P4F Evaluative Case Studies: Synthesis

Overall Assessment
FINAL Report

Contents

P4F Evaluative Case Studies – Synthesis of Findings

Insights and recommendations for promoting transformational change to reduce the pressure on forests and improve livelihoods through private investment for deforestation-free commodities.

1 Introduction

Background

The UK Government-funded Partnerships for Forests (P4F) programme seeks to support partnerships and increase private investment that delivers on commitments for deforestation-free commodities, reduced pressure on forests, and improved livelihoods by 2020. It is designed to create market-ready Forest Partnerships (FPs) and support enabling conditions (EC) and demand side measures (DSM), with the intention of mobilising investment, principally from the private sector.

LTS International Limited, part of the NIRAS Group, in consortium with Natural Resources Institute, Greenwich University and Aidenvironment, is the Evaluation Manager (EM) of P4F, contracted by one of the P4F donors; the UK Foreign Commonwealth and Development Office (FCDO). The UK Department for Business, Energy and Industrial Strategy (BEIS) supports P4F work in Latin America. An evaluative learning approach was employed to generate lessons and inform the P4F programme in its adaptive management, as well as to inform the UK Government on lessons learned. Thematic case studies were conducted and generated insights and lessons that have been shared with P4F and which form the basis for a series of more in-depth evaluative case studies.

Evaluation Methodology

A theory-based approach was adopted, meaning that the theory of change of the P4F programme, and the associated impact pathways and assumptions embedded within it, form the basis for the evaluative case studies. The programme's theory of change comprises five inter-connected impact pathways (described in more detail in Section 2):

1. Targeted producers' performance and livelihood benefits, with a focus on smallholders and communities;

2. Targeted producers' organisations as viable business units, with a focus on their governance and capacities to access markets and provide services to members;

3. Catalyst companies and other value chain actors, with a focus on their catalyst role, and service providers, with a focus on their capacity to serve producers, all with their business benefits;

4. Forest/landscape actors and governance systems at different scales, with a focus on their capacities and management systems to protect the forest;

5. Enabling conditions to support scaling and systemic change.

A methodology was developed on parameters of Relevance, Progress and Effectiveness, Sustainability, Scaling, Transformative Change, and Contribution by the programme, applies to each impact pathway and the integrated approach. Project baseline and endline studies were conducted for four clusters of P4F projects to be able to generate insights and draw lessons on the above impact pathways and parameters and on the contribution by the P4F programme. The evaluation drew on various sources of information, including project documentation, remote and face-to-face interviews with P4F staff, project implementing partners and other stakeholders involved in the projects, as well as focus group discussions with final beneficiaries. Findings in this report have been validated by P4F and project implementers.

Of the four clusters of projects that were evaluated, two clusters have a focus on one main project with one commodity and a corresponding geographical area or landscape (palm oil and cocoa, both in Ghana). The third cluster has an integrated landscape focus, with several projects in the Bukit Tiga Puluh (BTP) landscape in Indonesia. The fourth cluster focuses on four FPs in Colombia and three FPs in Brazil, which have received P4F technical assistance and grants since 2019. All project clusters also include linkages to projects that support enabling conditions and/or demand side measures (see Table 1 below).

Table 1. Summary of the P4F Evaluative Study Clusters

Cluster	Focus FP	Additional FPs	EC and DSM projects
Cocoa cluster	Partnership for Productivity, Protection, Resilience in Cocoa Landscape (3PRCL), in Western region in Ghana, by Touton in collaboration with Agroeco, SNV, Nature Conservation Research Centre, Cocobod and Forestry Commission.	- Partnership for Livelihoods and Landscapes, in Ghana, by Olam; - Preservation of Forest through Cooperative Professionalisation, in Côte d'Ivoire (CEMOI); - Protecting Forests and empowering people, in Liberia, by the Royal Society for Protection of Birds.	EC project: Cocoa and Forests Initiative (CFI) implemented in Ghana and Côte d'Ivoire, by the sustainable trade initiative (IDH) and the Wild Chimpanzee Foundation.
Palm oil cluster	Adum Banso Net Positive Carbon and Sustainable Oil Palm Pilot, in Ghana, by Benso Oil Palm Plantation (BOPP) Limited in collaboration with Proforest Initiative Africa.	None.	- EC project TFA2020 Africa Palm Oil Initiative (APOI); - DSM project 'Amsterdam Declarations.'
Rubber and ecosystem restoration concession landscape cluster	- Integrated Landscape Programme in Bukit Tiga Puluh (BTP), central Sumatra, Indonesia, including: - A Sustainable Natural Rubber Plantation project (RLU) Ecosystem Restoration Concession (ERC), by PT Alam Bukit Tigapuluh (ABT); - P4F support to a new Landscape Protection Forum in the same area.		- Global Sustainable Natural Rubber Platform; - Sustainable Landscape / Green Bond; - Lestari Capital Sustainable Commodities Compensation Mechanism (SCCM).
Latin America (LatAm) project cluster	In Colombia: Colombian Pacific Acai, Corpocampo, Ecoflora and Planeta projects. In Brazil: COOPAVAM, Veja and Xingu Seeds.		– 'Unleashing NTFPs' in Colombia; - Muvuca project in Brazil.

This paper presents the insights and recommendations of the baseline and endline assessments of the above four evaluative case studies. The insights are structured around the case study research questions.

2 Theory of Change and Overview of Findings

As a basis for the evaluation approach, the Evaluation Manager developed a theory of change that is applicable to the P4F programme as a whole, see Figure 1 below. This theory of change captures the three different interventions strategies of the P4F programme, being: 1) high value-low intensity value chains in forest landscapes; 2) production-protection linkages; and 3) restoration in forest landscapes.

The programme's theory of change comprises five inter-connected Implementation Pathways referred to continually throughout this report:

- **Implementation Pathway 1:** Targeted producers' performance and livelihood benefits, with a focus on smallholders and communities;

- **Implementation Pathway 2:** Targeted producers' organisations as viable business units, with a focus on their governance and capacities to access markets and provide services to members;

- **Implementation Pathway 3:** Catalyst companies and other value chain actors and their business benefits, with a focus on their catalyst role, and service providers and their business benefits, with a focus on their capacity to serve producers;

- **Implementation Pathway 4:** Forest/landscape actors and governance systems at different scales, with a focus on their capacities and management systems to protect the forest;

- **Implementation Pathway 5:** Enabling conditions to support scaling and systemic change.

The colour-shape symbols in Figure 1 provide an indication of the progress and potentials for each pathway based on the findings of this assessment for the four evaluative case studies, being the project clusters in the cocoa and palm projects, the three projects for the BTP integrated landscape programme in Indonesia, and the seven projects in Latin America (see Table 1). However, these scores should be considered with caution, because variability between projects is large, in particular for the LatAm case study.
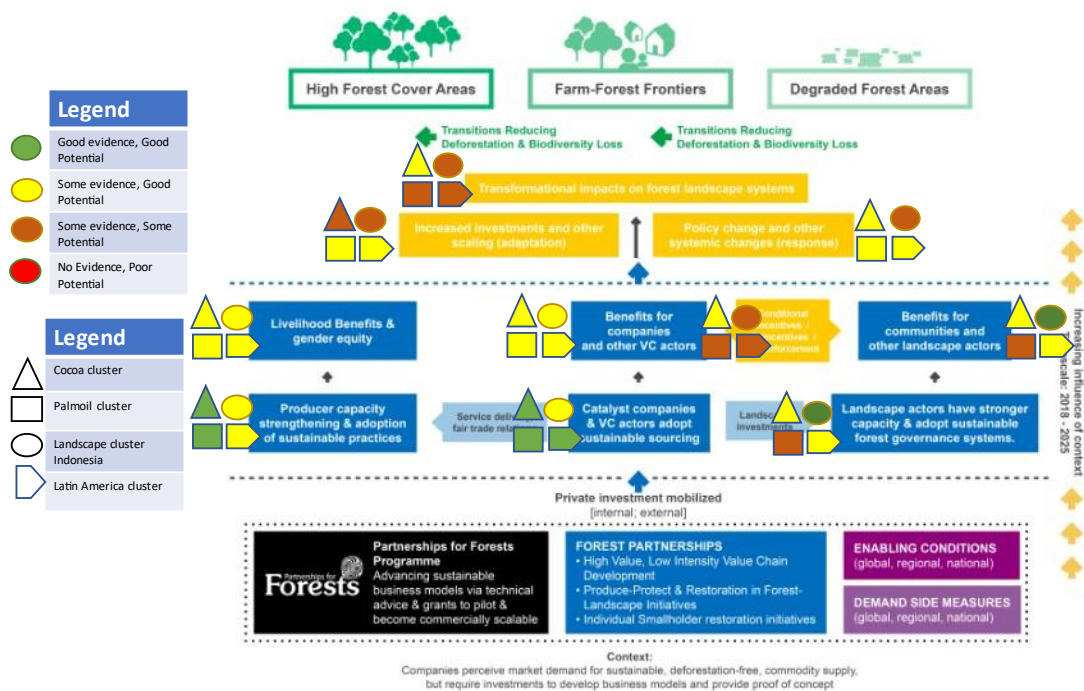

Figure 1: Schematic overview of endline study assessment scores for key elements of the theory of change and its different pathways. See legend for meaning of colours (scores) and forms (project clusters).

The following are some general insights from this overview, and also include a comparison with the baseline values, with more details provided in the following section (Section 3):

- **_Impact Pathways 1 and 2_** (producers and producer organisations, which are merged in the left-hand producer pathway): For all project clusters (climate smart cocoa, palm oil, sustainable rubber, sustainable collection of Non-Timber Forest Products; NTFPs) there is some or good evidence for capacity development and adoption of improved practices. For all case studies, this is a considerable improvement as compared to the baseline. In terms of benefits there have also been improvements as compared to the baseline, but the full potential has not yet been realised in the project clusters. This mainly relates to further productivity increases that can be made, incomes and other livelihood benefits, and the sustainability of the realised improvements (see below).

- **_Impact Pathway 3_** (private sector, the middle pathway) shows similar scores and similar improvements as compared to the baseline study. Again, there is some or good evidence for capacity development and adoption of improved practices by value chain actors, which is a considerable improvement as compared to the baseline, but in terms of benefits the full potential has not yet been realised. Thus, again, the main conclusion is that the full potential has not yet been realised in the project clusters. This is mainly related to the business cases not being fully developed, and some questions about sustainability of the results.

- **_Impact Pathway 4_** (landscape actors, the right-hand pathway), shows variable scores, i.e. with some or good evidence for all clusters and a mix of some to good potential. The low score for the palm oil cluster on this pathway is due to the fact that in the focus project the landscape relation was less developed. For the three other project clusters, the scores have improved as compared to the baseline, with the highest final score for the BTP landscape in Indonesia. For the cocoa and Latin America (LatAm) clusters, the scores have not yet reached full potential, mainly due to the fact that the established landscape governance structures or initiatives are not yet fully functional, but the ongoing activities provide confidence that the highest scores can be achieved in coming years.

- The evidence and potential for linkages between the production and protection pathways have slightly improved in the project clusters, but concrete evidence for these linkages remains weak.

- The four pathways jointly have the potential to contribute to a set of changes (outcomes), including increased investments and other scaling mechanisms, policy changes and other transformational changes. These scores have shown improvements, generally reflecting good or some potential, and some evidence. However, there are remaining challenges in terms of investment models for scaling, support to realise the potential for transformational change, and follow-up to ensure that reduced deforestation and enhanced reforestation is sustained.

3 Main Insights

3.1 Relevance

What is the relevance and additionality of the (proposed) interventions in relation to the challenges of deforestation, reforestation and poverty reduction?

The studied project clusters aim to solve complex problems associated with the environment and development nexus in contexts that are characterised by significant deforestation and have potential for restoration. They do so by supporting catalyst companies and local producer organisations, by introducing new partnerships and business models and by creating enabling conditions for these initiatives to become successful and enhance scaling potential.

P4F supports catalyst companies and local producer organisations to develop new business models to improve livelihoods of smallholder producers in combination with introducing conditionalities and incentives for forest protection and restoration. The case study clusters are all located in areas characterised by significant deforestation during recent years and with potential for forest restoration. These remote forested and forest-farm areas are also characterised by producers and communities that largely fall under the poverty threshold. P4F support aims to achieve positive change in complex development-protection-restoration dynamics. These include:

- RLU developing a sustainable rubber plantation model, by regaining control of land for rubber plantations, creating a smallholder in-grower production scheme, partnerships with migrant and indigenous groups, and establishing a wildlife conservation set-aside area as a buffer to the national park protected area.

- Support for an Ecosystem Restoration Concession approach to generate revenues from multiple forest products and funding for a multi-land manager landscape protection forum.

- BOPP investment in an Roundtable on Sustainable Palm Oil (RSPO) certified oil palm smallholder outgrower scheme, including support to communities on additional livelihoods activities to help them overcome the income gap in the period of the immature plantation stage and as an incentive for community-based forest protection activities.

- Touton investment in adoption of practices for more sustainable climate smart cocoa production, introducing an agroforestry system with shade trees, and developing and building the capacities of a multi-layered forest governance system in a cocoa production landscape area in order to control deforestation.

- Several projects with smallholder organisations and catalyst companies in Latin America working to improve production of non-timber forest products to generate improved incomes while enhancing forest protection and restoration.

Project clusters (of FPs with EC and/or DSM measures) have been relevant to address some of the challenges of deforestation as related to the specific commodities targeted by the projects, but few are likely to reverse the trend of deforestation in the targeted landscapes. Project designs did not necessarily clarify the bigger picture, including systemic issues and contextual factors that are root causes of threats to deforestation.

P4F has the ambition to reverse deforestation trends by achieving transformational change. While all projects have benefitted from detailed diagnostics and design, it appears that the bigger picture is not always complete. As a result, it often remains insufficiently clear what are the remaining barriers to real transformation and scaling in the project landscapes and the wider context. While it cannot be expected that P4F projects solve all systemic issues that need to be addressed to reverse deforestation trends, an improved diagnostics could have contributed to identifying partnerships or pro-actively promoting additional activities that would fill the remaining gaps for real transformative change. While in some cases this is certainly happening, the focus has been on developing a viable business case for a well-defined sector-landscape model, while there seem to be remaining challenges in terms of the wider context that may explain why overall deforestation has not significantly reduced in the targeted landscapes (see Box 1). Certainly, it takes more time to reverse deforestation than the average project period.

3.2 Effectiveness and Impact – per Pathway

How effective has the project been in realising the expected benefits (including reach and response)?

Are there any negative or unexpected effects, and if yes, for what type of stakeholders / actors and with what implications?

Impact Pathway 1: Targeted producers' performance and livelihood benefits

All FPs support capacity building to improve livelihood benefits of producers / community members, through raising yields, diversifying income opportunities and/or creating markets, and aim to make these benefits conditional on forest protection measures. There is plausible evidence that in some case studies income benefits have been realised and that diversification of incomes contributes these improvements. It is important to document proof of concept of piloted models and the assumptions involved. There are challenges on sustainability and potential for scaling, which may need some more time to 'solve'.

As Figure 1 shows (on page 4), for all project clusters, there is good potential and both capacities and early benefits for producers and communities have been realised. These results often build upon earlier initiatives or pilots. Improved benefits originate mainly from improved productivity and quality of the main commodity (palm oil, cocoa, and rubber) or harvesting of forest products (ERC honey, vanilla, Payments for Ecosystem; PES payments, other NTFPs), following application of good practices. For instance, cocoa farmers selling cocoa produced according to principles of climate smart cocoa are receiving premium prices. With the ERC Sialang wild honey value chain project, tree owners have received premium prices. In the palm oil and cocoa projects, to

diversify incomes and provide incentives for forest protection, alternative livelihoods are being introduced and supported. While in the palm oil project a revolving fund has been set up to scale the pilot through additional livelihoods, a financial mechanism to do so in the cocoa project is also being developed. Incomes from carbon credits are also considered but have not been realised yet.

However, the Evaluation Manager did not see a concluding proof of concept of these new market-oriented, forest-friendly production models. This is related to several factors, of which time to address remaining challenges of the sustainability of the new models may be an important factor. For example, in most projects it was not yet clear to what extent the improved productivity and related income improvements build up to a living income, and whether this income is sufficient to motivate producers to adopt and comply with forest protection conditionalities. Second, several assumptions are related to the aspect of sustainability, including the sustainability of production and harvesting practices; the quality of land conflict resolution processes in terms of tenure security; the stability of markets upon which producers depend (especially for NTFPs); the willingness of the market / companies to pay premium prices (e.g. in the face of declining global prices); questions around how carbon credits will be shared with producers. Thirdly, there may be other less tangible benefits that also play a role, apart from the income benefits, to be accounted for in an evaluation of the new models. Lastly, the data to allow for concluding on a proof of concept were generally not available within the projects.

There is qualitative evidence that women benefit in an equitable way, and that there are initiatives to strengthen women's empowerment, although these were less consistent.

A differentiation can be made between women's livelihoods (i.e. enhancing women's incomes through livelihood activities) and women's empowerment (i.e. changing the conditions for women to play a role in decision-making and leadership at household, organisational and community level). Examples of creating livelihoods benefits for women include setting quotas for the number of women participating in the oil palm outgrower scheme and targeting women for vegetable farming activities in the cocoa project. Some of the projects also paid explicit attention to women's empowerment. The palm oil project contributed to more active participation of women in community decision-making, whereas the cocoa project achieved this in the Hotspot Intervention Area (HIA) and sub-HIA structures. However, it was observed that entrenched cultural practices, norms and beliefs that underpin and shape gender dynamics are not easily changed. In the LatAm projects, limited attention was given to gender issues in design, but there have been some positive instances of female empowerment emerging in the projects, for instance by specific studies that were conducted. In addition, for RLU's engagement with smallholders, migrants, and Orang Rimba, the interviews suggest that contrary to proposed strategies, women in the Orang Rimba said that they had not been consulted.

Impact Pathway 2: Producers' organisations as viable business units

Strengthening producer organisations can be relevant from both a marketing and forest protection perspective. As regards marketing, strengthening of producer organisations may lead to increased access to services and markets, and related benefits to the company may include reduced transaction costs, increased security of supply and improved relationships with producers and communities. As regards forest protection, strengthening of producer groups may lead to involvement of communities in forest patrolling and ensuring that forest protection norms are understood and shared in the community (see also pathway 4).

Attention for organising producers from a marketing perspective is included for outgrower (palm oil) or ingrower (rubber) schemes. However, for cocoa, independent smallholders are involved, and in the ERC project, there is limited organisation of producers, beyond basic aggregation, and the project does not focus on producer organisation. In the RLU project, the company is working with farmer groups who will obtain legalisation as part of the social forestry partnership scheme. In the LatAm projects, strengthening producer organisations is essential to improve entrepreneurial and business management skills of organisations in remote forest areas. Strengthening is leading to improved business plans, production and processing practices.

The palm oil project shows the dual roles of producer organisations. BOPP has established a Community Forest Protection Committee (CFPC) in every community. The community organisations are relevant for community

driven forest protection as well as oil palm plantation development, and their capacities have much improved since the baseline study. Outcomes in this pathway include important intangible benefits in the company-community relationships, such as more efficient communication, less conflicts and quicker conflict resolution, mutual trust and willingness to co-invest. Similar structures are strengthened within the cocoa project, where Community Resource Management Areas (CREMAs) and respective organisations already existed with a role to manage natural resources, but now also play a role in organising cocoa smallholder farmers for climate smart cocoa production.

Impact Pathway 3: Value chain actors and service providers

Targeted catalyst companies or community-oriented business enterprises experience tangible benefits (i.e. more secure supply and related sales if market demand is there), and so do the smallholder producers, which is evidence of viable production schemes. Also important are the non-tangible benefits, such as better relations with producers or collectors, collaboration with NGOs and conflict resolution. Both types of benefits should be considered in the proof of concept of the business case.

There is a strong emphasis by P4F to develop viable business and investment models and then prove their validity. The main focus has been on commercial and financial benefits. Investments in plantation development and smallholder production systems are generally based on financial considerations. The projects have by now shown plausible evidence that the models being introduced are effective:

- In the LatAm NTFP projects, within the short time frame these have been functional, a few community-oriented business enterprises have shown increases in sales, while others are still developing realistic business plans, showing the potential of viable business models on NTFPs.

- For the RLU rubber concession in the BTP landscape, the different elements (the WCA *in situ* rubber smallholder pilot which is about to be rolled out, initial land claim clarifications, etc.) are all key to the rubber plantation 'best in class' business model – enabling Michelin to have secure rubber sourcing.

- In the same BTP landscape, the ERC model has shown good results for one forest product pilot (wild Sialang honey, including a premium price, although challenges exist), which demonstrates that the model promoted by ERC could work.

- The oil palm smallholder production scheme has been shown to be viable, generating positive returns to the company and improved incomes for smallholders, but the plantation expansion awaits further investors.

- The production scheme of climate smart cocoa has also been shown to be, generating positive returns to the company through increasing sales of climate smart cocoa, and improved incomes to cocoa producers, including a premium price.

The endline study, like the baseline study, has shown the importance of other, non-tangible, benefits in all four projects, with the emphasis on non-tangible benefits becoming more pronounced in the later studies. Non-tangible benefits include the development of a relationship of trust with producers and communities, conflict resolution and reduced risks of conflicts, improved land security, reduced risks of side-selling, improved collaboration with CBOs or NGOs and improved reputation of companies (e.g. as leaders in sustainability). In the LatAm projects, community-oriented business enterprises have built up improved relations with indigenous collectors. Apart from that, more sustainable production processes, such as climate smart cocoa, strengthen ecosystem services, which also benefit communities (e.g. through carbon credits). All of these intangible benefits could be translated into direct financial benefits. In fact, this is already done in the case of RLU as its business case rests on a land reclaim process which includes tackling land legacy issues through conflict mediation. Assessing and documenting the lessons on how the intangible benefits can be realised will strengthen the business case for the adaptation of innovative production models by other companies.

Improved service delivery (of knowledge, inputs, finance) has been developed as a critical aspect of the collaboration between private companies and producers. Different models are being explored, but making them commercially viable (and thus scalable) remains a challenge. There is increased attention on developing an investment case for these type of models.

Access to quality services and markets is an important condition to improve productivity, ensure that protection measures are included, and improve livelihood benefits. For the companies, this is important to ensure a high quality and timely supply of products. Therefore, in the palm project, BOPP takes full control over some key services (plantation establishment, fertiliser application, pest management) and, likewise in cocoa, Touton is strongly supporting Rural Service Centres providing agricultural and financial services to all cocoa farmers. However, these service centres have difficulty in recovering the costs. RLU provides various services oriented at sustainable rubber production by smallholders and is building partnerships with local migrant and indigenous groups to protect the Wildlife Conservation Area. In the LatAm projects, catalyst companies (such as Veja) are providing farmers with access to training, advice, and inputs such as tree seedlings and seeds.

However, in most case studies, financing of service delivery models is an issue, as is access to finance for independent smallholder farmers in the cocoa project. In the cocoa projects, new financial mechanisms and investment models are being explored. In one LatAm project, the Ecoflora case, payments from an existing PES scheme have been used to fund farmer tree planting and the establishment of agroforestry. In the palm oil project, all services to the oil palm outgrowers are pre-financed by the company and repaid through deductions in the payments for future delivery of fresh fruit bunches. To scale this model, the project is looking for external impact investors. For the additional livelihood support, which is fully subsidized, the project is looking to establish a revolving fund which should (partly) cover continued service delivery and future expansion to other community members.

Impact Pathway 4: Forest/landscape actors and governance systems

All FPs have contributed to bring together stakeholders, improve collaboration and help create or support multi-stakeholder landscape governance platforms. This enhances the conditions for forest protection at landscape level (beyond the single commodity scope). Capacities have been built and platforms are expected to become more functional in coming years.

- In the BTP landscape management programme, P4F adopted a more comprehensive 'hands-on' approach to support a new landscape protection forum for large-concession holders. This Protection Forum has enabled the landscape managers to collaborate in tackling common issues, such as illegal logging, with some apparent successes. The Protection Forum is seeking to convince the law enforcement agencies to take meaningful action to support these initiatives.

- In the LatAm projects, initiatives are being taken at local level to convene stakeholders and develop forest governance and management plans, including forest permits and payment for ecosystem services schemes, which are promising initiatives at the local scale to improve forest management.

- In the cocoa project, the process of developing the landscape governance system has greatly improved collaboration between the different stakeholders. It has given an important boost to the development of the landscape governance system, with capacity building at three levels: the HIA board responsible for the Bia Juaboso landscape, which now comprises six sub-HIA Boards who oversee one or more community-based CREMAs to jointly implement the landscape governance activities. Each level has constitutions and/or by-laws developed, and has developed a landscape level management plan.

- In the palm oil project, the Adum Landscape Governance Board is more of a project steering committee than a landscape governance board. Although it did improve collaboration for forest protection at a small geographical scale, its mandate and membership should be expanded in order to become relevant for landscape governance.

All FPs aim to support improved livelihood benefits of producers / communities (see impact pathway 1) while making this support conditional on forest protection and/or restoration activities (e.g. through agreements, bylaws, awareness raising, etc.). While it is plausible that this has contributed to forest protection, it remains uncertain to what extent this change will be sustained.

All projects have forest protection goals and make support on production and livelihood benefits conditional on them, with associated deterrents and sanctions. Both in the cocoa and the palm projects, it is plausible that forest protection in relation to the commodity or the producers involved has improved. For the palm oil project, this covers both the small amount of forest left in the concession area and, indirectly, the wider forest. In both projects, this is probably driven by a combination of improved incomes, awareness raising, conditionalities, bylaws and their enforcement. In the Indonesia landscape project, a variety of conditional agreements are being developed by both RLU and ERC with indigenous communities and migrant groups. The conflict mediation process is also underway to firstly resolve land conflicts and then establish partnership agreements and their implementation. So far, the results are not conclusive, although the forest data trends are positive since the establishment of the ERC in 2015. In the LatAm projects, in one case producers are wary of giving up on illegal crops or other deforesting activities, as they are critical to provide much needed additional incomes. It is expected that if significant income improvements from marketing NTFPs are realised, this could help bring about a change in this mindset, but this will require some time.

Nevertheless, there are some concerns about whether the above-mentioned measures will be sustained over time. This will depend upon whether mindsets regarding forest protection have structurally changed, the effectiveness of the forest governance protection structures to enforce protection laws, and whether the communities will continue to achieve concrete income benefits.

While most projects focus on deforestation related to targeted commodity production, other important causes of deforestation in the landscape may remain unchanged, explaining why the rate of deforestation has not reduced. This provides further credence to why continuous support to the landscape governance mechanism is important.

As highlighted in Box 1, while there is plausible evidence that deforestation by targeted commodities has stopped, the Evaluation Manager's GIS data analysis demonstrates that there is no evidence from these project clusters that deforestation has been halted or reversed in the wider landscape. This provides further credence as to why a landscape governance mechanism is important, and why the capacity of the governance mechanism should be improved, providing the power and authority to work with stakeholders across commodities to achieve set goals and targets above and beyond commodity related deforestation.

Impact Pathway 5: Enabling conditions

In most projects EC and DSM initiatives (mainly as separate mechanisms) have contributed to the effectiveness of FPs, and their potential scaling and sustainability. This is done through the development of market conditions, common standards, regulatory reforms and financing vehicles. They also have the potential to facilitate stakeholder alignment, coordination and learning.

The case studies show the relevance of several measures and changes in terms of providing a more enabling context and access to markets for the FPs to be successful. Usually these are separate EC or DSM projects funded by P4F. The case studies show evidence that these measures have contributed to the success of the FPs and have enhanced the potential for scaling and sustaining results with time. The following are some examples.

- The LatAm team has achieved a major change through their project called 'unleashing NTFPs'. They have supported a consultative process in the country across scales, for a national decree to facilitate legal registration and harvesting of NTFPs in Colombia. Already relationships in the NTFP sector have been developed, and more are expected. Apart from that, several specific projects have benefitted from specific measures, integrated in the FP, to acquire export and harvesting permits.

- With respect to the BTP Integrated Landscape project, P4F has supported the Sustainable Commodities Compensation Mechanism and the Green Landscape Bond, but none of the RLU or ERC projects has so far benefitted from these. There are therefore no relevant linkages in this particular landscape, but other Indonesian landscapes are likely to benefit. In addition, P4F support to the GPSNR (Global Platform for Sustainable Natural Rubber) via enhancing Indonesian smallholder participation may have improved effectiveness of the RLU project.

- With respect to palm oil, P4F has supported the African Palm Oil Initiative which has contributed to the establishment of the Tree Crop Development Authority (TCDA) in Ghana. The establishment of the TCDA implies a fundamental reform as it has the mandate to govern the palm oil sector. P4F also supported the Amsterdam Declarations Partnership (ADP). The ADP has had a significant influence on EU policy reforms, which strengthens the business case for sustainable palm oil in Ghana.

- With respect to cocoa, P4F support to CFI has helped create the conditions to which both climate smart cocoa and the landscape governance structures could be developed and become successful, and the commitment by all cocoa companies to comply to principles of sustainable cocoa production. In turn, this provides a forum through which the Touton project can share best practice and lessons learned in order to support the achievement of CFI objectives. An important aspect has been the collaboration with the COCOBOD to develop a climate smart cocoa standard which is about to be approved and integrated in COCOBOD's practices. Also, the project supported the development of a tree registration process to record trees on farmers' lands and ensure they enjoy financial revenues from their agroforestry practices.

3.3 Scaling

Has the project contributed to scaling, through any/all the following:

a. Wider adoption and adaptation by targeted and non-targeted producers?

b. Expansion through crowding in by other companies in the same landscape / sector?

c. Response in terms of changes in public policies, at sector (e.g. adoption of standards) and landscape scale (e.g. law enforcement)?

The projects show variable evidence of scaling. Most common is both wider adoption and adaptation of practices by targeted and non-targeted producers and companies. Secondly, there is some crowding in of companies and other actors in the same landscape or sector (expansion). The potential for scaling depends upon the business case and external factors, such as market demand for sustainable products. If the short-term business benefits are less convincing, there is less potential for scaling and results tend to remain pilots unless external funding is made available.

In the cocoa cluster, climate smart cocoa practices are being adopted and adapted in the entire Bia-Juabeso landscape and beyond by other cocoa companies, possibly with some external funding for initial investments and capacity building of producers. This is based on a business case that focuses on short term benefits, supported by the international demand for deforestation-free cocoa and chocolate companies who have committed to buy sustainable cocoa in line with their CFI commitments. For other practices that have been applied, like agroforestry practices with shade trees, there are mainly long-term benefits (e.g. long-term effects on soil stability of shade trees) which are more difficult to capture in a business case.

In the palm project, the smallholder model being developed is commercially viable and has good potential for scaling within the sphere of control of the company, shown by their commitment to expand the project by 5,000 additional hectares. The project has already yielded some spontaneous replication of activities around riparian forest protection and additional livelihoods within the target communities. The true scaling potential will depend on the attractiveness of the model to other companies across Ghana and other African countries. This will hinge on whether the BOPP project will result in a proof of concept of the business model, a corresponding investment proposition and its effectiveness to realise livelihood and forest protection impacts. While the project has already delivered many elements, there are still important challenges to be overcome, particularly related to the financing

of the oil palm development and additional livelihoods components. For example, the project is still trying to determine how to make investments in additional livelihoods opportunities which are less dependent on donor funding.

In the BTP landscape, RLU's sustainable rubber plantation model still needs to prove it can be commercially viable as well as sustainable. The model is constrained by low rubber prices and lack of demand for sustainable rubber. In addition, land conflicts and pressures remain significant, and the company still needs to secure further loans. In spite of this, some expansion is being achieved through the roll out of the 'in situ' rubber farming scheme. Some crowding in by smallholders is also occurring as benefits from the early entrant groups are observed. RLU is also planning to replicate the 'in situ' smallholder rubber programme in East Kalimantan. However, adoption of the model by other rubber plantation investors elsewhere in Asia may be constrained by low rubber market prices and less demand for sustainable rubber.

In the LatAm projects, there is already an indication of the potential for wider adoption in most of the projects: the catalyst companies and partners are all planning to continue with the new initiatives and several have expanded, engaging new producers into their value chains (e.g. Veja, Ecoflora, Planeta). However, for some, there are limited opportunities for further expansion, as the catalyst companies work in specific geographies, but there are also some cases where expansion is possible or being planned (e.g. Veja is seeking to source from other areas in Brazil, using the same newly developed tools and protocols). While there is not yet evidence of copying/crowding in for some other companies.

Apart from replication, an important scaling mechanism is through creating more enabling conditions and financial models. In all project clusters there are EC and/or DSM to create the right enabling conditions (pathway 5). Projects are also working on the proof of concepts of the new business models, investment propositions, and financial mechanisms to enhance scaling.

In all the projects, the current models are heavily subsidised, financial models including incentives, as well as disincentives for non-performance or non-adherence to sustainability standards, are critical to support scaling. In the palm case study, blended finance models are being explored, involving a mixture of affordable credit to beneficiaries, company and donor investment. In addition, revenue generating models (such as profitable marketing of NTFPs - ERC and LATAM projects) and revolving funds are options that are being tested. For the integrated landscape project in Indonesia, the Landscape Bond financing is a scaling mechanism which could be used in other concession areas to support conservation goals. Also, the Sustainable Commodity Compensation Mechanism (SCCM) and Rimba Collective are mechanisms in which ERCs could be scaled up by providing access to funds, although this is not envisaged in the short-term for the BTP landscape, and carbon finance is likely to be a key route for BTP landscape managers to support the shift to sustainable land use and forestry.

Payments through PES schemes have good potential to contribute to viable business models for landscape governance. In the cocoa case study, carbon payments for 2019 emission reduction are expected at $ 1.5 million, but carbon credits have so far not been received. Of received carbon credits it is expected that 69% will go to farmers, to support inputs needed to meet CSC requirements, and likely a certain amount to the landscape governance structure.

In terms of enabling conditions, reference is made to the insights provided for pathway 5. For example, in the palm oil case study, the development of the Tree Crop Development Authority (TCDA) can address many of the systemic issues around national standards, land use zoning, grievance mechanisms, technical assistance, and pricing mechanisms. In the BTP landscape case study, multi-business forest concession scaling opportunities have grown enormously with the Omnibus Law for concession holders, although it represents a challenge for ERCs. The achievement by the LATAM P4F portfolio in securing a major regulatory change is remarkable and the consultation process has created new relationships and collaboration in the Colombian NTFP bioeconomy.

3.4 Sustainability

The sustainability of landscape governance structures is a challenge. First, within the landscape all relevant actors would be expected to adhere to shared principles and agreements to make the landscape sustainable, including a coordinated monitoring, reporting and verification system, to ensure there will be no more deforestation. Second, revenue models for the various landscape governance structures are needed, to enable them to carry out their various functions.

In the cocoa case study in Ghana, compliance of cocoa companies is much stimulated by all companies complying with CFI commitments, of which the three key principles are i) forest protection and restoration; ii) sustainable production and enhancing farmer livelihoods; and iii) community engagement and social inclusion. Currently, over 85% companies have signed unto the CFI in these priority landscapes and are guided by these sustainability principles. This has supported the 3PRCL model being adopted and adapted in three other landscapes, with major external financial support, while taking into account the lesson that the lead should be taken by an independent organisation and not a commercial company: Asutifi (led by WCF); Kakum (led by NCRC); and Atiama (led by Tropenbos). The model developed in the 3PRCL project has not yet been applied in Ivory Coast, because Ghana is more advanced in terms of meeting REDD+ criteria, the cocoa sector is well organised through COCOBOD, and hotspots were identified. However, it is expected that the model will soon be applied in Ivory Coast as there is commitment at political level.

In the cocoa landscape, revenue models for the landscape governance structures have not yet been developed. In fact, the previous failures of CREMAs were due to lack of financial sustainability. Different revenue sources have been identified and explored. These include eco-tourism, sales of NTFPs, industry premiums, emissions reduction payments, additional livelihoods options, and RSC profit-sharing. The main expectation is that industry premiums and carbon credits for emissions reduction will contribute to a viable revenue model. The project expects viable financial models to be developed by a Sustainable Cocoa Landscape Finance mechanism, including additional contributions by cocoa companies.

In the BTP landscape, ABT's and RLU's capacity to conduct forest protection and restoration activities has been strengthened, and will likely be sustained, although for the ERC company, this depends on continued grant funding. However, the Protection Forum's financial future is insecure, as investment vehicles have not yet been developed and smallholder participation in the sustainable rubber project still needs to be further developed.

In the LatAm projects, despite the strong commercial orientation of the support to the projects, sustainability potential remains mixed, with more time and resources required in many cases – reflecting common challenges in creating new NTFP business models. Several of the Colombian projects may also need further donor support to become fully established and sustainable. The Brazil initiatives generally have a higher chance of sustainability because they are anchored within established organisations, and the capacity strengthening, expanded markets, and new technologies and agreements, improve the chances of continued success. However, there are risks of reliance on single buyers which may require attention; diversification will reduce risks of value chains collapsing if a buyer withdraws, as well as increasing the bargaining power of producers. In addition, the enabling environment remains particularly volatile in Brazil.

3.5 Contribution

What has been the relative contribution by the project to the observed changes? What is the relative contribution of other external factors?

P4F investments have not been working in isolation, neither are they completely new interventions, as they were generally follow-up or complementary to other initiatives. The contribution by P4F has generally been strategic in nature, filling gaps including those related to risks others may not have funded (e.g. to carry out pilots, provide capacity building, create collaborative actions and/or provide institutional support). The contribution seems to have been most additional for Impact Pathway 4 (linkages with forest protection) and Impact Pathway 5 (enabling conditions).

From the case studies, there are several examples of the added value and contribution by P4F. The most significant contributions include:

- For the BTP landscape, the programme is not a fully integrated landscape approach. For ERC, P4F supported ABT on protection systems, but its business support has not been fully embedded and the early ending of support to ABT threatens the sustainability of improvements in business capacity. RLU has benefited from capacity strengthening support and technical advice and the establishment of the WCA. The Protection Forum is another element of the programme, for which P4F has been the principal driver, resulting in improved relationships and collaboration. P4F inputs were highly valued, but the partners all stated that the intensity of the support was too demanding and longer-project periods would be desirable.

- For the LatAm projects, P4F has made strong contributions across all the projects which were well chosen. In Brazil, in a challenging political context, the projects highly valued the support for a market-driven approach, and in both countries the P4F team's support was well received and appraised, although the partners also all gave feedback that the intensity of the support was too demanding, and longer-project periods would be desirable.

- In the cocoa cluster, the 3PRCL project's main contribution has been on the development of the landscape governance structure with its capacity building, legalisation and membership, and the development of the Ghana Climate Smart Cocoa Standard. P4F funding has also supported CFI to improve enabling conditions for the uptake of holistic climate-smart cocoa and its scaling in cocoa landscapes.

- In the palm oil cluster, the financial contribution by P4F allowed the projects to do things faster than would otherwise have been possible, if they were done at all. The P4F funding for the non-oil palm activities gave BOPP an important push to come up with their own funding for the plantation development. It also allowed BOPP to give more emphasis on social and environmental aspects. For both APOI and ADP, P4F is the main donor. Beyond funding, P4F also contributed technically to the BOPP project and facilitated several learning activities across the portfolio.

Several external factors have affected the projects, of which COVID-19 has most likely been the most important, through its impacts on markets and on the ability to meet physically and carry out fieldwork, capacity building and learning events. Yet, all projects have shown good flexibility and commitment to pursue and adapt the planned activities, so that overall, the influence on progress has been limited.

In general, the COVID-19 pandemic has particularly affected the possibility of establishing new relations. For example, engaging with other companies in the landscape, and coming together for learning events. This has been particularly difficult for the LatAm projects that were just starting up. In the other three projects, the basic contacts had already been established. For example, where landscape governance structures had been established, these were not able to meet physically but meetings were replaced by distance calls.

In the LatAm projects and the BTP landscape, COVID-19 has seriously affected the viability of NTFP businesses, by affecting the local markets, and leading buyers to reduce orders, which has seriously reduced progress and effectiveness. The COVID-19 pandemic has also had impacts on relevant markets and fieldwork.

However, other significant external factors have also played a role, in particular, the need for P4F to withdraw its support to ABT (ERC projects), as a result of the ending of the WWF-Government of Indonesia memorandum of understanding which changed the investment risk profile for P4F. Additional external factors are related to markets, such as the low price for rubber and lack of standards and rewards for sustainable rubber production affecting the viability of the RLU project.

3.6 Transformational Change

To what extent are observed changes transformative (i.e. perceived as systemic in nature or disruptive business models, leading to changes in mindset, creating leverage, game changers?)

The project clusters have demonstrated the potential for transformational changes, which results from the complementarity between different pathways and the synergy between FPs and EC measures, and also by the deliberate focus on systemic 'drivers of change'. Transformational changes contribute to the potential for scaling and sustaining of results over time. Transformational changes can be strengthened by a good design which includes an analysis of the systems in which FPs operate.

Change can be incremental, or transformative in nature (being more systemic and addressing root causes). Transformational change will ensure that results do not remain 'islands of success' or that they remain sustained over time. P4F has the ambition of contributing to transformational change. There are several examples of potential transformational impacts within the project boundaries associated with P4F support. In particular, these are seen where P4F has taken a holistic vision and integrated the different impact pathways. At landscape level, it seems most effective to link producer support or market incentives to forest protection commitments, while in parallel developing forest protection mechanisms. Therefore, developing a business case for integrated production and protection goals at a landscape level is critical. Having said this, the cocoa project in particular is confronted with remaining threats to deforestation in the targeted landscape, which continue to drive deforestation despite reductions in deforestation drivers from cocoa producers. This will remain a strong bottleneck to realise transformational change in terms of a fully-fledged landscape governance mechanism.

An overview of ongoing or expected transformational changes is provided in Table 2 below. The components for transformational change were developed by the Evaluation Manager and are based on literature and experiences within different commodities (documented in a separate paper). The transformational changes within the project clusters are strongly promoted by the relations and synergy between FP and EC measures, as can be seen in the Table 2 overview (below).

Table 2: Schematic overview of the contribution to transformative change by the four projects, in four different stages (see legend below)

Dimension of Transformative Change	Palm oil	BTP	Cocoa	Latam
Policies and Implementation	Establishment of Tree Crop Development Authority		Development and implementing of climate smart cocoa standard	Unleashing NTFPs decree in Colombia
Investment Proposition Innovation	Financial models and investment propositions in development			
Business Model Innovation	Sustainable model of oil palm expansion	ETC regenerative business models	Model of climate smart cocoa	Strengthened business models
Market demand change	Amsterdam Declaration on Sustainable Palm Oil EU		Demand for climate smart cocoa	
Technological innovations	Revolving fund for investments to generate additional incomes	Joint SMART patrols, daytime honey harvesting, traceability	More sustainable farm model with agroforestry model	New sets of more sustainable practices
Supportive services and finance	Fully integrated service model	Integrated where smallholders are part of the model	RSCs as hubs for service delivery	Provided by organisations to their member
Economic (dis)incentives linked to goals	Conditional incentives for forest protection	Conditional incentives and agreements for forest protection	Conditional incentives for forest protection	PES payments
Organisational models and capabilities	Community Forest Protection Committees		Landscape governance structure	Strengthening of community-oriented business enterprises
Relationships and transactions	Company-community relations based on trust		Improved relations between landscape stakeholders	
Coordination and dialogue	National platform and governance body	Landscape Protection Forum	Landscape governance multi-stakeholder board	Strengthened relationships
Accountability and Participation	Community-based decision making and role of women		Engaging village chiefs as non-voting members	
Monitoring and adaptive learning	Several adjustments made to create more impact		Several lessons learned and documented	
Mindset, commitment and ownership	Community and company on forest protection	ERC more business oriented. RLU more conservation oriented	Mindset change of farmers related to shade trees	

Green   = *important positive contribution by cluster*
Yellow   = *moderate positive contribution by cluster*
Orange   = *in progress / potential is there*
Red   = *no progress / potential is weak*

4 Recommendations

The following recommendations are targeted at P4F, however, they are also therefore relevant for its donors FCDO and BEIS. The recommendations are structured according to the main phases of the program cycle.

4.1 Portfolio and Project Design

1. **It is recommended to further strengthen existing project clusters, and also to expand the P4F project portfolio by enhancing project complementarity in three different ways.** First, there is complementarity between FPs and EC and/or DSM measures, whereby the latter can focus on systemic issues that form challenges for transformational changes with on-the-ground pilots for FPs. Second, there is potential synergy between projects working on different commodities in the same geography (example of RLU and ERCs). Third, there is complementarity by projects collaborating in piloting similar models, in the same commodity, but in different contexts or with different target groups, to gain insight in the business case.

   These lessons can be translated into recommendations for follow up activities in each of the project clusters and expansion of the P4F portfolio. For example:

   i. In palm oil, elements of the BOPP model could be adapted to large-scale outgrower models in other contexts (e.g. in palm oil, rubber, or timber). It would also be relevant to test how palm oil companies can introduce produce-protection mechanisms with independent oil palm smallholders. This could incorporate lessons drawn from the cocoa projects. It is also recommended to introduce and further develop landscape governance approaches in oil palm production sheds. Again, the lessons from cocoa and other projects are highly relevant here.

   ii. In cocoa, in terms of financial mechanisms it is recommended to more closely collaborate with the BOPP project, the latter apparently being more advanced in developing a revolving fund. Much learning takes place at the level of CFI with landscape governance being replicated in other landscapes. However, a more holistic approach to landscape protection is still missing, which addresses all the threats to the landscape. Here, inspiration could be sought from the BTP landscape approach.

   iii. In BTP, it is recommended to continue to support RLU's partnership deepening and scaling amongst migrant and Orang Rimba indigenous peoples; expansion of agroforestry, sustainable agricultural intensification, and livelihood diversification activities for producers to realise concrete benefits; and encourage RLU to consider a diversified business model, which builds on the Omnibus Law with more rubber agroforestry production in the concession's production area.

   iv. In LATAM projects, it is recommended to seek out 'for purpose' companies that are willing to invest in supply chain partners and where possible promote local and regional markets, not only export ones, where there are attractive opportunities which may offer greater resilience to enterprises. It is also recommended to support diversification of business models / livelihood opportunities by participating enterprises/households, given the risks of reliance on a sole crop/buyer.

   The above examples show how relevant one project can be for other projects. This shows the value of peer learning processes between projects, something P4F could facilitate.

2. **For all project clusters, it is recommended that project designs are preceded (or strengthened) by a more extensive diagnostic analysis that identifies the main barriers to transformative change towards sustainable (zero-deforestation), inclusive and resilient commodity production systems and jurisdictions. It is also recommended that for existing projects the original design is upgraded in this sense.** The various underlying barriers and root causes should at least be identified by project implementers, to better understand the wider picture and the expected specific role of the project. An improved diagnostics would also contribute to identifying partnerships or pro-actively promoting additional activities that is needed to fill the remaining gaps for real transformative change.

3. **In order to better contribute to transformation, it is recommended that projects (clusters) have a longer-time horizon (i.e. of at least five years but preferably up to eight years, including low intensity support in later years). Transformative processes take time.** Characteristics of a longer-time horizon should include: less resource intense, flexibility, piloting and scaling new models, working in partnerships, strengthening local ownership, evidence-based learning. For the four case study clusters, it is recommended to continue support at a low intensity. It is clear from the overview of progress and effectiveness in the theory of change (Figure 1), scaling and transformative change (Figure 2) that the potential has not yet been fully realised and results are in many cases not yet sustainable. This also implies that P4F should search for alignment and collaboration with other programmes that can provide support on remaining challenges in terms of transformative change, within the landscapes or at (national) sector level.

4.2 Project Implementation

4. **It is recommended to generate the evidence that enables conclusions on the business cases (or 'proof of concept') to be determined for the new production, value chain and landscape governance models that have been introduced.** Being able to demonstrate convincing business cases is important to promote future scaling. The business cases should recognise tangible benefits (e.g. income, security of supply, market benefits), as well as intangible benefits (e.g. building up good relations with communities and consequent reduced risks on conflicts or side-selling). They also should make clear the short- and long-term benefits (e.g. the benefits of agroforestry systems for ecosystem services as well as timber sales).

5. **It is recommended within each of the P4F projects to more specifically analyse and determine what is needed to enable disadvantaged smallholder producers to acquire a living income, as well as other desirable livelihood benefits.** This might require revisiting the synergies between improved commodity productivity, reforestation and reduced deforestation, income diversification, and community-level services and infrastructure, specified for different social groups.

6. **It is recommended to better understand and address the underlying causes to ensure that women's rights and voices are strengthened, and that gender and diversity issues in partnership building and community development activities are taken into account.** This might require a gender-transformative approach, which strengthens women's empowerment and equality by addressing the root causes of gender inequality and thus bringing about transformative change to this important issue (change of mindsets, change of relations between men and women, change of gender relations in organisations and stakeholder platforms).

7. **It is recommended to pursue the jurisdictional pilots and landscape governance approach in such a way that no-deforestation and reforestation becomes the norm in the whole landscape.** While individual commodity-oriented interventions (cocoa, palm oil, rubber, NTFPs) can be an entry point, these experiences should be embedded in a sustainable landscape governance system which allows for community voice in overall rural development trajectories, engaging with a diversity of livelihood farm and non-farm opportunities, adhered to by all key actors and that have a coordinated monitoring, reporting and verification system, which ensures all causes of deforestation, and related key actors, are being addressed.

8. **It is recommended that support for ongoing work in several projects is sustained on specific issues.** This is particularly relevant where it is related to the development of financial models, ensuring landscape governance structures will become operational and that results that were achieved will be sustained, and reducing the costs of scaling. This can include looking at blended finance models, revolving funds, and PES payments and carbon credits. This type of support need not be resource-intensive, i.e. with field level pilots and extensive training.

4.3 Project Monitoring, Evaluation and Learning

9. **For future projects, it is recommended that processes of transformational change are supported by well-defined and resourced monitoring and evidence-based learning systems.** There is a need to invest in monitoring systems and evaluative studies to capture 'deeper' evidence-based lessons. This is needed to gain proof of concept of business models (e.g. whether different types of producers benefit from the new production systems and to what extent) and also to verify whether production-protection conditionalities work in practice to effectively reduce deforestation. Lastly, a critical function of any landscape governance structure should be to carry out monitoring (of forest cover), especially to know whether these are successful to bring together stakeholders and reduce deforestation in the landscape. Monitoring systems should be based on the dual elements of using satellite images and using ground truthing whereby community participation is important. Evidence-based learning should allow relevant lessons to be captured on how results have been achieved and would help to communicate these in such a way that they are useful for other stakeholders, especially community and marginal social groups.

10. **It is recommended that P4F generates evidence of scaling and transformative change as an input to learning.** There are different approaches for capturing transformative change, which can be effective when using a qualitative approach to track levels of change. Alternately, a transformational change rubric can be a simple and effective tool for capturing and communicating transformational change. Capturing such changes by project teams would contribute to learning.