of degraded land into productive land reduce pressure for the expansion of agriculture areas via deforestation of ecosystems, can increase carbon stocks in above ground biomass and on soils. A second alternative is to support the restoration of the land into conservation land. Afforestation, reforestation and revegetation (ARR) brings trees back, either for productive use, such as timber or agroforestry that provides income, or for non-productive use, such as native forest restored for conservation. All these cases can increase carbon stocks on above ground biomass and soils.

In Zambia, farmers regenerate naturally occurring trees on 8,900 hectares of degraded land and establish agroforestry systems on a further 1,900 hectares of farmland, with an expected 1.9 million tCO_2e removed over 30 years. World Vision Korea leads the Circle project, with World Vision Zambia implementing on the ground alongside local community forest management groups. Korea Investment and Securities is the financial partner, and EcoSecurities developed the project to Gold Standard requirements and is supporting validation and the monitoring phase.



World Vision Circle project in Zambia, agroforestry nursery (World Vision Korea, World Vision Zambia, EcoSecurities).

The largest gains come when degraded land restored to forest, degraded land brought back into production, or agroforestry approaches are implemented into the productive land as well.

Areas of **intervention at the infrastructure level (4 & 5)**

4. **Farmhouse:** With many smallholders still not having its basic needs attended, the focus of interventions cannot be concentrated on the core activities of a farm in exchange for neglecting the living conditions of farmers. There are many potential interventions to be done at farmhouse level, focusing on decarbonization and improving living standards. Some of the examples are solar home systems, providing lighting and energy access, clean water supply, wastewater and waste management, reducing CH4 emissions, clean cooking, reducing consumption of unsustainable fuels and reducing air pollution, and others.

In Timor-Leste, the Gold Standard programme of activities (GS12906), listed in 2024, aims to replace open fires with up to 200,000 efficient cookstoves, avoiding about 340,000 tCO_2e a year (roughly 1.7 tCO_2e per stove). As a programme of activities, it can add new groups of households over time without separate registrations. Carbon finance allows stoves to be provided free of charge to priority households, and close to 5,000 have been distributed so far. Village ambassadors and digital data collection support monitoring, and the government's letter of approval for corresponding adjustments opens the way to selling credits under Article 6.





"After over a year of using this new stove, I observe that this ICS is the best. It has reduced smoke in this kitchen, less time for firewood collection, and cook faster. Girls are now having more time for study and doing other domestic works."

Francisco dos Reis - Aisirimou village, Aileu (EcoSecurities)

5. **Production Process:** This encompasses day-to-day farm operations, including livestock management, machinery, waste handling, processing and storage, farm products processing and other activities. Emission reduction opportunities include improved feeding practices and herd management to reduce methane from enteric fermentation, alongside the management of wastewater or solid waste generated in the farm, reducing methane emissions and generating new products such as compost, biochar and renewable energy. The adoption of renewable energy solutions to replace

fossil fuels in activities such as solar systems for irrigation pumping, processing and cooling can significantly reduce CO2 emissions associated with the consumption of fossil fuels. This falls under productive use of renewable energy (PURE), which integrates renewable energy technologies into agricultural operations to improve efficiency, reduce emissions and enhance productivity.

The Watts and Water programme of activities in Kenya, coordinated and managed by EcoSecurities, gives small solar pump companies access to carbon finance they could not reach alone. Emission reductions from displaced diesel are calculated with the UN small-scale methodology AMS-I.B, and each pump carries a connected device that reports its use. Each company joins as a separate component with its own approvals from Kenya's national authority. The first phase targets about 10,950 pumps a year, avoiding about 7,200 tCO_2e annually. The programme is being designed for authorisation under Article 6, with an advance buyer identified, so that carbon revenue can complement the pay-as-you-go finance farmers use to buy the pumps.

Another example is the earlier model Granja Tres Arroyos in Argentina, co-developed by EcoSecurities under the Clean Development Mechanism (CDM). It replaced open lagoons at two poultry processing plants with aerobic treatment (AMS-III.I) and has issued more than 367,000 credits between 2008 and 2015. According to the project design, credit revenue, together with savings on natural gas, was expected to recover the investment of about USD 4.3 million within ten years.



Farmer using a solar water pump to irrigate his farm in Kenya.

6. Crosscutting solutions and enablers

Some technologies connect several parts of the farm at once, hybrid solar systems supply power across the farm; biochar from agriculture waste returns crop residues into a stable form of carbon that improves the soil and store carbon; biogas digesters capture methane from manure and turn it into energy, leaving a residue that can be

used to substitute chemical fertilisers. Together, these interventions integrate systems that generate renewable energy, such as solar, small hydro and biogas, and systems that put that energy to productive use, such as water pumping, irrigation, and processing.

The Atlas Olive Oils project in Morocco turns orchard and processing waste into biochar in a new factory plant and applies it on its own organic olive tree farms. The project uses Verra's biochar methodology VM0044 and is under validation, with expected removals of about 26,000 tCO_2e a year over a seven-year crediting period, renewable twice. Atlas invested in the plant and owns the credits, with EcoSecurities as carbon advisor, so carbon removal credits add a revenue stream to an investment that also improves its soils.

The Malawi Dairy Biogas Programme authorised under Article 6.2 of the Paris Agreement, with Switzerland's KliK Foundation as Buyer, brings household biodigesters to 10,000 smallholder dairy farmers through their producers' association, with about 60% of reductions from manure methane and 40% from replacing firewood and charcoal (KliK Foundation, 2026; Sistema.bio, 2026).



Atlas Olive Oils biochar project in Morocco (Atlas Olive Oils, 2026. www.atlasoliveoils.com.)



Sistema.Bio Project in Malawi, Article 6 (KliKs Foundation, 2026)

The implementation and combination of these interventions depends on the land, the farming system and the local market for energy and products. Manure from the livestock area can feed a biogas digester; the energy can power pumps that irrigate restored land; and residues from crops and orchards can become biochar that improves soils on productive land. Planned together, these interventions share monitoring systems, partners and finance, which lowers costs and increases the volume of credits from a single farm or landscape.

The framework provides a structured way to identify opportunities for farm-level interventions, understand how different activities generate carbon credits, and integrate them within a broader programme. It also links project-level emission reductions and broader development benefits to national priorities, including land restoration, energy access, and climate targets.

Different parts of the framework also call for different types of finance. Land-based interventions on productive, preserved and degraded land (1-3) generate results over

many years and suit long-term carbon revenue and results-based payments, but still need upfront funding for planting, extension and monitoring. Infrastructure in the farmhouse, in production process and across the farm (4-6), such as solar pumps, biogas digesters and cookstoves, needs capital upfront, which pay-as-you-go plans, concessional loans and guarantees can provide, with carbon revenue helping to repay or reduce the risk of that capital. Many of these interventions also deliver adaptation benefits, such as irrigation and healthier soils, which can make them eligible for adaptation grants and climate funds. A whole-farm programme can therefore combine several sources of finance, each paying for the part of the farm it is best suited to.

How to enable the use of Carbon Markets in the agriculture sector

Aggregating smallholder farmers and mobilizing finance

The costs of carbon project development and monitoring are often beyond the reach of individual smallholder farmers, making aggregation essential to achieve the scale and cost efficiencies needed to access carbon finance. Signing up, monitoring and paying thousands of small, scattered farms involves a fixed cost that does not shrink much as projects grow. The main reasons are fragmented, often informal land rights; farms starting from very different baselines; high monitoring costs compared to the emission reductions each farm delivers; limited access to loans for upfront investment and to digital services; and the logistics of reaching farms spread across large areas. Access to credit is a particular constraint: across more than 285 million smallholder households, demand for credit exceeds USD 323 billion a year against a supply of about USD 95 billion, and where loans are available, they are often short-term and cost 25-30% a year in Africa (ISF Advisors, 2025).

The best approaches share a common logic: they reduce the number of separate agreements a project has to manage, use organisations and networks that already exist on the ground, spread fixed costs across many participants, and replace costly field visits with remote monitoring. These approaches are most often combined:

Working through cooperatives. Contracting with cooperatives and producer associations instead of individual farmers turns thousands of agreements into a few dozen, and uses structures that already exist for registration, record-keeping, communication, capacity building and sharing income. Cooperatives or famers associations add a layer of governance that needs careful management: how income is shared and reported, whether the cooperative has the capacity to do the job, and how to prevent the risk that benefits go mainly to a few influential members. Programmes need to design clear rules for sharing benefits, a way for farmers to raise complaints and support to strengthen the cooperative itself. Cooperatives also hold what lenders lack: data and direct access to many farmers. Digital farm records and repayment

histories, for example from pay-as-you-go solar pumps, can be pooled into a portfolio that a bank can assess and price.

Partnering with established organisations. NGOs, public bodies and companies, Indigenous governance bodies, development banks with existing rural networks can take on the work of signing up farmers and delivering on the ground.

Programme structures and blended finance. A Programme of Activities (PoA) lets many small implementers operate under one registered umbrella, which lowers costs for each. Advance commitments from buyers, consumer finance and guarantees reduce the risk of investing before carbon revenue arrives coupled with a pay-as-you-go finance approach for farmers. In Kenya, the Irrigation and Climate-Smart Agriculture (ICSA) Guarantee Fund that EcoSecurities is developing with the Kenya Climate Innovation Center and Kenya Climate Ventures will use Article 6.2 revenue from the Watts and Water programme to guarantee lending by microfinance institutions, savings and credit cooperatives and banks. Around USD 25 million of concessional capital is intended to back a USD 100 million credit line for 100,000 solar pumps, in a country where agriculture receives under 3% of bank credit despite generating 23% of GDP. Through the CIRCLE programme, EcoSecurities is applying the same approach to cooperatives in coffee and cocoa value chains, including in Ethiopia. In both cases, scarce public funds absorb the early risk once, rather than subsidising each pump or each farmer.

Digital monitoring. Satellite data, remote sensing and connected devices cut the cost of monitoring each farm, as described above.

Advancing science, technology and finance for scalable climate solutions

Satellite imagery has changed the cost of monitoring carbon projects. Free public satellites such as the EU's Copernicus Sentinel-2 photograph the same field roughly every five days at a resolution of 10 meters (ESA, n.d.), and commercial providers offer daily or more detailed images. Combined with machine learning, these images can show whether trees are growing, how land is being farmed and how much irrigated is. That makes it possible to set a starting point, confirm that farmers have changed their practices, and keep a dated record of how land changes across thousands of farms at once. Much of the checking that once required a visit to every farm can now be done centrally and repeated at low cost. Field visits are still needed, especially for measuring soil carbon, but satellite data has made farm-level accounting affordable at the scale financing requires, with cheaper sensors, robotics and automated equipment lowering costs further.

Several innovations are also advancing at the same time. Soil scientists can now measure and model changes in soil carbon more reliably. Precision farming tools track fertiliser uses and farming practices field by field. Mobile money, pay-as-you-go plans and new ways of assessing credit have made it possible to pay smallholders directly

and to help them buy equipment in instalments. Together, these changes make farm-level projects possible to verify and finance at a cost that was out of reach ten years ago. In addition, cooperatives and producer associations can collect and manage data from dispersed smallholder farmers and share income on behalf of their members. This makes them a natural partner for carbon projects, which need a reliable counterpart on the ground. We return to their role in the next sections.

None of these changes alone are enough. What has changed is that monitoring technology, farm science, payment systems and farmer organizations have matured simultaneously. That combination is what makes whole-farm carbon projects workable on a scale.

Looking ahead, Recommendations and Next Steps

Agriculture needs more climate finance as traditional funding declines. Carbon finance can work tackling many farm practices that cut emissions and strengthen resilience at the same time. Satellite monitoring, better science, mobile finance and stronger farmer organisations now make it possible to design, check and fund these practices on a scale. Treating the farm as a single system, organised around the state of the land and the infrastructure on it, gives a practical way to do so. Cooperatives, partner organisations, and programme structures can reduce the cost of working with many small producers. Combined with blended finance and the long-term demand created under Article 6, carbon revenue can do more than reward results: it can lower the cost of capital for farmers and the businesses that serve them.

Not every project is ready for carbon markets from the start. Results-based climate finance from public funds can act as a steppingstone, paying for verified results while the institutions monitoring systems and farmer networks that carbon markets require are built. In Zambia's Eastern Province, the World Bank's BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL) programme first received about USD 33 million from IDA, the Global Environment Facility and the ISFL to build institutions, extension services and monitoring, before an emission reductions purchase agreement signed in 2024 linked further payments to verified results (World Bank, 2024).

The examples in this paper show that this is already happening, on productive, degraded and preserved land, with energy systems on farms and in homes, and with partners ranging from Indigenous associations and NGOs to pay-as-you-go companies and integrated agribusinesses. They also show that results depend on getting the details right: fair benefit-sharing, genuine consent, clear rules on what counts, and finance to cover the years before carbon revenue arrives.

EcoSecurities works with governments, development banks, cooperatives and private companies to design agricultural carbon programmes that are investable and built to include many producers from the start. Our work covers feasibility studies, choice of methodology, monitoring design, registration and approvals under Article 6, with one aim: to make sure carbon revenue reaches the farm and keep rewarding the changes it

was meant to support.

Key terms

Article 6: the part of the Paris Agreement that allows countries to cooperate, including by transferring emission reductions between them.

Blended finance: the combination of public or philanthropic funds with private capital, usually to reduce risk for private investors.

Carbon credit: a certificate representing one tonne of CO_2-equivalent reduced or removed, issued once results are independently verified.

Clean Development Mechanism (CDM): carbon crediting mechanism under the Kyoto Protocol. Projects in developing countries earned certified emission reductions (CERs), which industrialised countries could use towards their emission targets. Under the Paris Agreement, eligible CDM activities can transition to the new Article 6.4 mechanism.

Corresponding adjustment: an accounting step that ensures an emission reduction transferred abroad is also not counted towards the host country's own climate target.

Crediting period: the period during which a project can earn carbon credits.

First-loss guarantee: a commitment by one funder to absorb the first share of any losses on a loan portfolio, which makes other lenders more willing to lend.

Monitoring, reporting and verification (MRV): the process of measuring a project's results, reporting them and having them checked by an independent auditor.

Programme of activities: a framework in which a coordinating entity registers a programme once, and many similar small activities can then be added to it over time without each being registered separately. This lowers the cost of bringing small projects to the carbon market.

REDD+: activities that reduce emissions from deforestation and forest degradation.

Results-based climate finance (RBCF): public funding paid on delivery of verified climate results, such as emission reductions, rather than on project inputs.

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