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GLOBAL ENVIRONMENT FACILITY

Evaluation of GEF Food Systems Programs

An Evaluation Report by the GEF IEO

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Part 1
Ghana Country Case Study

Acronyms

COCOBOD	Ghana Cocoa Board
CREMA	Community Resource Management Area
EPA	Environmental Protection Authority
EUDR	EU Deforestation Regulation
FAO	Food and Agriculture Organization of the UN
FC	Forest Commission
FOLUR	Food, Land Use, and Restoration
FSD	Forest Services Division
FSIP	Food Systems Integrated Program
GCF	Green Climate Fund
GEF	Global Environment Facility
IDH	Sustainable Trade Initiative
IEO	Independent Evaluation Office
IFAD	International Fund for Agricultural Development
LUSPA	Land Use and Spatial Planning Authority
MEST	Ministry of Environment, Science and Technology
MoFA	Ministry of Food and Agriculture
PSC	Project Steering Committee
RFS	Resilient Food Systems
SLWM	Sustainable Land and Water Management
UNDP	United Nations Development Programme
VSLA	Village Savings and Loans Association
WD	Wildlife Division

1 Introduction

This Ghana case study is part of the Evaluation of Global Environment Facility (GEF) Food Systems Programs. This evaluation seeks to assess the quality of design and achievement of results of food systems programs in GEF-6, GEF-7, and GEF-8, as well as to evaluate how the GEF has adapted to changing contexts and incorporated lessons learned into the design of later programs. The global evaluation covers three GEF-6 programs (Resilient Food Systems [RFS], Coastal Fisheries Initiative [CFI], and Good Growth Partnership [GGP]), one GEF-7 program (Food, Land Use, and Restoration [FOLUR] Impact Program), and one GEF-8 program (Food Systems Integrated Program [FSIP]). The evaluation scope also includes standalone country and regional projects focused on food systems from GEF-6 through GEF-8 that were identified by the GEF Independent Evaluation Office (IEO) using a keyword search.

Country case studies are a key component of the evaluation, intending to help:

- Gain a deeper understanding of the outcomes resulting from GEF food systems interventions and the explanatory factors for and sustainability of these changes;
- Understand how the GEF integrated programs' approach to food systems has evolved at the country level by assessing the similarities and differences between projects from each replenishment cycle and capturing links and interconnection; and
- Collect the perspectives of local communities affected by GEF interventions.

Ghana was one of four case study countries selected purposively by the GEF IEO. Case study countries were selected based on their having food systems program child projects from all three GEF replenishment cycles included in the scope of the evaluation. Other factors considered include maturity of projects and variation across regions, GEF Agencies, and sectors targeted.

1.1 Methodology

This Ghana case study used a systems thinking approach that was guided by the global evaluation's theoretical framework for understanding food systems that integrates GEF concepts with relevant literature to identify the drivers, actors, parts, and outcomes of a given system. The case study sought to answer thirteen overarching evaluation questions pertaining to design, relevance and coherence, performance and results, value addition, and efficiency of GEF food systems programming.

The case study used multiple methods to extract robust and credible findings, including desk reviews of project and program documents, virtual and in-person key informant interviews, in person focus group discussions with project beneficiaries, in person group interviews with project implementation teams and direct observation through site visits. The case study team conducted a stakeholder mapping exercise to develop an initial list of key informants, then used a snowballing approach to identify additional key informants through interviews with representatives of the national, regional, and local Government of Ghana, GEF Agencies, project staff, private sector actors, and other donors (see Annex 1 for a full list). The case study team visited sites in the Eastern and Ashanti Regions associated with the FOLUR project (GEF ID 10348) under implementation as well as the Upper East and North East regions associated with the financially closed RFS project (GEF ID 9340) (see Annex 2).

The team received support from EPA in facilitating the in-person mission to visit sites and stakeholders. However, there were limitations to primary data collection. For example, the team was unable to secure a response from the Ministry of Gender and Social Protection and Ministry of Local Government and Rural Development (both part of the PSC at the national level) to understand socio-economic policy outcomes, despite targeted and repeated outreach. The evaluation team sought other perspectives to understand

the socioeconomic outcomes to the extent possible mainly through focus group discussions with project beneficiaries. At the national level the evaluation team was not able to interview the project focal point from COCOBOD, although the team did engage with several COCOBOD extension agents at the district and local levels. Similarly, the evaluation team has not received a response from the Water Resources Commission.

Another gap in evidence is the lack of civil society and NGO perspectives. The study team was not able to consult any national or local level NGOs/CSOs involved in GEF projects design or implementation despite repeated inquiries. The study team reached out one NGO involved in the implementation of RFS but was informed that their involvement ended years ago and thus they were not able to share their views on the project.

1.2 Scope

Ghana was selected for a case study due to the existence of child projects from GEF-6, GEF-7, and GEF-8 food systems programs. Table 1 below shows the three child projects in Ghana included in this case study. Each program also has a corresponding global/regional coordination projects, although these projects were only secondarily covered by the case studies from the perspective of the value added at the country level from participation in an integrated program.

GEF ID	Project Name	GEF Agency	FS Program	Project Status	Target Landscape
9340	Sustainable Land and Water Management Project	World Bank	RFS	Financially closed	Northen Savanna Zone
10348	Ghana Landscape Restoration and Ecosystem Management for Sustainable Food Systems	World Bank	FOLUR	Under implementation	Northen Savanna Zone and Cocoa Forest Landscape
11375	Ghana Sustainable Food System and Forest Management	World Bank	FSIP	CEO PIF Cleared	Cocoa Forest Landscape

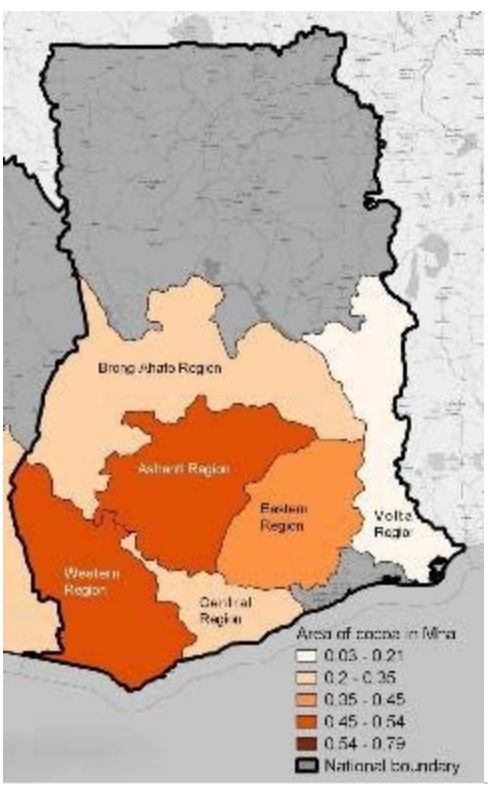
The Sustainable Land and Water Management Project (SLWMP) (GEF 4, 5 & 6) was implemented in Ghana with US$29.87 million in GEF funding. The project aimed to improve sustainable land and water management practices to reduce land degradation and enhance biodiversity conservation in targeted watersheds of Ghana's Northern Savannah Zone (Upper East, Upper West, and Northen Regions). The project was implemented between 2010 and 2021 with two additional financing cycles in 2014 and 2016. GEF 6, which falls under the scope of this evaluation, started implementation in 2016 and had a total budget of US$12.77 million.

The Ghana Landscape Restoration and Small-Scale Mining Project (GLRSSMP) (GEF 7) is a US$103.36 million initiative funded by the World Bank (IDA - US$75 million), GEF (US$12.76 million), ~~and~~ the Global Partnership for Sustainable and Resilient Landscapes, a World Bank administered multi-donor trust fund (PROGREEN - US$15 million) and Extractive Global Programmatic Support Multi-Donor trust fund (US$ 0.6m). The project aims to promote sustainable land use, forest conservation, and formalization of the Artisanal small-scale mining sector (component funded by the World Bank) while improving livelihood opportunities for local communities in Ghana's savannah and cocoa forest landscapes (expanding the project to the Eastern, Central and Ashanti Regions). The project implementation started in 2021 and is expected to close in 2027.

The Ghana Sustainable Food System and Forest Management (GEF 8) project aims to address environmental challenges and enhance food security in Ghana through sustainable practices in agriculture including cocoa and aquaculture. The project focuses on the Cocoa Forest Landscape, particularly in the

Western North, Ashanti, Central, and Eastern Regions of Ghana. The project aims to preserve landscapes by addressing deforestation and environmental degradation. The project is financed by $15.2 million from the GEF, with a total of $240 million in expected co-financing from various sources.

The map below (Figure 1) shows national data from 2020 on food insecurity being most prevalent in the northern regions of Ghana. The Upper East, Upper West, North East and Savannah Regions, where the RFS project was implemented, have over 30% of food insecure households. It is important to note the differences in the landscape between the northern and southern regions with the first being savanna landscape and later moist semi-deciduous forest. Thus, cocoa production in Ghana is concentrated in the southern regions (Figure 2) including Ashanti, Eastern and Central Regions where FOLUR project is active. These regions have the lowest levels of food insecure households (below 10%) (Figure 1). Therefore, the types of farmers targeted by the two GEF projects differ to a larger extent. The FSIP project will include regions in the middle tier of food insecurity (10-20% of households) extending GEF support to most administrative regions in the country.



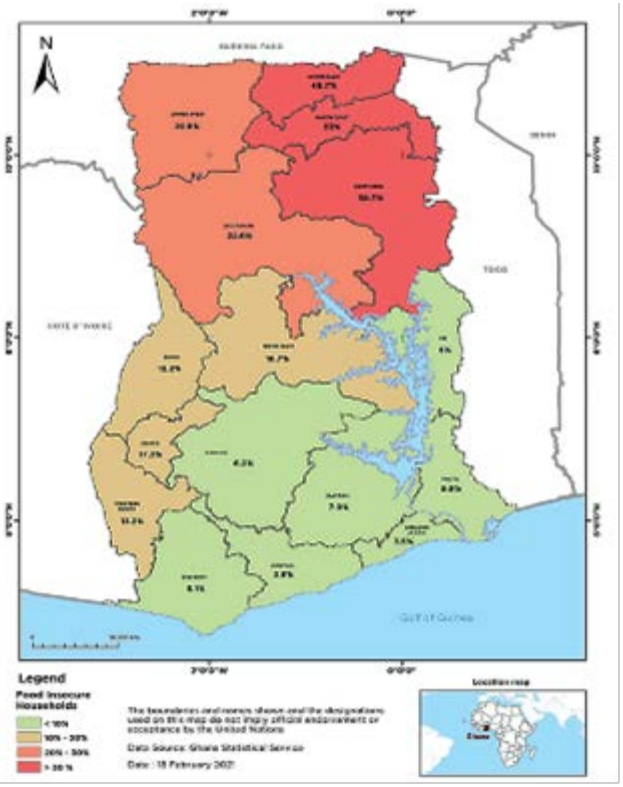


Figure 1. (left) Food insecurity situation in Ghana by administrative regions (2020)[1]
Figure 2. (right) Cocoa producing regions in Ghana in million hectares (Mha)[2]

2 Findings

2.1 Design

2.1.1 Systems thinking

The GEF food systems interventions in Ghana demonstrate a partial consideration of the environmental footprint of food systems and largely focus on production aspects. While projects show efforts to integrate sustainable agricultural practices—such as agroforestry, climate-smart agriculture, and

responsible aquaculture—the interventions primarily concentrate on increasing productivity and improving environmental practices in production. The consideration of the broader food system, including the stages of post-production, processing, aggregation and distribution, and consumption, is minimal, and there is little emphasis on value chain integration, market access, or value addition. While RFS activities largely focus on increasing agricultural yields in a sustainable manner in order to increase food security of beneficiary households, some livelihood diversification activities have been implemented such as beekeeping and shea nut picking and processing (by women's groups from the fringes of the Gbele Resource Reserve) to reduce pressure on land use. The project established shea and cassava processing facilities, and some consideration has been given to establishing market linkages between those groups and premium markets (through selling in bulk to Savanna Fruit Company). However, RFS beneficiaries reported that the presence of the shea processing facility has contributed to increased pressure on access to wild shea nuts. This pressure is further intensified by the growing number of other communities and off-takers operating in the area. While the rise in off-takers cannot be solely attributed to the project, the facility has played a role in making shea processing more accessible. As a result, more households are now engaged in processing activities than before, contributing to the overall demand for wild shea nuts.

There is a notable evolution from RFS to FOLUR and FSIP in terms of increased consideration of value chain approaches in project design. The FOLUR project includes activities aimed at sustainable practices for key commodity crops including cocoa, shea nut and cashew. The project appraisal document mentions encouraging partnerships with the private sector and exploring market access for targeted commodities to increase community access to financial resources and better adapt to economic shocks. However, on the ground the evidence of private sector engagement is missing. One interview confirmed that the Cocoa Forest Initiative[3] (convening major cocoa companies) was invited to initial stakeholder consultations in the context of FOLUR, but they have not been involved in project implementation. Similarly, the FSIP concept note mentions sustainable development of cocoa, maize and aquaculture value chains in Ghana but it is unclear to what extent the private sector has been involved at project design stage. The project is meant to support sustainable certification standards for cocoa including implementation of traceability efforts and environmental guidelines to ensure responsible aquaculture practices implying close coordination efforts on the demand side of the value chains. However, the positive linkages of certification standards with ecological and biodiversity outcomes are not fully proven[4]. The evaluation team found no evidence on the ground of GEF projects integrated in a way that reflects system thinking across national boundaries for example with Ivory Coast in the case of cocoa supply chains. Importantly, this was not foreseen at the design stage of the GEF project.

The interventions under FOLUR and FSIP lack a fully integrated approach to health, nutrition, and food security outcomes, with no clear strategies for directly measuring these aspects. RFS, partly due to its focus on a highly food-insecure population, did not take a holistic approach to addressing issues further down the value chain. The focus of RFS remained on boosting agricultural yields and RFS project beneficiaries reported significant improvements in their levels of household food security and nutrition through the inclusion of soybeans, cowpeas, and groundnuts in the intervention. Moreover, the Women in Agriculture Development Unit at the Department of Agriculture has been assigned to educate communities on incorporating soybeans into their local diets and developing new nutritious meals using soybeans such as soy milk, soy kebabs and adding soy to local staples (tubaani).

GEF projects are also starting to address food system interactions with artisanal small-scale mining. The GEF-7 FOLUR project was the first environmental project in which the government also accessed World Bank IDA credit to complement GEF grant funding (for the formalization of artisanal small-scale mining component). While the government sets a fixed price for cocoa, it limits the ability of farmers to sell at market-driven rates, even when international prices rise as seen since 2022.[5]. The limited financial

incentives in the cocoa sector has led some farmers to abandon their cocoa farms and sell their land for mining activities. This shift not only undermines the sustainability of the cocoa sector but also contributes to environmental damage and unregulated extraction of resources, exacerbating the challenges faced by the agricultural sector. The IDA credit demonstrates that the government recognizes the environmental issues at hand as a priority. The decision to secure a sovereign loan reflects the government's commitment to support formalization of artisanal small-scale mining, indicating that it is considered a critical area.

2.1.2 Learning

GEF-8 food systems interventions build upon previous GEF-6 and GEF-7 efforts by integrating lessons learned, especially in terms of geographical focus and crop diversification. For example, the lessons from GEF-6, which were more concentrated on specific regions and crop types, were applied in GEF-7 with a broader focus on different regions and crops such as cocoa. This shift reflects lessons learned about the need for diversified approaches to address varied environmental and socio-economic conditions across the country. However, the transitions between these phases have not significantly expanded beyond production-focused initiatives. While lessons were incorporated regarding environmental aspects of production (such as riparian establishment, land preparation, organic composting) the project has yet to fully incorporate post-production aspects such as market access, value chain integration, and private sector involvement, which were less emphasized in previous stages.

GEF-funded support in Ghana is not implemented as separate projects (starting from GEF4), but rather a continuous approach building on each four-year replenishment cycle, ensuring sustainability and integrating lessons learnt in subsequent child projects. GEF-4 and GEF-5 served as the foundation for GEF-6 efforts. As the initiative progressed from GEF-6 to GEF-7, a coordinated approach was introduced to address the intersection between small-scale artisanal mining and sustainable land management (component funded by the World Bank) in the case of cocoa farming. In GEF-8, the scope was further expanded beyond cocoa production to include aquaculture, as the impacts of mining on these sectors became evident. Throughout this evolution, the core mandate of the GEF food systems support remained unchanged, with smallholder farmers kept at the center of all interventions. To effectively tackle cocoa-related deforestation, COCOBOD was brought on board as a key partner in the initiative under GEF-7.

One of the lessons learnt from GEF-6 (and before) taken forward to GEF-7 and GEF-8 is working with a community-based approach to natural resources management though the creation and institutionalisation of Community Resource Management Areas (CREMAs). Unlike government-protected areas, CREMAs are established on community-owned lands to prevent environmental degradation and support biodiversity, including migratory species. Under GEF-6, six CREMAs were established within the Western Wildlife Corridor. Communities actively participate in resource management through governance structures, constitutions, and bylaws, which, once gazetted, grant them legal authority over their resources. Interviewees mentioned that previously, communities were sidelined, with conservation efforts driven by a top-down approach. However, when communities are actively involved and see tangible benefits, they take ownership of conservation efforts and play a crucial role in protecting natural resources.

2.1.3 Gender and Social Inclusion

GEF food systems interventions in Ghana have considered gender and inclusion in their design and met targets for women's participation. Yet projects were not designed to close gender gaps in agriculture, and thus do not have strategies to address underlying gender dynamics or enhance women's economic empowerment. Projects have set and exceeded targets for women's involvement as GEF beneficiaries (40%) as 56% of the RFS beneficiaries were women and 50% of FOLUR beneficiaries are women (larger project including the small-scale mining component). However, by design, project targets are not

supported by a well-defined strategy or specific activities aimed at engaging women in transformative ways. There is also a noticeable absence of strategies to address gender inequalities in the agricultural sector or to create opportunities for women to challenge traditional roles. This limited gender-focused approach reduces the potential for addressing broader inclusion and empowerment objectives within the food systems interventions. For example, FOLUR beneficiaries in some communities reported that the project's requirement of an initial investment from the farmer for labor costs related to first weeding of their land (about GHC 600/USD 51 per 0.5 hectare) has practically meant that women cocoa farmers and poorer farmers are unable to participate in project activities. Interviewees noted that this requirement was set at the national level, and that COCOBOD district extension officers did not feel empowered to question the decision, which resulted in many women and poorer cocoa farmers initially interested in joining the project to withdraw. The evaluation team noted discrepancies in the project inclusion criteria with different communities not being required to make this initial investment themselves showing a lack of transparent inclusion strategy.

Even though access to land is one of the main project inclusion criteria, the GEF interventions do not seek to engage with the land tenure arrangements (such as abunu or abusa)[6]. The decision of whether the landowner or the sharecropper joins the project is made by the landowner and sharecropper themselves. If the sharecropper chooses to participate, the landowner must grant power of attorney to authorize their involvement This arrangement may lead to issues of inclusion, as the decision-making power remains with the landowner, potentially limiting the sharecropper's autonomy in participation. If the landowner is not supportive, the sharecropper may be excluded from benefiting from the project, despite their active involvement in land cultivation. It is also likely that this approach results in the inclusion of individuals who are relatively better off within their communities, rather than focusing on the poorest or most vulnerable populations. From a project implementation perspective, there is often a trade-off between the expediency of implementation, particularly when securing tenure can be a lengthy process—and the goal of ensuring broader inclusion. Similarly, issues of women's land tenure rights (especially in the north) and youth's limited access to land have not been addressed by the GEF interventions. The projects acknowledged these issues during the design phase but did not provide clear solutions during implementation. In GEF-6, men were sensitized and encouraged to allocate land for their wives, and while some did, the land provided was typically small and located near households or communities, often with lower fertility. . In GEF-7, although tenure insecurity for women and youth was recognized, the project chose not to engage with this issue directly.

Transparency of beneficiary inclusion processes has been repeatedly questioned by the project communities. In GEF-6 targeted communities the inclusion process was initially perceived as very transparent by farmers, as they were asked to form groups, and only those interested chose to participate. However, after joining a group and having their names submitted, they were informed that support could only be provided to certain groups. This has been considered unfair by farmers, who believe that the Department of Agriculture is favoring some groups over others. The project team later clarified that these perceptions were primarily due to several limitations: (1) during field verification, some farmers who submitted sub-project proposals did not have land available to implement the interventions; (2) there was an oversubscription of applicants in certain communities; and (3) the project had limited funds, which made it impossible to support all eligible participants.

Another issue emerged as some communities targeted under RFS have been included in FOLUR. Beneficiaries reported that the inclusion of older GEF-6 communities was prioritized, with a focus on allowing only those communities and beneficiaries who were deemed committed to participate in GEF-7. However, farmers were questioning how this "commitment" is determined, as it appeared that more affluent farmers are being selected as GEF-7 beneficiaries. This has raised concerns among the original

beneficiaries, who feel that the criteria for commitment may not have been applied consistently, leading to an unfair shift in who receives support. Project team later explained that commitment was assessed based on the extent to which farmers adopted the technologies promoted by the project. Farmers who were not included in GEF-7 project expressed that they were informed the selection process was managed by "computers" in Accra, which made their exclusion feel arbitrary as they were not provided with a clear explanation for the decision.

2.2 Relevance and Coherence

2.2.1 Alignment with country priorities and needs

GEF food systems interventions have been well aligned with the priorities and needs of Ghana in the agriculture, livestock, and fishery sectors. The focus on sustainable agricultural practices, including agroforestry and climate-smart agriculture as well as curbing deforestation, matches the country's broader goals for improving agricultural productivity and environmental sustainability.

RFS aligned well with Ghana's central development strategies and policies on land degradation and natural resource management such as Growth and Poverty Reduction Strategy (GPRS II) (2006–2009) which recognized land restoration and integrated ecosystem management as essential for sustainable development; National Development Policy Framework (2010–2013) and Food and Agriculture Sector Development Policy (FASDEP II) which emphasized sustainable land and environmental management; Forest and Wildlife Policy (1994) and National Land Policy, and Forestry Development Master Plan (1996–2000) which provided a policy foundation for natural resource governance; Natural Resources and Environmental Governance Program (NREG) and the Northern Savannah Biodiversity Strategy and Action Plan (NSBSAP) which reinforced ecosystem services, biodiversity conservation, and socio-economic benefits to local communities.

Similarly, FOLUR demonstrates robust alignment with Ghana's economic and environmental policies, particularly in sustainable agriculture, forestry, and climate resilience through the Coordinated Programme of Economic and Social Development Policies (CPESDP) 2017–2024 which supports Ghana's goal to double per capita GDP by 2024, with a focus on transforming agriculture and industry. Key environmental and agricultural policies which directly correspond to FOLUR objectives include Forest and Wildlife Policy (2011), National Land Policy (1999), National Biodiversity Policy (2018), and National Environment Policy (2014), Food and Agriculture Sector Development Policy (FASDEP II) and Tree Crops Policy. FOLUR is strongly integrated with Ghana's economic growth strategies and climate action policies, ensuring a multi-sectoral approach to sustainable land management. The alignment with REDD+ and international commitments (NDCs, AFR100, Aichi Targets) positions FOLUR as a key contributor to Ghana's environmental and economic development goals. FOLUR success depends on effective policy coordination across sectors and sustained government support.

FSIP focuses on landscape restoration, sustainable food systems, and climate resilience, aligning with key government policies and programs such as: Food and Agriculture Sector Development Policy (FASDEP II) and Cocoa Sector Development Strategy (CSDS II) promoting agricultural sustainability and support Ghana's major cash crop industries (e.g., cocoa, tree crops); National Food System Strategy and Investment Plan (2023–2030) and Aquaculture Development Plan (2022) reinforcing food security, fisheries, and sustainable agricultural investments and Green Ghana, Ghana Cocoa Forest REDD+ Program (GCFRP), and Forest Investment Program (FIP). FSIP also contributes to Ghana's obligations under the Bonn Challenge, AFR100, and Aichi Biodiversity Targets. It supports Nationally Determined Contributions (NDCs) under the Paris Agreement, reinforcing climate adaptation and resilience efforts. Despite these

positive policy alignments, integrating smallholder farmers and vulnerable communities into large-scale investment plans requires additional policy safeguards to ensure inclusive benefits.

Table 1. GEF's alignment with country priorities and needs

GEF Project	Policy alignment	Key strengths	Potential gaps
RFS	Strong alignment with land degradation, biodiversity conservation, and ecosystem restoration policies	Well-integrated with national land and forest governance strategies (NREG, NSBSAP)	Sustainability concerns if long-term funding is not secured
FOLUR	Strong coherence with economic, agricultural, and climate policies	Aligns with CPESDP 2017–2024, REDD+, NDCs, and Ghana's agriculture and forestry policies	Requires effective cross-sectoral coordination
FSIP	Broad alignment with agriculture, forestry, and climate adaptation policies	Supports major government programs (GCFRP, FIP, Food System Strategy) and international commitments	Needs policy safeguards for smallholder inclusion

Interviews at the national level confirmed the above and showed a high level of awareness of climate change impacts including impact on/from agriculture and the consequences for future generations. National interviewees stated that the projects are effectively addressing national priorities, and even without funding from the GEF to be part of the integrated program, these are topics they would still seek support for.

2.2.2 Interaction with similar government and donor-funded activities

Interactions between GEF food systems interventions and similar government or donor-funded activities in Ghana have been limited. Notably, interviews showed that key international organizations like the International Fund for Agricultural Development (IFAD) and the Food and Agriculture Organization (FAO) were not fully involved GEF activities in Ghana. While there is some alignment with the GCF, the overall interaction between GEF and other programs could be significantly improved. For example, GEF-6 aimed to expand Village Savings and Loan Associations (VSLAs) in the same communities where World Vision had already established VSLAs, under the assumption that the existing VSLAs were insufficient. However, farmers often preferred joining the GEF project activities including VSLAs, believing they would receive more benefits such as free agriculture inputs in addition to joining the VSLA. This led to conflicts within the community, as some members want to leave the World Vision VSLAs to join GEF-6 activities, anticipating greater access to free inputs.

Some components of GEF-7 and GEF-8 share similarities with other government programs that have not been successful. This suggests that while projects broadly align with the country's needs, the specific activities on-the-ground may not be fully aligned with local communities' needs or preferences. For example, in the FOLUR project farmers reported initial resistance to join COCOBOD implemented interventions (rehabilitation of moribund cocoa farms) due to the failure of similar rehabilitation activities started under the Productivity Enhancement Programmes (PEPs) which begun in 2017. The PEPs encouraged farmers to adopt major agronomic practices geared towards improving cocoa yield per hectare. This strategy included interventions such as cocoa farm rehabilitation, mass spraying, pruning, hand pollination, and subsidized fertilizer application, among others.[7] Nevertheless, the implementation on the ground faced significant challenges which led to lack of trust in COCOBOD actions from farmers. They repeatedly mentioned that only after learning the COCOBOD interventions were supported by GEF (and in particular the World Bank) they were willing to join the project.

Tree planting interventions under the GEF-6 initiative have faced challenges, making them less popular among communities. One significant issue is the delayed benefits of tree planting, as it takes years for

trees like teak and mahogany to mature. Additionally, there are concerns around land and tree ownership, as communities may lose out when these trees are eventually harvested by the landowner. This uncertainty over ownership and the long-term nature of tree planting undermines the appeal of such interventions. To address this, leguminous crops were provided to farmers interested in tree growing as an incentive and to improve soil fertility.

The similar approach of the Modified Taungya System (MTS)[8] shows that a clear, shared benefit structure is critical for engaging communities in long-term forest management and conservation efforts. Therefore, addressing the issues of tree and land ownership and ensuring more immediate, tangible benefits could improve the popularity and effectiveness of tree planting interventions under GEF. The MTS has been the primary public-community partnership for forest plantation development since 2002. It is a collaboration between the government, represented by the Forestry Commission, and forest-fringe communities, offering equal benefit-sharing. Through MTS, communities can participate in the restoration of degraded landscapes, while benefiting from food crops, income from tree seedling sales, and a share of the standing timber value—40% from commercial thinning and the final harvest.[9]

2.2.3 Policy coherence

GEF food systems interventions have not had a particular focus on promoting policy coherence in Ghana. The focus of GEF interventions has been primarily on sustainable agricultural practices and environmental outcomes, rather than addressing the broader policy frameworks related to subsidies or engaging in dialogue about agricultural support mechanisms. This lack of focus on policy coherence, especially in relation to subsidies, means that GEF interventions have not been a significant driving force in shaping or influencing agricultural policy reforms that could better align with sustainability goals. While agricultural inputs are subsidized by the government, in recent years, government's share of subsidies under the Fertilizer Subsidy Program (FSP) has declined steadily since 2020 mainly due to fiscal pressures on government, the need to continue the subsidy program and expand the number of beneficiaries.[10] FSP has been a key component of the Planting for Food and Jobs (PfJ) initiative targeted at improving crop productivity, ensuring food security and creating employment opportunities in Ghana. Over a five-year period (2017 to 2021), the government has spent about GH¢2.7 billion mainly for covering subsidies on selected fertilizers and seeds supplied to smallholder farmers. Eligible farmers were provided a 50% input subsidy, which was reduced to 15% as of 2022.[11] There is no evidence however to argue that GEF food systems interventions have contributed to this reduction.

Interministerial coordination of the GEF support is ensured by the Ministry of Environment, Science and Technology (MEST) convening the Project Steering Committee. MEST has an oversight role, ensuring the successful implementation of the project. The interviewees explained that they formed a project coordination unit at the national level and mini teams at the regional level to ensure ownership and participation. They emphasized the importance of speaking with one voice and having a common sense of purpose. At the national level, coordination is evident among key ministries and government agencies, such as:

- EPA (environmental protection interventions)
  Ministry of Food and Agriculture (agricultural productivity and sustainability)
- Forest Service Division (forest conservation and management)
  Wildlife Division (biodiversity conservation)
- COCOBOD (cocoa sector interventions)

Despite these high-level engagements, implementation at the district level shows a mix of coordinated and sector-specific approaches. While some interventions remain ministry-specific—with COCOBOD, the

Ministry of Agriculture, and the Forestry Commission operating independently—there are positive signs of cross-sectoral collaboration through District Watershed Management Teams. These teams include representatives from:

- EPA
- Department of Agriculture
- Department of Social Welfare and Community Development
- Department of Gender
- Ghana National Fire Service
- Forest Services Division
- National Disaster Management Organization
- Physical Planning Department
- Development Planning Department
- Wildlife Division of FC (where they are present)

Districts maintain a list of stakeholders to include in local implementation efforts. The Department of Agriculture typically occupies 4 spots (District Director, Schedule Officer and two Agric Extension Agents), leaving 6 for other stakeholders, with a total of 10 spots available. This allocation also includes the community extension agent. Private sector entities, civil society organizations (CSOs), and NGOs are usually not included. Moreover, when a department is located outside the district, it is often excluded from the team due to budget constraints. For example, in many districts, the Wildlife Department is based in Bolgatanga, the regional capital, and oversees all districts (Wildlife Dep offices are established based on the prevalence of wildlife). As they are not situated in the district capital, they are not included in the district-level implementation. Many of the units and departments represented on the committee are primarily tasked with sensitization efforts (as agreed at the project inception), rather than providing substantial support or realistically addressing issues within their areas of expertise. A clear example of this is the District Fire Service, which, while involved in awareness-raising, does not have the capacity to contribute effectively to practical implementation.

Despite coordination efforts at the district level, there is limited evidence of collaboration at the community level. Many interventions remain siloed, with different departments and/or agencies implementing their activities independently rather than in an integrated manner building on each other. This gap raises concerns about efficiency, resource allocation, and the sustainability of interventions at the community level.

2.3 Performance and Results

2.3.1 Global environmental and socioeconomic benefits

RFS is the only project that has closed at the time of the evaluation and generated tangible outcomes. The RFS project closed in 2020 and has been subject to both a terminal evaluation[12] and a development impact evaluation by the World Bank[13]. The FOLUR project has only started on-the-ground implementation in the last year, and emerging results, particularly in terms of yields increase, are only anecdotal at this stage. For the purpose of the case study this section refers only to the RFS project results.

Through its phased implementation, RFS covered 15,861 hectares under sustainable land and water management practices (SLWM), benefited over 63,500 individuals, and the development of the Western Wildlife Corridor Management Plan including the establishment of six CREMAs covering 600,995.71 hectares improving biodiversity conservation and sustainable resource management. Interviews with

project staff at different levels and focus group discussions with project beneficiaries confirmed that RFS has been largely successful in achieving environmental and socioeconomic benefits including significant progress in SLWM, livelihood and food security improvements, and environmental restoration.

Key project benefits reported by farmers include:

- Adoption of low-input farming methods such as crop rotation with manure, zero tillage, and organic compost has improved soil fertility and crop yields.
- Restoration of riparian zones has protected water bodies, preventing river drying and enabling dry-season vegetable farming in surrounding communities (in some areas, riparian did not necessarily refer to water bodies).
- The abandonment of slash-and-burn farming has helped preserve soil health and biodiversity.
- The introduction of nutrient-rich crops like soya, cowpea, and groundnuts has enhanced dietary diversity.
- Farmers report higher crop yields, reducing hunger and improving household nutrition.
- Reduced reliance on synthetic fertilizers and pesticides has improved post-harvest storage, with crops such as onions now lasting significantly longer.
- Increased agricultural productivity has led to higher household incomes, though full income security remains a challenge as expenses continue to exceed earnings.
- Some farmers have invested in livestock to create a more stable income stream, ensuring financial security beyond seasonal farming. This can be seen problematic from an environmental perspective.

Spillover effects to neighboring communities have been notably strong, suggesting a broader impact beyond the immediate project areas. However, the interventions have primarily focused on production with limited evidence of benefits extending to other aspects of the food system. Communities have been strategically selected to be surrounded by other settlements, enabling knowledge transfer and the adoption of best practices through farmers' own initiatives. Within the beneficiary communities and in other non-beneficiary communities, demonstration plots have been used to facilitate learning for farmers. Adjacent communities are also engaged, where knowledge is shared through interactions with extension officers and project beneficiaries. Non-beneficiary communities have independently adopted SLWM techniques, demonstrating the project's broader influence. Farmers outside the project have begun implementing composting, zero tillage, and dry-season farming after witnessing successful outcomes.

While environmental practices that were adopted led to yield improvements and environmental protection, the sustainability of these benefits remains uncertain due to the higher labor demands associated with these practices, which may deter long-term engagement if there is no financial compensation. Additionally, climate change impacts, such as increased droughts, present ongoing challenges, especially in relation to irrigation and water management. This challenge has been partially addressed through the introduction of SLWM practices, including integrated in-field water harvesting techniques—such as earth and stone bunding, which are semi-permanent—and conservation methods like mulching, all of which help mitigate the impacts of climate change.

To ensure sustainability of project results, a bottom-up approach was adopted. Decisions were not imposed; rather, funding was provided to support technologies that received approval from farmers. Once

the benefits were recognized, farmers independently adopted the practices, even if not in their entirety, implementing what was within their means. The introduction of certified seeds ensured that farmers continued their use beyond initial project support. Many farmers have sustained the practices they were taught, leading to higher yields. As a result, they were introduced to VSLAs, enabling them to save and rely on their savings for purchasing necessary inputs at the appropriate time. Interviewees recognized that as GEF support may eventually end, measures have been implemented to ensure continuity. Interventions remain location-specific, with programs adjusted based on emerging needs. To enhance motivation and long-term ownership, economically valuable species such as mango and cashew have been integrated into restoration efforts. The demand-driven approach ensures that farmers remain committed to maintaining the interventions.

2.3.2 Role of women in RFS interventions

RFS interventions have had a limited focus on the role of women in agriculture and household gender dynamics. While women have started to earn more income as a result of their participation in the project, this has led to some tensions within households, particularly in terms of gender dynamics and decision making around income. Under GEF-6 women's participation in group-based activities, such as VSLAs and shea processing, has expanded their economic opportunities and allowed them to contribute to children's school fees and other household expenses. However, the project was not designed to close gender gaps, and interventions did not specifically target the role of women in influencing household or farm decisions. The increasing empowerment and financial independence of women have led to emerging household conflicts, particularly around traditional gender roles. Both men and women in the GEF-6 communities mentioned that men interpret women's financial independence as a challenge to their authority and respect within the household. This shift in dynamics has created power struggles and tension in decision-making.

Although there has been some progress in granting women land for farming (from their husbands), the allocation remains limited. Women are typically given small plots near their homes or within the community, while men continue to control larger plots of land outside the community. Women mentioned that they are seeking access to more land to expand their farming ventures, highlighting the unequal distribution of resources. Moreover, while women are now gaining access to more land from men, this shift has not been coupled with broader strategies to address land tenure issues or actively promote gender equality in the food systems.

2.3.3 Private sector engagement

While farmers' ownership of their land and involvement in decision-making has been a central factor in the success of the RFS interventions, the lack of a comprehensive private sector strategy has hindered the scaling of benefits. Early interventions were largely focused on supporting farmers directly with agricultural inputs, which were provided for free, enabling them to reinvest savings into agricultural expansion. Additionally, as the sustainability of the environmental practices adopted by farmers is uncertain, largely due to the labor intensity of these practices without adequate financial support, private sector involvement could play a critical role in ensuring continued success and expanding the environmental impact. Government programs such as Input Credit through Planting for Food and Jobs phase II (PfJ 2.0) could support the continuity of interventions beyond the project closure. The GEF food systems support in Ghana considers the individual farmer as their entry point. Interviewees mentioned that farmer group or cooperative formation is not discouraged however, experience has shown a preference among farmers for an individual approach. While a collective approach could facilitate greater private sector participation.

With the recent introduction of the EU's Regulation of Deforestation-free Products (EUDR) including commodities such as cocoa, close coordination with the private sector cocoa companies will need to be ensured down to the field level. Under the Regulation, any operator or trader who places these commodities on the EU market, or exports from it, must be able to prove that the products do not originate from recently deforested land or have contributed to forest degradation. The evaluation team observed a high awareness of the implications of this regulation among the COCOBOD staff involved in FOLUR implementation. However, how this will be operationalised is yet to be seen.

2.4 Programmatic value addition

The broader knowledge exchange has provided valuable insights and practical benefits to individual child projects in Ghana, though access to these opportunities has been limited to specific individuals. One notable example is the learning experience from Burkina Faso, where Ghanaian farmers were exposed to advanced tomato and onion production techniques. This exchange directly contributed to strengthening Ghana's agricultural value chain by fostering the establishment of producer organizations while keeping individual farmers at the center of interventions. Additionally, participation in international workshops, such as those organized under the RFS regional hub project, has facilitated cross-country learning. Recent engagements in Kenya on gender inclusion, for example, have enhanced the projects' ability to integrate more women effectively. While these knowledge-sharing initiatives have been beneficial, their reach has not yet been expanded to ensure more project beneficiaries and implementers gain access to such opportunities, further strengthening local implementation capacity.

3. Summary of findings and emerging lessons

- **Design and systems thinking:** The GEF food systems interventions in Ghana have primarily focused on increasing productivity and improving environmental practices in production. They show minimal consideration of the broader food system, including post-production, processing, aggregation, distribution, and consumption. The interventions have evolved from RFS to FOLUR and FSIP, with increased consideration of value chain approaches and sustainable practices for key commodity crops. Despite efforts to harmonize stakeholder involvement, the interventions lack a fully integrated approach to health, nutrition, and food security outcomes.

Emerging Lesson: There is a need to increase value chain integration, market access, and private sector involvement to ensure the sustainability of interventions. The lack of a comprehensive private sector strategy has hindered the scaling of benefits.

- **Learning:** GEF-8 food systems interventions build upon previous efforts by integrating lessons learned, especially in terms of geographical focus and crop diversification. The continuous approach ensures sustainability and integrates lessons learned in subsequent child projects. The creation and institutionalization of Community Resource Management Areas (CREMAs) have been effective in preventing environmental degradation and supporting biodiversity.

Emerging Lesson: Expanding the reach of knowledge-sharing initiatives can further strengthen local implementation capacity. Participation in international workshops and cross-country learning has provided valuable insights and practical benefits to individual child projects.

- **Gender and social inclusion:** While GEF food systems interventions have considered gender and inclusion in their design and met targets for women's participation, they do not have strategies to address underlying gender dynamics or enhance women's economic empowerment. Projects have set and exceeded targets for women's involvement, but there is a noticeable absence of strategies to address gender inequalities in the agricultural sector. Issues of land tenure arrangements and transparency of beneficiary inclusion processes have also been questionable.

Emerging Lesson: Addressing underlying gender dynamics and enhancing women's economic empowerment are crucial for achieving broader inclusion and empowerment objectives within food systems interventions. Projects have not incorporated strategies to address gender inequalities and create opportunities for women to challenge traditional roles.

- **Relevance and coherence:** GEF food systems interventions have been well aligned with the priorities and needs of Ghana in the agriculture, livestock, and fishery sectors. The focus on sustainable agricultural practices matches the country's broader goals for improving agricultural productivity and environmental sustainability. However, interactions between GEF food systems interventions and similar government or donor-funded activities in Ghana have been limited.

Emerging Lesson: Promoting policy coherence and engaging in dialogue about agricultural support mechanisms can better align GEF interventions with sustainability goals. Effective interministerial coordination and community-level collaboration are essential for the success of interventions.

- **Performance and results:** The RFS project has generated tangible outcomes, including significant progress in sustainable land and water management practices, livelihood and food security improvements, and environmental restoration. Key project benefits reported by farmers include improved soil fertility and crop yields, enhanced dietary diversity, higher household incomes, and spillover effects to neighbouring communities. However, challenges remain in coordination, beneficiary inclusion, and long-term sustainability.

Emerging Lesson: Ensuring the sustainability of project results requires a bottom-up approach, with funding provided to support technologies that receive approval from farmers. Measures should be implemented to ensure continuity beyond project closure.

Annex 1: Stakeholders Consulted

List of interviewees

No.	Type of stakeholder	Organization	Date of Interview
1	Government GEF Focal Point	Environmental Protection Agency (EPA)	16/01/25
2	Project Management Team	Ministry of Food and Agriculture (MoFA)	20/01/25
3	Project Management Team	Environmental Protection Agency (EPA)	20/01/25
4	National Government	Land Use and Spatial Planning Authority (LUSPA)	20/01/25
5	National Government	Ministry of Finance - Resource Mobilization Division	21/01/25
6	National Government	Ministry of Finance - Climate Change Division	21/01/25
7	National Government	Ministry of Environment, Science and Technology (MEST)	22/01/25
8	National Government	Forest Service Division (FSD)	10/02/25
9	National Government	Wildlife Division (WD)	12/02/25
10	Donor	EU Delegation in Ghana	22/01/25
11	Private sector	The Cocoa and Forest Initiative (IDH Ghana coordinator)	22/01/25
12	GEF Agency	IFAD Ghana Country Office	22/01/25
13	GEF Agency	FAO Regional Office for West Africa	22/01/25
14	GEF Agency	UNDP Ghana Country Office	29/01/25
15	Local government	Mpraeso Forest Service Division (District Office)	23/01/25
16	Local government	Nkawkaw Area Office (EPA)	23/01/25
17	Local government	Nkawkaw COCOBOD (District Office)	23/01/25
18	Local government	Nkawie Forest Service Division (District Office)	24/01/25
19	Local government	Nyinahin COCOBOD (District Office)	24/01/25
20	Local government	Nyinahin Fire Service Division (FSD)	24/01/25
21	Local government	Talensi District Agriculture Development Unit (DADU)	28/01/25
22	Local government	West Mamprusi District Agriculture Development Unit (DADU)	27/01/25
23	Local government	EPA Office Bolgantaga	30/01/25
24	GEF Lead Implementing Agency	World Bank	26/02/25

List of Focus Group Discussions

No.	Type	Community	Participants
FOLUR			
1	Fire volunteers	Dwerebease	14 (4F; 10M)
2	Farmers	Dwerebease	26 (12F; 14M)
3	District Watershed Assembly Management implementation team	Atibie	7 (1F; 6M)
4	Farmers	Old Jejeti	16 (4F; 12M)
5	COCOBOD implementation team	Old Jejeti	9M
6	Farmers	Botrampa/Agogoso/Akatanso/Agogo Agya	13 (1F; 12M)
7	COCOBOD implementation team	Botrampa	15 (2F; 13M)
8	Farmers	Pamuroso	35 (14F; 21M)
9	Forestry Commission (including Fire Service Division) implementation team	Pamuroso	6M
RFS			
1	Farmers	Takorayilli	30 (22F; 8M)
2	Department of Agriculture implementation team	WaleWale	3M
3	Farmers	Yameriga	50 (29F; 21M)
4	Farmers	Santeng	40 (22F; 18M)
5	District Watershed Assembly Management implementation team	Talensi	9 (2F; 7M)
6	Famers	Tarikom	12 (5F; 7M)
7	Farmers	Gbantongo	64 (31F; 33M)

Annex 2: Project sites visited

Below are descriptions of project site visits conducted during a fieldwork mission from January 20 to January 30, 2025.

Region	District	Community	Interventions
FOLUR			
Central	Kwahu East	Damano	Riparian establishment and prevention of wildfires
Central	Kwahu East	Dwerebease	Riparian establishment
Central	Nkawkaw	Jejeti	Rehabilitation of moribund cocoa farms
Central	Nkawkaw	Atibie Nkwanta	Rehabilitation of moribund cocoa farms
Ashanti	Nkawie	Offin Shelterbelt Forest Reserve	Green fire breaks, reforestation and Modified Taungya System
Ashanti	Nyinahin	Botrampa	Rehabilitation of moribund cocoa farms
RFS			
Upper East	Bawku West	Tarikom	Integrated soil fertility management, agroforestry
Upper East	Bawku West	Gbantongo Agoadabot	Rangeland and dugout, composting, earth bunding
Upper East	Talensi	Yameriga	Stone lining, enrichment planting and natural regeneration
Northen	West Mamprusi	Takorayilli	Riparian establishment, woodlot and shea processing facility

Pictures from project sites visits

Eastern Region, Kwahu East District, Dwerebease community, reforesting activities (before picture on the left; after picture on the right)

Eastern Region, Nkawkaw District, Jejeti community, cocoa farm rehabilitation activities, new cocoa seedling replanted, and plantain planted as a shade tree, bottle irrigation for cocoa seedling

Ashanti Region, Nyinahin District, Botrampa community, cocoa farm rehabilitation activities, new cocoa seedlings replanted with plantain as shade tree, intercropping with peppers

Bridge at Takorayili from SLWM (left) and dry season farming by the bridge Takorayili (right)

Shea processing facility at Takorayili (left) and shea butter produced by women's group (right)

Stone bunding and leaving crop residue at Yameriga

Part 2
Indonesia Country Case Study

Acronyms

ADB	Asian Development Bank
ACIAR	Australian Centre for International Agricultural Research
ADM	Archer Daniels Midland
Bappenas	Ministry of National Development Planning.
Bapperida	Regional Development Planning Agency
BERLKAN	Initiative to Promote Sustainable Palm oil in Indonesia
BNI	Bank Negara Indonesia
BPDPKS	Palm Oil Plantation Fund Management Agency
CFI	Coastal Fisheries Initiative
CEO	Chief Executive Officer
CI	Conservation International
CMEA	Coordinating Ministry of Economic Affairs
CMFA	Coordinating Ministry of Food Affairs
CSP	Cocoa Sustainability Platform
DO	Development Objectives
EAFM	Eco-System Approach to Fisheries Management
ESG	Environment, Social and Governance
FAO	Food and Agriculture Organization
FMA	Fisheries Management Area
FMP	Fisheries Management Plan
FOKSBI	Indonesian Sustainable Palm Oil Platform
FOLUR	Food, Land Use, and Restoration
FSIP	Food Systems Integrated Program
GAP	Good Agricultural Practices
GEB	Global Environmental Benefits
GEF	Global Environment Facility
GGP	Good Growth Partnership
GHG	Green House Gas
GIZ	Gesellschaft für Internationale Zusammenarbeit
HCV / HCS	High Conservation Value / High Carbon Stock
HQ	Headquarter
IAP / IP	Integrated Approach Pilot / Impact Program
ISPO / RSPO	Indonesian Standard for Palm Oil / Regional Standard for Palm Oil
IEO	Independent Evaluation Office
IFC	International Finance Corporation
ILM	Integrated Landscape Management
IP	Implementation Performance
ISEAL	International Social and Environmental Accreditation and Labeling Alliance
ISLME	Indonesian Seas Large Marine Ecosystem
KEHATI	Indonesia Biodiversity Foundation
MMAF	Ministry of Marine Affairs and Fisheries
MoEF	Ministry of Environment and Forestry
MS	Moderately Satisfactory
MSP	Multi-Stakeholder Platform
MTR	Mid-term Review

MU	Moderately Unsatisfactory
NAP IT	National Action Plan Implementation Team
NIM	National Implementation Modality
NTFP	Non-Traditional Forest Products
OneCGIAR	Unified Consultative Group on International Agricultural Research System
PIR	Project Implementation Report
PMU	Project Management Unit
ProDoc	Project Document
PSC	Project Steering Comittee
PT ANJ	Indonesian Diversified Agribusiness Holding Company
RAME	Rurality, Accountability, Monitoring, and Engagement Framework
RAN-KSB	National Action Plan on Sustainable Palm Oil
SASCI	Sustainability and Value Added in Agricultural Supply Chains
SoC	Signals of Change
SRP	Sustainable Rice Platform
STDB	Surat Tanda Daftar Budidaya (Cultivation Registration Certificate)
TE	Terminal Evaluation
ToC	Theory of Change
TORA	Agrarian Reform Scheme
TSC	Targeted Scenario Analysis
UNDP	United Nations Development Programme
USD	United States Dollar
WWF	World Wildlife Fund
YKAN	Yayasan Konservasi Alam Nusantara (NGO)

1. Introduction

This Indonesia case study is part of the Evaluation of Global Environment Facility (GEF) Food Systems Programs. This evaluation seeks to assess the quality of design and achievement of results of food systems programs in GEF-6, GEF-7, and GEF-8, as well as to evaluate how the GEF has adapted to changing contexts and incorporated lessons learned into the design of later programs. The global evaluation covers three GEF-6 programs (Resilient Food Systems [RFS], Coastal Fisheries Initiative [CFI], and Good Growth Partnership [GGP]), one GEF-7 program (Food, Land Use, and Restoration [FOLUR] Impact Program), and one GEF-8 program (Food Systems Integrated Program [FSIP]). The evaluation scope also includes standalone country and regional projects focused on food systems from GEF-6 through GEF-8 that were identified by the GEF Independent Evaluation Office (IEO) using a keyword search.

Country case studies are a key component of the evaluation, intending to help:

- Gain a deeper understanding of the outcomes resulting from GEF food systems interventions and the explanatory factors for and sustainability of these changes;
- Understand how the GEF integrated programs' approach to food systems has evolved at the country level by assessing the similarities and differences between projects from each replenishment cycle and capturing links and interconnection; and
- Collect the perspectives of local communities affected by GEF interventions.

Indonesia was one of four case study countries selected purposively by the GEF IEO. Case study countries were selected based on their having food systems program child projects from all three GEF replenishment cycles included in the scope of the evaluation. Other factors considered include maturity of projects and variation across regions, GEF Agencies, and sectors targeted through FSIP.

1.1 Methodology

This Indonesia case study used a systems thinking approach that was guided by the global evaluation's theoretical framework for understanding food systems that integrates GEF concepts with relevant literature to identify the drivers, actors, parts, and outcomes of a given system. The case study sought to answer thirteen overarching evaluation questions pertaining to design, relevance and coherence, performance and results, value addition, and efficiency of GEF food systems programming.

The case study used mixed methods to extract robust and credible findings, including desk reviews of project and program documents, virtual and in-person interviews, and direct observation through site visits. The case study team conducted a stakeholder mapping exercise to develop an initial list of key informants, then used a snowballing approach to identify additional key informants through interviews with representatives of the national, regional, and local Government of Indonesia, GEF Agencies, project staff, private sector actors, external experts, and civil society organizations (see Annex 1 for a full list). The case study team visited sites in West Kalimantan associated with the GGP and FOLUR programs (GEF ID 9180 and 10238) (see Annex 2).

Key limitations faced during the study included the difficulties related to carrying out an evaluation mission during the volatile and fluid transition period after a new President took over and key responsibilities for GEF projects were changing, especially due to the break-up of the former Ministry of Environment and Forestry into two separate entities and the transfer of GEF FOLUR execution oversight from the Coordinating Ministry of Economic Affairs (CMEA) to the new Coordinating Ministry of Food Affairs (CMFA). This limited the availability of competent interview partners to some extent. Secondly, the large number of projects covered (eight) during a relatively short mission period of about 10 days

posed a challenge. The availability of solid documentation in the form of Terminal Evaluations (TE), Mid-term Reviews (MTR), Project Implementation Reports (PIR) and basic Project Documents, and the pro-active support by UNDP, FAO, and the FOLUR Project Management Unit (PMU) in organizing the field visit and linking the evaluation team with knowledgeable interview partners from other projects in Jakarta, were instrumental for the success of the mission. The CFI, WWF-Indonesia, and IFC teams equally contributed. The early stages of three projects, the FAO-implemented FSIP child project and the two standalone projects, limited comparisons with earlier and ongoing GEF programs to some extent.

1.2 Scope

Indonesia was selected for a case study due to the existence of child projects from GEF-6, GEF-7, and GEF-8 food systems programs as well as two standalone GEF projects with a food systems approach. Table 1 below shows the 8 projects in Indonesia included in this case study. The three projects of the Good Growth Partnership (GGP) program, part of the GEF-6 Integrated Approach Pilots (IAP), were global projects covering three countries each: Paraguay, Liberia, and Indonesia. As global initiatives, they were managed partly by central and regional implementing agency quarters and partly by the respective country offices of UNDP, WWF-US, and IFC. GGP projects were implemented between 2017 and 2022 and are now closed. The GEF-6 Coastal Fisheries Initiative (CFI) project on Ecosystem Approach to Fisheries Management has been under phased implementation since 2018, with WWF-US engagement (starting in 2021) following an earlier component executed by Conservation International (2018-2022). The project is currently ongoing and expected to close by December 2026.

The GEF-7 FOLUR project, implemented by UNDP, began effective operations in 2022 and is scheduled for completion in 2028 (six-year duration). The planned GEF-8 FSIP livestock project, to be implemented by FAO, is still in formulation phase, and the project proposal was not available for the purpose of this evaluation. Meanwhile, the ADB-implemented standalone project on aquaculture in Indonesia and Timor-Leste started operations effectively in April 2024. A standalone FAO project on crop diversity became effective in 2022; however, its first disbursement and inception workshop only occurred in 2024 due to prolonged restructuring and changes in nomenclature in the government executing institution.

Table 1. Overview of projects included in case study

GEF ID	Project Name	GEF Agency	FS Program	Project Status	Target Food System
9129	Eco-system Approach to Fisheries Management (EAFM) in Eastern Indonesia (Fisheries Management Area (FMA)- 715, 717 & 718)	WWF-US (plus CI)	CFI	Under implementation since 2018	Marine fish in coastal areas
9180	Reducing Deforestation from Commodity Production	UNDP / FAO	GGP	Completed	Palm oil
9182	Commodities-IAP: Generating Responsible Demand for Reduced-Deforestation Commodities	WWF-US	GGP	Completed	Palm oil
9696	Enabling Transactions - Market Shift to Deforestation Free Beef, Palm Oil, and Soy	World Bank	GGP	Completed	Palm oil
10867	Towards Sustainable and Conversion-Free Aquaculture in Indonesian Seas Large Marine Ecosystem (ISLME)	ADB	Standalone	CEO endorsement cleared	Shrimps and seaweed
10511	Crop Diversity Conservation for Sustainable Use in Indonesia	FAO	Standalone	Under implementation Since 2022	Crops with national and global importance for crop diversity (and their crop wild relatives)

GEF ID	Project Name	GEF Agency	FS Program	Project Status	Target Food System
10238	Strengthening Sustainability in Commodity and Food-Crop Value Chains, Land Restoration and Land Use Governance through Integrated Landscape Management for Multiple Benefits in Indonesia	UNDP and FAO	FOLUR	Under implementation since 2022	Palm oil, rice, cocoa and coffee
11229	Sustainable Livestock Production to Support Resilient Food Systems, Environment and Rural Livelihoods in Indonesia	FAO	FSIP	Under design (Project document submitted to GEF)	Livestock (cattle, other ruminants, poultry)

2. Findings

2.1 Design

2.1.1 Systems Thinking

All Indonesian food systems programs and projects—including the two standalone initiatives—apply a relatively strong and comprehensive food systems approach, albeit in slightly different ways. Their scope consistently covers multiple food systems dimensions, with explicit attention to environmental footprints. The **GGP program** was food systems-oriented from the outset, guided by a Theory of Change focused on key deforestation-linked commodity supply chains and incorporating production, demand, and finance aspects—an approach mirrored in its child projects across three countries, including Indonesia. The **FOLUR Indonesia project** similarly developed a strategic vision encompassing all key food systems dimensions across four globally traded commodities, (palm oil, rice, coffee and cocoa) aligned with the global FOLUR program's objectives. The **FSIP GEF-8 livestock project** reflects the food systems orientation of its parent programwell at this current formulation stage, while the **CFI Indonesia fisheries project** was also shaped by the broader vision of its global program. The way these programs and projects address the four core food systems dimensions—production; commodity value addition and finance; policies, enabling environments, and governance; and the demand side—is detailed in the next section and summarized in Table 2.[1] More details on each of the programs/projects are provided in Annex 5 (Project Synopsis).

All programs and projects address production aspects, though this dimension has been less prominent in GGP implementation compared to what is planned or has been done in the other initiatives (see Table 2). While the GGP Production project focused on policy and commodity value addition (Chapter 2.3: *Performance and Results*), the GGP Transactions project was unable to fulfill its intended and important role in indirectly supporting production (through private sector enterprise finance) due to the cancellation of its GEF funding in the absence of suitable client enterprises (Chapter 2.3: *Performance and Results*). In contrast, the other projects give strong attention to production, even though the CFI has so far focused more on policies and regulatory frameworks than direct support to fishing communities—aside from some training activities. Both the FOLUR and FSIP projects express high ambitions to work directly with farmers at the provincial level, although specific interventions at project sites are yet to be fully defined.

[1] Only the GGP projects are completed and several have not yet started. For the GGP and CFI projects, the reported coverage of food systems dimensions reflects achievements to some extent, while for others the analysis is mostly based on project design.

Commodity value addition, markets and finance have played—or are expected to play—a significant role in the CFI and FOLUR projects. This includes investments in commodity processing, value addition through better standards, higher prices or creative product transformation and partnerships with private sector companies. FOLUR also explicitly supports improved finance access for smallholders, specifically through partnerships with the Ministry for Coordinating Food Affairs and the Ministry of Agriculture, as well as through farmer capacity building. The CFI contributed to a Fund to support private sector finance for community fisheries investments These elements are also emphasized in the FSIP livestock project, the stand-alone FAO crop diversity project, and the ADB marine fisheries project. The GGP Transactions project was originally intended to cover this dimension through its GEF-financed component, which ultimately did not materialize (Chapter 2.3: *Performance and Results*).

Policy, enabling environment, and governance—including multi-stakeholder platforms and engagement across different administrative levels—have been central to all food systems programs and projects. Most include dedicated components to ensure attention to this dimension (Table 2). Once again, the GGP Transactions project likely could have contributed more in this area, particularly in developing an enabling finance environment, had it been fully implemented.

On the demand side, the WWF-led GGP Demand project—designed as a specialized intervention within the broader GGP—focused most intensively on consumer awareness and the promotion of sustainable products, particularly at the national level. The ADB marine aquaculture project (ISLME) also articulates strong ambitions in this area. In addition, the FOLUR and FSIP livestock projects, along with the standalone FAO crop diversity initiative, intend to contribute meaningfully to increasing consumer demand for deforestation-free, environmentally sustainable and GHG emission reducing products. However, plans in this area are generally described in less detail compared to other dimensions.

Table 2 – Indonesia food systems projects : components and coverage of broad food systems dimensions

Project / Implementat-ion perid	Components, target sites/companies and commodities	Coverage of broad FS dimensions			
		Production and ILM	Commod.. value-addition & finance	Policies, enabling environm.& governance	Consumer demand
GGP Production March 2017 – June 2022	**3 landscapes/districts** **Palm oil** Comp. 1 – Dialogue, action planning, policies and enforcement Comp. 2 – Farmer support systems Comp. 3 – Land use planning (incl. HCV/HCS) Comp. 4 – KM, and M&E				
GGP Demand April 2017 – Dec. 2021	**Private sector companies and consumers in Indonesia** **Palm oil** Comp. 1 – Mainstreaming demand for reduced deforestation palm oil with major buyers and traders				

Project / Implementat-ion perid	Components, target sites/companies and commodities	Coverage of broad FS dimensions			
	Comp. 2 – Strengthening enabling environment in demand markets Comp. 3 – Promoting reduced deforestation palm oil in major markets Comp. 4 – Advancing supply chain transparency, traceability and decision support tools				
GGP Transactions March 2017 – 2019 (plus co-finance period) (No suitable company found for GEF finance; IFC co-finance supported GGP Production)	**Private sector companies and smallholder farmers in Indonesia** **Palm oil** Comp. 1 – Support for commercial transactions Comp. 2 – Support to financial markets & institutions Comp. 3 – Support to public sector (finance alignment and incentives)	Co-finance only	Co-finance only	Co-finance only	
FOLUR 2022 – 2028 (6 years)	**5 landscapes/districts** **Palm oil, cocoa, coffee, rice** Comp. 1 – Enabling Value Chains and ILM Comp. 2 – Sustainable Crop Production and Value Chains Comp. 3 – Conservation and Restoration (incl. HCV/HCS) Comp. 4 – KM, Coordination and Collaboration, M&E				
FSIP n/a	**5 livestock prod. systems in 5 provinces** **Livestock (ruminants and poultry), incl. integr. crop/livestock production systems** Comp. 1 – Strengthening multi-sectoral food system governance from national to local levels Comp. 2 – Scaling of sustainable livestock production Comp. 3 – Enhancing delivery of market-based incentives for sustainable production and consumption (VC)				

Project / Implementat-ion perid	Components, target sites/companies and commodities	Coverage of broad FS dimensions			
	Comp. 4 – Data and Knowledge Management systems				
CFI WWF: May 2021 – Dec. 2026 CI: March 2018 – March 2022	**3 Fisheries management areas** **Marine fish** Comp. 1 – Enabling conditions (policy, regulations management) for ecosystem approach fisheries mngmt. (EAFM) Comp. 2 – Implementing EAFM tools to support EAFM Comp. 3 – Sustainably financing the protection of coastal ecosystems and EAFM activities Comp. 4 – KM, M&E for sustainable coastal fisheries				
FAO Crop Biodiversity Effective: 2022 First disburse-ment 2024	**Covering project sites in 3 provinces** **Various ag. crops** Comp. 1 – Enabling environment for conservation and use of globally important crop biodiversity Comp. 2 – Conservation and utilization of crops and their wild relatives for agriculture, food security and environment stability Comp. 3 – Development of market/non-market incentives and linkages for target crops (incl, demand) Comp. 4 – Strengthening knowledge management (incl. processing and recipe dev.)				
ADB Marine aquaculture (ISLME) n/a	**Six pilot sites in Timor-Leste, sites in Indonesia still to be determined through suitability mapping** **Shrimp and seaweed** Comp. 1 – National strategies for priority commodities (Indonesia and Timor-Leste) Comp. 2 – Shrimp feed and shrimp product connectivity (incl. VC) Comp. 3 – Amplification of seaweed aquaculture (Timor Leste) Comp. 4 – Improved market linkages (national and international) Comp. 5 – KM and Learning (IW, regional/global)				

Key: Darker shades of green indicate more intensive coverage, lighter green indicates less intensive coverage, white signifies areas not covered.

Dealing with food systems complexity

The various programs and projects have addressed the complexity of a comprehensive food systems approach in different ways, with implications for their outcomes. This includes variation in their emphasis on horizontal, landscape-level strategies versus vertical, commodity chain approaches, as well as differences in the intensity of engagement at the community level versus the policy level (district/regional and national). All projects make compromises, which become more evident when examining their performance in Chapter 2.3 and their efficiency in light of complexity in Chapter 2.5.

In terms of design, the **GEF-6 GGP program** attempted to separate key food systems dimensions and intervention areas—production and markets, financing, and consumer demand—and to integrate them at both country and global levels. However, this integration did not materialize effectively, and interactions among components remained minimal, as already noted in the 2022 GEF IEO Integrated Approach evaluation. [2]This also applied to the Indonesia projects (see later chapters). In contrast, the **GEF-7 FOLUR program** sought to integrate all critical food systems dimensions within each country project and, in Indonesia, included a broader range of commodities than GGP, which had focused solely on palm oil. Commodity selection in FOLUR was guided by relevance to deforestation and globally traded commodities in the targeted regions, resulting in a focus on four commodities across five widely dispersed provinces and districts. From the outset, the FOLUR Indonesia project faced challenges due to the socio-economic diversity, the range of targeted commodities, and the geographical spread of its five implementation sites. These challenges include determining the most effective approaches to cover this diversity within budgetary and management constraints, and managing the complexity of stakeholder engagement (FOLUR PIR 2024; see also later sections). The **GEF-8 FSIP livestock project**, as outlined in Indonesia's Concept Note, simplified its approach by focusing solely on a single commodity, that is livestock production—including ruminants such as cattle, goats and sheep, as well as poultry—while still aiming to apply a comprehensive food systems approach to the sector. Meanwhile, the ambitious goals of the **GEF-6 CFI program**—both in terms of its integrated food systems and ecosystems approach and its intent to link global and country-level CFI initiatives—met clear limitations during implementation with the executing Ministry that found it difficult to identify and execute the broad range of program intentions (see section 2.5)

2.1.2 Learning

The progression from GEF-6 (GGP), to GEF-7 (FOLUR), and now to GEF-8 (FSIP Livestock) in Indonesia reflects institutional continuity and an evolving understanding of how to design and implement food systems interventions. **However, while learning has occurred, it has often been partial and uneven, with room for more structured knowledge transfer across projects and GEF program phases.** Across GEF phases, learning has occurred mainly within agencies and institutional channels, particularly UNDP and FAO, which have played recurring implementation roles. However, opportunities to formally capture and apply learning—especially around governance coordination, local engagement, and the operational integration of food system dimensions—have not always been maximized.

Learning from GEF-6 (GGP) to GEF-7 (FOLUR). Based on interviews with FOLUR PMU and UNDP staff in Indonesia, the FOLUR project clearly builds on the achievements of the GGP program-particularly the GGP

[2] https://www.gefieo.org/evaluations/environmental-degradation

Production project—even though the FOLUR ProDoc includes no dedicated section on lessons learned. According to these sources, GGP lessons are being transferred both informally and institutionally, as UNDP served as the Implementing Agency (IA) for both projects. The lessons relate especially to the implementation of policy reforms, partnerships, and multi-stakeholder platforms. FOLUR also aims to scale GGP approaches, especially in overlapping areas and neighboring districts related to palm oil sustainability (ProDoc p. 61). One such area is the legalization of the National Action Plan on Sustainable Palm Oil (RAN-KSB), to which GGP significantly contributed. Early exchanges have taken place between FOLUR and WWF Indonesia, which led the GGP Demand project, though systematic knowledge sharing remains limited. As the GEF 2022 Integrated Approach Evaluation already observed, while FOLUR references GGP at the global level, it does not reflect sufficiently on GGP's coordination challenges—particularly in integrating supply and demand measures across governance levels. For example, in West Kalimantan, FOLUR has not yet drawn systematically on lessons from the adjacent GGP project in Sintang, partly due to delays in its own field-level activities. This could be useful, for instance, in FOLUR HCV studies and forest conservation baseline and targeted scenario analyses (TSA) to identify economically viable pathways for sustainable practices. The FOLUR project confirmed during the Evaluation mission that it would be initiating on-the-ground interventions in Sanggau District in West Kalimantan in 2025, building at that stage upon the lessons of the successful model established by the GEF-6 GGP production project in Sintang as well as another standalone GEF project in Sintang (not included in this evaluation) which established ecological corridors and fostered strong local ownership.

Learning from GEF-7 (FOLUR) to GEF-8 (FSIP Livestock). The design of the GEF-8 FSIP livestock project has benefitted from observations of early-stage implementation bottlenecks in FOLUR related to perceived weaknesses in consultations with provincial and district governments and line ministries during project design and early implementation. This resulted in limited early ownership and weak understanding of objectives at the sub-national and to some extent national levels. The FSIP livestock project aims to embed provincial and district perspectives more strongly from the outset using livestock as an entry point for engagement and to ensure continuity of institutional knowledge at sub-national and national levels, also considering bureaucractic turnover at these levels. This adjustment reflects a growing recognition of the importance of bottom-up design processes, something that was less present in GEF-6 and only partially addressed in GEF-7. It also signals a move toward more targeted and commodity focused interventions—livestock in this case—while maintaining a comprehensive food systems framework.

2.1.3 Gender and Social Inclusion

Gender and social inclusion analysis and consultations

Most of the reviewed projects conducted some form of gender and social inclusion analysis during the design stage, though the depth and methodology varied, and there is limited evidence of explicit consultations with women. The **GGP Production** project is notable for integrating gender assessments early in the design process, producing a comprehensive Program Gender Mainstreaming Strategy that informed child project implementation. Similarly, the **FOLUR** project included a dedicated gender assessment in its ProDoc and annexed a detailed Gender Action Plan, supported institutionally by a full-time gender and safeguards officer. The **CFI EAFM fisheries** project also ensured that gender analysis and sex-disaggregated indicators were embedded in the project framework from the start.

In contrast, the **GGP Demand** project initially lacked full gender integration during development even as the project developed entry points for addressing gender in each project component; gender considerations were introduced more systematically only after a gender mainstreaming and action plan was introduced during implementation. The **FAO-led Crop Biodiversity** project distinguished itself with a detailed gender analysis and a standalone action plan during the PPG phase, rooted in both field

observations and literature review. The FSIP livestock concept note, while more recent, builds on FAO's broader experience and includes clear gender commitments. Meanwhile, the **IFC Transactions** project's design included some gender-responsive language (e.g., gender-balanced training participation), but lacked a substantive analysis or consultation process, reflecting its limited community-level interface.

The **FAO Crop Biodiversity** and the **GEF-8 FSIP Livestock** projects provided clear evidence of consultations with women's groups during the design phase (through documents and evaluation interviews), as did the **ADB ISLME** project in its design document. The **GGP UNDP Production** project involved gender analysis and consultation with a gender-focused ministry (Ministry of Women and Child Protection). According to interviews, the project also engaged directly with women and women's groups during design at multiple levels and embedded gender responsive elements in the project document.

Women's roles in food systems and targeted activities

Across the reviewed projects, women's roles in food systems were acknowledged to varying degrees—ranging from integrated, targeted approaches in GGP Production, FOLUR, FSIP, and the FAO Crop Biodiversity project, to more limited or peripheral treatment in IFC Transactions. The **GGP Production** project acknowledged women's marginalization in palm oil value chains—particularly in formal ownership and decision-making—and planned corrective actions, such as inclusive farmer support systems and technical training. The **CFI EAFM fisheries** project recognized the importance of women's participation in fisheries and community-level monitoring, with specific activities such as alternative livelihood training planned for women fishers. **FOLUR** design documents emphasized the integration of women into agroforestry and social forestry efforts and promotion of gender-sensitive livelihood alternatives. The **FSIP livestock** project concept note clearly highlights women's multifaceted roles in livestock management and committed to equitable access to resources, workload balance, and leadership strengthening. The **FAO Crop Biodiversity** project gave substantial attention to women's contributions to seed conservation, home gardens, and food processing, identifying barriers in access to extension services and proposing support for women's groups and rural entrepreneurship. Conversely, projects like **GGP Demand** and **IFC Transactions** generally treated women's role in food systems as a more peripheral issue—relegated to participation counts or high-level ESG policy language, partly caused by their higher-level attention on food demand and financial institution support.

Gender mainstreaming strategies and consideration of power dynamics

Only a few projects—particularly GGP Production and FOLUR—applied structured, policy-aligned gender mainstreaming strategies, while most others gave limited attention to shifting gender roles or potential unintended consequences. GGP Production and **FOLUR** stand out for their structured, policy-aligned and mainstreamed approaches, with analytical clarity. GGP embedded gender in monitoring frameworks and coordinated its strategy with the Indonesia Ministry of Women and Child Protection, while FOLUR set targets for equal representation and committed to budgeted activities supporting women's participation and leadership. The FOLUR project's gender mainstreaming strategy is fully cognizant of differences between men and women in terms of needs, priorities, the division of labour and access to knowledge and resources. The **FAO FSIP Livestock** and **FAO Crop Biodiversity** projects emphasized inclusive access to resources, training, and financial services, with attention to avoiding excessive burdens on women. Notably, the FAO projects were among the few that recognized the risk of unintended consequences from shifting gender dynamics, such as reinforcing traditional roles or increasing unpaid work. Gender mainstreaming was largely absent in the **CFI EAFM fisheries** project design which did not develop a gender mainstreaming strategy, nor did it consider gender power dynamics within fishing communities. Indeed, despite broad commitments to equality, few projects explicitly addressed how shifting power relations—such as through women's increased agency or

leadership—might affect intra-household or community dynamics, or how potential backlash could be mitigated.

2.2 Relevance and Coherence

2.2.1 Project alignment with policies and needs

Across Indonesia, GEF food systems programmatic and standalone projects have demonstrated a strong alignment at design with country policy priorities and sectoral needs in agriculture, livestock, fisheries and the environment. The **GGP Production project** was rated *highly satisfactory* in terms of relevance (Terminal Evaluation). Its design and objectives aligned well with Indonesia's twin priorities of stabilizing rural livelihoods and reducing deforestation, particularly in the post-COVID context where sustainable palm oil production gained renewed attention. The project supported smallholders in adopting the Indonesian Standard for Palm Oil (ISPO) certification, directly reinforcing national marketing standards and environmental goals.[3] The **GGP Demand project** was assessed as *satisfactory* in relevance as its focus on raising awareness, promoting transparency, and creating demand for sustainably produced palm oil aligned well with national sectoral needs (TE). The project complemented existing government and private sector actions, adding value by fostering consumer engagement and strengthening supply chain accountability.

The **FOLUR Indonesia project** represents one of the strongest cases of policy alignment. Its design closely follows national strategies such as the 2020–2024 Medium-Term Development Plan, Indonesia's Biodiversity Strategy, and key commitments under the UNFCCC and Land Degradation Neutrality targets (FOLUR ProDoc). It also supports major national programs like the Agrarian Reform (TORA) and Social Forestry schemes, aiming to improve land governance and equitable access to services. FOLUR's integrated landscape management approach and its multi-commodity scope further reflect Indonesia's broader development goals. However, early implementation has highlighted the complexity of working across five dispersed provinces with diverse socio-economic conditions and commodity dynamics (as already noted in the previous part). In the case of the **FSIP livestock project** the alignment with national priorities is particularly strong. The project builds on Indonesia's National Medium-Term Development Plan (2025-2029), the Master Plan for Economic Development, the Agriculture Development Strategy (2015–2045), and the Food Law 18/2012. It addresses growing demand for protein and livestock products as well as resilient food systems, while also emphasizing environmental sustainability, genetic resource conservation, and reduction of GHG emissions. The design supports national goals of improving food systems governance and resilience and is well positioned within Indonesia's broader food sovereignty and sustainability agenda.

The standalone **ADB GEF-7 marine (ISLME) project** with focus on nature based solutions and ecosystem-based adaptation for shrimp and seaweed production is highly relevant to the national policy and strategic priorities of both Indonesia and Timor-Leste where it operates, including the RPJMN 2020-2024 in Indonesia and the National Strategic Development Plan (NSDP) 2011–2030 in Timor Leste, and especially in light of the countries' exposure to climate risks and commitments to inclusive and ecosystem-based adaptation. Many of the selected pilot sites are vulnerable to flooding, sea-level rise, and socio-economic marginalization—underscoring the geographic and social relevance of the intervention. The project is coherent with other national and international government and donor initiatives (such as by the World Bank and GCF) and includes clear provisions for coordination and synergy with government and development partners. The standalone **FAO GEF-7 Crop Biodiversity Project** is highly relevant to

[3] ISPO was launched by the Ministry of Agriculture in 2011, and strengthened through two Presidential Regulation, in 2020 (No. 44) and 2025 (No. 16).

Indonesia's policy priorities on agrobiodiversity, climate resilience, and food sovereignty. It aligns with outcomes from Indonesia's National Food Systems Dialogues, particularly on crop genetic diversity as a foundation for resilient food systems. The project addresses gaps in on-farm conservation, seed systems, and smallholder access to local crop varieties supporting Ministry of Agriculture goals. By promoting Indigenous knowledge and community-based conservation, the project also responds to national policy aims to elevate local innovation. It is coherent with ongoing efforts by government institutions and development partners and includes mechanisms to coordinate with programs such as IAARD's work on local seed systems and BRIN's research on genetic diversity and climate-smart agriculture.

While relevant and well aligned at design two projects became less relevant over time as they failed to deliver or adapt. The **GGP Transactions project** led by IFC, struggled to achieve its intended results. The Government of Indonesia expressed a preference for support directed toward smallholder oil palm producers and companies, in line with IFC plans. But ultimately the project failed to connect with the realities of Indonesia's smallholder palm oil landscape, processing companies and the financial sector. It didn't manage to identify credible client companies within the GGP target areas that met IFC environmental and financial requirements to serve smallholder producers, leading to the eventual reallocation of GEF funds (IFC TE). The **CFI fisheries project**, while based on a relevant and forward-looking concept—the Ecosystem Approach to Fisheries Management (EAFM)—had mixed results in terms of alignment. The Government of Indonesia formally endorsed EAFM in 2010, and the project's goals are consistent with national fisheries management strategies. Yet, according to the project's Midterm Review, implementation has not consistently followed through with activities that match policy frameworks or stakeholder needs. The gap between design and delivery has limited the realization of the project's full relevance.

Feedback from government stakeholders reinforces these assessments of strong GEF project alignment that addresses sector needs. A representative from the Ministry of Environment welcomed the emphasis on food systems as a concept that aligns well with national food policy and environmental commitments. The representative emphasized the importance of focus and thematic clarity in food systems projects, particularly given the breadth of the approach. GEF integrated food systems projects would benefit from clearer sub-themes and targets, along with measurable outcomes linked to these priorities. A representative from the **Ministry of Agriculture** expressed positive engagement with the FOLUR project, particularly on rice systems in upland areas. They noted the importance of improving access to high-yield varieties and addressing land tenure issues, while welcoming FOLUR's role in helping farmers qualify for government support services. The project's potential to link farmers to agricultural services and improve good agricultural practices (GAP) and good handling practices (GHP), including environmentally responsible pesticide use, was seen as a valuable contribution. An interview partner from the **Coordinating Ministry of Economic Affairs –** which has overseen FOLUR project execution until a recent government re-organization (see below) – emphasized the importance of coherence and integration across ministries. They noted that FOLUR's food systems model of an integrated landscape management combined with a multistakeholder approach encouraged the necessary learning between institutions: for example, allowing the Ministry of Agriculture to gain a better understanding of environmental issues, and the Ministry of Environment and Forestry (MoEF) to better appreciate the practical needs of farmers. Given Indonesia's limited national budget, they regarded GEF co-financing as a valuable resource to support long-term food systems transformation, especially in terms of bringing in the environmental and holistic perspective.

Several common themes emerge: strong policy alignment in concept, but persistent implementation gaps, and a continued need for smallholder inclusion, cross-sector coordination, and measurable outcomes. First, conceptual alignment with policy is consistently strong across all projects. Most designs

are well integrated with national strategies on sustainable agriculture, environmental conservation, and rural development. However, there are implementation gaps—particularly in projects like CFI and GGP Transactions—where activities either failed to materialize or did not fully match the needs on the ground. Second, smallholder inclusion remains a central concern for the Government. Projects that successfully target small producers (e.g. GGP Production, FOLUR, FSIP) receive stronger institutional backing. Third, stakeholders consistently emphasize the importance of coherence, cross-sectoral coordination, and measurable outcomes. Integrated approaches like FOLUR are valued for bringing ministries together, but their complexity also demands clearer operational focus and better tools for measuring impact. For this reason, the FOLUR project, for instance, pro-actively facilitates alignment between the CMFA and relevant line ministries.

2.2.2 Policy coherence and incentives alignment

Indonesia has established ambitious national policies to promote both agricultural production and food security, as well as environmental sustainability and climate resilience; however, despite much conceptual coherence, fragmentation and incoherence persist in practice. The country's agricultural policy emphasizes four key goals: self-sufficiency in strategic commodities (especially rice), affordability of food, dietary diversification, and improved competitiveness and farmer welfare. Environmental policies, on the other hand, include strong commitments to forest preservation, climate change mitigation, and sustainable commodity production, as seen in past various Presidential Instructions and national action plans on palm oil (e.g., RAN-KSB for sustainable palm oil). The GGP Production TE noted "conflicting laws and regulations" and a lack of integrated land-use planning as persistent barriers to coherent systemic change that would reconcile agricultural policy goals and environmental safeguards and protection. The FOLUR ProDoc further highlights this divide: while national commitments exist, mechanisms to implement them—such as harmonized incentives, planning tools, and cross-sector coordination—are reportedly underdeveloped. Policy gaps and weak alignment between environmental and agricultural stakeholders remain significant. During its interviews and field visits, this evaluation also encountered many mapping inconsistencies and regulatory overlap between agencies and levels of government, especially regarding forests and forested areas that continue to hinder sustainable Integrated Landscape Management (ILM).

The FOLUR project identified key policy challenges in an early analysis of government policies and commitments, including poor harmonization across sectors, weak integrated planning, limited cross-sectoral coordination, and a lack of incentives for implementing sustainable policies. A recent analysis lays the groundwork for improving coordination and planning through existing but underused multi-stakeholder forums, which the project will activate in its next phase. Relevant stakeholders have been mapped using an ILM Matrix, outlining their roles and contributions.

GEF projects highlight major gaps in vertical coherence of policies and implementation strategies between national and sub-national administrative entities. According to the FOLUR ProDoc, sub-national regulations often diverge from or fail to implement national standards. Despite the 2018 One Map Policy aiming to resolve overlapping land uses, coordination across administrative levels remains limited. This is echoed in stakeholder interviews: regional authorities lack capacity, tools, and incentives to enforce environmental safeguards or integrate landscape considerations into development planning. The FOLUR program explicitly addresses this through tools like policy integration scorecards and multi-stakeholder planning processes at multiple administrative levels.

Agricultural subsidies and the challenge of misaligned incentives require balanced interventions into integrated landscape planning, responsible input use and market based incentives. Indonesia's agricultural subsidy regime—fertilizer, seeds, credit, price support—has played a central role in food

policy, especially in support of smallholder farmers that cultivate less than 2 hectares, often rice farmers (FOLUR ProDoc). Fertilizer subsidies, in particular, have grown despite rising production costs, and credit is widely accessible at below-market rates. These instruments are designed to raise productivity and stabilize smallholder incomes. From an environmental perspective, these subsidies are potentially misaligned. If not conditioned on sustainability criteria, they can encourage overuse of environmentally damaging chemical inputs or indirectly incentivize expansion into forested areas (a concern that the GGP production TE also discussed). However, GEF interventions (notably in FOLUR) recognize the dual nature of intensification: if well-managed, it can reduce pressure on forests by meeting production targets on existing land. Yet if intensification is done without safeguards, it can also make commodity production more attractive and drive expansion into protected forests and other lands. This underscores the need for coherence between subsidy policies and land-use governance—a gap which GEF projects aim to address through integrated landscape management, jurisdictional planning, environmentally responsible agricultural input use and market-based incentives for sustainability.

The new Government's increasing focus on food sovereignty and security and institutional changes in the national government offer both opportunities and risks. The new government reemphasizes food sovereignty, resilience and diversity and it has launched a universal free nutritious meal program for school children. While the main focus of food sovereignty policy is on rice and maize, livestock is also interesting in this context as Indonesia is import dependent on animal-based protein, especially beef and milk. The recent creation of the **Coordinating Ministry of Food Affairs (CMFA)** after the Presidential elections in late 2024 marks a pivotal shift in Indonesia's governance of food systems. The CMFA is tasked with aligning food, agriculture, trade, and environmental agendas under a single institutional roof.[4] It now oversees initiatives like FOLUR, previously coordinated by the Coordinating Ministry of Economic Affairs (CMEA). This change, although still unfolding, is widely viewed as a step toward greater horizontal coherence across relevant food systems sub-sectors. However, risks remain. For instance, declarations by the new administration—such as plans to convert up to 20 million ha of forest into food and energy estates—have raised alarm among environmentalists and others (Monabay and Jakarta Post articles)[5]. While pitched as a means of achieving food sovereignty and security, such plans contradict global and national climate goals. Civil society and parliamentary voices instead advocate for "no deforestation" strategies, focused on improving yields through sustainable intensification and better support for farmers, approaches that are also taken by GEF programs and projects. The Ministry of National Development Planning/Bappenas as the main long-term planning Ministry in Indonesia continues to support low-carbon agriculture[6]. But some evaluation interview partners note internal contradictions within the new policy directions: a revived biofuel mandate, for example, may spur deforestation, even as the Government claims to prioritize environmental stewardship.

All major GEF food systems interventions in Indonesia have attempted to support coherence, with varying intensity and results: the **GGP Production** project established Multi-Stakeholder Platforms (MSPs) to align national and sub-national stakeholders on palm oil governance. It contributed to the RAN-KSB plan and supported ISPO certification uptake. The **FOLUR** project places policy coherence at its core:

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[4] The CMFA is supposed to coordinate the following ministries : Min. of Agriculture, Min. of Forestry, Min. of Marine Affairs and Fisheris, Min. of Trade and Industry, and the National Food Agency (the latter responsible for food security etc.). Please also note that the former Min. of Environment and Forestry, MoEF, was split into two ministries in this government reorganization, one of Environment, and another one of Forestry.

[5] https://news.mongabay.com/2025/01/indonesian-forestry-minister-proposes-20m-hectares-of-deforestation-for-crops/ ; www.thejakartapost.com/opinion/2025/01/15/facing-palm-oil-nonsense.html

[6] 2025–2045 National Long-Term Development Plan (RPJPN). Bappenas - Indonesia Ministry of National Development Planning

integrating HCV/HCS forest set-aside designation with ILM planning, stakeholder engagement, and value chain incentives. It also promotes jurisdictional planning to align national environmental goals with district-level food production plans. **CFI** similarly aimed to align fisheries policy (EAFM) with sustainable value chain incentives.

Across the policy contexts and projects, several themes emerge:

- **Conceptual alignment exists, but implementation lags**. Coherence in official strategies is undermined by regulatory fragmentation, weak capacity, and budgetary constraints at sub-national levels.
- **Misaligned subsidies and mandates** (e.g., biofuels and to a lesser extent inorganic fertilizers) risk undercutting sustainability. Without safeguards, they may promote land conversion or degrade ecosystems.
- **Jurisdictional ILM planning and MSPs**, as promoted by FOLUR and GGP, represent valuable tools to enhance coherence—but require continued investment in capacity and coordination.
- **Institutional changes like the creation of CMFA are promising** but must be supported by clear mandates and leadership, sufficient personnel, coherent planning tools, and robust safeguards.

2.2.3 Interaction with similar government or donor-funded activities

Across the GEF food systems portfolio in Indonesia, interaction of the GEF programs with other government and donor-funded initiatives has varied. FOLUR stands out for its strong emphasis on planned multi-stakeholder collaboration and alignment with donor efforts, although practical collaboration is still early-stage. **GGP** projects were mostly embedded within broader implementing partner activities but otherwise lacked clear links to other external programs. **CFI** has identified relevant actors but has struggled to translate this into meaningful synergy, although recent steps suggest improvement. **FSIP livestock** is too early for assessment but is expected to emphasize selective partnerships building on prior lessons. The following section provides additional details for each of the programs and projects.

The **GGP Program** and its Production, Demand, and Transactions projects were generally well integrated into the workplans, partnerships, and other initiatives of their implementing and field-executing agencies. For instance, the UNDP-led Production project worked closely with partners like WWF Indonesia and Conservation International (CI) in West Kalimantan and North Sumatra, embedding GEF-funded activities within broader ongoing efforts in Indonesia by WWF and CI, as well as UNDP itself. For instance, WWF-ID's GGP Production activities in Sintang District were well embedded in its long-term engagement in the District on Palm Oil and interactions with other interventions in the District.[7] Similarly, the WWF Demand project was embedded in broader and still ongoing efforts by WWF-ID to work comprehensively on the palm oil sector in Indonesia through Government and other projects, covering, production, demand and other aspects. However, the Terminal Evaluations of these projects did not detail coordination with parallel donor or government initiatives much, focusing instead on outcomes within each GGP component.

The **FOLUR Indonesia project**, led by UNDP and FAO, has made collaboration and coordination with other government, private sector and donor initiatives a central pillar of its strategy, particularly in planning. Its

[7] https://earthinnovation.org/uploads/2018/09/profiles_led/SJS_Profiles_ENG/Indonesia/Profile_SINTANG_Sukri_2020_ENG.pdf

ProDoc outlines an ambitious vision for alignment at national and sub-national levels, including partnerships with platforms such as FoKSBI, CSP, SCOPI, SRP, and international initiatives like the UNDP Green Commodities Programme and GIZ's jurisdictional approaches. The project also seeks alignment with Indonesia's Low Carbon Development Initiative and the Sustainable Palm Oil Initiative. FOLUR has established mechanisms for national-level coordination via its Project Board and aims (or already started) to create or reinforce provincial and district-level fora (multi-stakeholder platforms) to ensure coherence and collaboration with others. In terms of actual implementation, FOLUR collaboration is just beginning, such as by working with GIZ in Sanggau district, including joint scoping for an Action Plan for Sustainable Palm Oil, similar to the one in neighbouring Sintang district (covered by GGP Production). GIZ has further identified the SASCI (Sustainability and Value Added in Agricultural Supply Chains) project as a promising area for future partnership. It has also initiated dialogue with the Palm Oil Fund (BPDPKS, now BPDP) and Unilever, although the latter is not yet active in the same landscapes planned by FOLUR.

The **CFI Indonesia fisheries project**, led by WWF-US, includes stakeholder mapping and categorization at national and local levels in its design. However, its Mid-Term Review (2024) highlighted missed opportunities for stronger collaboration with similar MMAF programs (e.g. BerlKAN, Oceans) and NGOs (Rare, YKAN, KEHATI). While the PMU asserted that regular monthly coordination meetings were sufficient, the MTR noted weak use of potential synergies. But the project does maintain relationships with NGOs such as ATSEA, LAUTRA, BERIKAN, as well as BRIN, universities, and the MOE's GEF Focal Point. Coordination has improved somewhat through recent initiatives such as through CFI's Annual Reflection forum, which now invites staff from other projects to foster cross-learning.

The **FSIP livestock project** (GEF-8), currently at formulation stage, has not yet detailed specific collaboration mechanisms, though its alignment with national strategies and future coordination with the Ministry of Agriculture, Ministry of Forestry, Ministry of National Development Planning, the Indonesian Research and Innovation Agency (BRIN) and broader food system initiatives on livestock suggest much potential.

2.3 Performance and Results

2.3.1 Environmental and socio-economic results

This section presents the main findings, contexts and takeaways in terms of performance and results for four projects, the GGP Production and Demand projects that have been completed since 2022, and the ongoing FOLUR and CFI projects. The GGP Transaction project will be discussed in the section on Evolution of the PS engagement later in this chapter. The focus is on environmental and socio-economic results at policy, institutional and community levels (including GEB), challenges and factors that facilitated these results and main lessons learned by each project.

GGP Production project

The GGP Production Project in Indonesia performed well across several key indicators, with the Terminal Evaluation (TE) rating the project satisfactory in terms of effectiveness, efficiency, and overall outcomes. Despite challenges related to lengthy policy approval processes, implementation complexity, and the late delivery of some key activities, the project made tangible progress, especially in the areas of enabling policy frameworks and land use protection (HCV/HCS). Sustainable farmer support systems for oil palm production were tested in three districts.

GEBs were notably achieved through forest and peatland protection and emissions reduction. By project end, over 824,000 ha of HCV/HCS areas were set-aside in Indonesia, nearly reaching the target of 925,000

ha, with the most significant contribution being 651,234 ha of protected peatlands in Pelalawan District. The project reported over 100 million metric tons of CO_2 avoided, far exceeding its original target.

A central strength of the GGP project lay in its work to develop policies and platforms that support sustainable palm oil production and land management. Indonesia recorded the highest achievement rates among the three GGP countries for this component. Key results included:

- Establishment of a National Platform for Sustainable Palm Oil (FOKSB), transformed into the National Action Plan Implementation Team (NAP IT) under legal decrees from 2020, institutionalizing national coordination.
- Development of four sub-national multi-stakeholder platforms and three district-level fora, enabling localized dialogue and planning.
- Adoption of one national action plan for Sustainable Palm Oil (RAD-KSB) and three sub-national, regional action plans (for North Sumatra, West Kalimantan and Riau).
- Approval of key national and subnational policies, such as the MoA Decree on Community Plantation Development and the MoA Decree on Strengthening Extension Services for Smallholders.

Despite these successes, the TE points to challenges. Policy and platform development proved time- and resource-intensive, with underestimated costs, timelines and sustainability challenges. Shifts in national political priorities and a lack of systematic policy demand analysis or strategic communication also hindered faster adoption (Box 1). Multi-Stakeholder Platforms (MSPs) played a key role in aligning different actors, fostering coherent decision-making and reducing conflict but their institutional sustainability remained uncertain due to their reliance on project funding. The TE notes they were still "works in progress" at closure.

The Regional Action Plan on Sustainable Palm Oil Production 2018-23 implemented with GGP support, its monitoring in 2022/23 and the development of a follow-up plan for 2025-29 show progress and learning. Reaching an implementation rate of about 60 per cent in 2022/23, the Plan's progress on Corporate Social Responsibility and business legality was stronger than on coordination and economic empowerment, due to administrative restructuring and limited budget allocations. The new plan indicates among others a shift towards more regulatory clarity, smallholder inclusion and market-based goals (Annex 2).

Box 1: Blueprint for successful policy implementation

The GGP Production project underestimated and underbudgeted the steps, efforts, and timeframes required for policy development and implementation. Progress was further constrained by shifting national priorities, a slow policy approval process, and overly optimistic assumptions. Critical elements for successful policy formulation were missing or insufficiently addressed: there was no robust estimation of demand for the proposed policies, no strategic communications plan, and limited provision for advocacy or visible policy champions—at national or sub-national levels—to drive implementation, neutralize strong interests and counter other resistance. Multi-stakeholder platforms played an important role in the process, but trust—essential to open dialogue—was not adequately planned for. Stakeholders engage meaningfully only when common interests can be safely discussed.

Based on this experience, a blueprint for effective policy design and implementation emerged:

A. A win-win policy proposal, developed through a participatory process that leverages or responds to real demand;
B. Strategic communications to build and sustain momentum;
C. Targeted advocacy and stakeholder engagement across all levels;
D. Well-timed communications to support policy passage through political and bureaucratic systems;
E. Action plans linked to policies to guide implementation;
F. A visible, trusted policy champion to foster trust and facilitate decision-making;
G. Tailored capacity building and planning support to prepare stakeholders for implementation and enable structured dialogue.

Technical assistance for policy formulation and multi-stakeholder engagement proved essential to preparing leadership for constructive dialogue. GEF Implementing Agencies may benefit from partnering with organizations better equipped to support these dimensions.

Source: Terminal Evaluation GGP Production project, pages 5, 7 and 8

Farmer training, production and marketing support helped farmers increase their productivity in pilot projects, but with uncertain sustainability. While the project was seen by the TE as "heavy on policy and light on production" it still managed to train about 2,700 farmers in sustainable crop intensification techniques (through WWF-ID, CI and UNDP sub-contractors), with a reported 89% adoption rate. Practices included improved fertilizer use, water-saving methods, proper spacing, and effective pesticide application, contributing to higher productivity in districts like South Tapanuli (Riau province, Sumatra) and Sintang (West-Kalimantan). However, their sustainability after project completion without further support was uncertain. The project also promoted farmer organizations especially in view of Surat Tanda Daftar Budidaya (Cultivation Registration Letter) (STDB) certification for palm oil sales and thus improving their bargaining positions with palm oil buyers. These efforts were complemented by the Pelalawan district 'Farmer Support Strategy', which was aligned with the national action plan. While yield increases were reported, the TE notes that these were mostly anecdotal, and no agronomic baseline had been established to systematically measure gains. The absence of process and outcome indicators related to agricultural production and socio-economic benefits weakened the evidence base.

A major lesson of working with farmers was the importance of trust-building through agricultural production support at the community level to achieve environmental objectives. In fact, production components were critical in closing the trust gap between the project and local stakeholders. Many

farmers were skeptical of external initiatives related to forest protection. The project succeeded where it used locally respected technicians and emphasized production-related support over regulation.

The environmental impact of the project was particularly evident in its protection of High Conservation Value (HCV) and High Carbon Stock (HCS) areas. This was supported by improved regulations, mapping tools, and stakeholder platforms. However, the TE underlines that the time allocated to building political support and institutional platforms was insufficient. Awareness raising and consensus building took longer than expected, and sustainability of these arrangements post-project remains uncertain.

GGP Demand project

The GEF-Demand project in Indonesia focused primarily on palm oil, and aimed to mainstream demand for deforestation-free palm oil by fostering awareness and commitments among companies, consumers, and investors. It sought to increase the domestic supply and uptake of certified palm oil (Indonesian Standard for Palm Oil / Regional Standard for Palm Oil, ISPO/RSPO), generate consumer support through public campaigns, and build investor capacity to drive sustainability through Environmental, Social, and Governance (ESG) frameworks. The project concluded with a performance rated *Satisfactory* in both development objective and implementation progress. Although the project was not intended to directly deliver GEBs, its influence on awareness, accountability, and transparency within markets positioned it as a key enabling initiative.

The project achieved notable results particularly in corporate engagement and market tools, public awareness efforts and influencing investor behavior. One major accomplishment was the development of Sustainable Sourcing Guidelines, produced in collaboration with the Indonesian Business Council for Sustainable Development. By project end, nine companies had adopted the guidelines, marking a significant step toward mainstreaming sustainability in procurement. Another major success was the Palm Oil Buyers Scorecard, which rated over 130 global companies on sustainability and transparency. This tool helped pressure brands and retailers to strengthen deforestation-free commitments, with indirect benefits to Indonesian suppliers seeking access to more discerning markets. Public awareness efforts were concentrated in cities such as Jakarta and Medan. While overall recognition of palm oil's link to deforestation remained modest, the campaign helped raise awareness to nearly 50 percent of survey respondents. COVID-19 forced a shift toward digital outreach, which was successfully adapted through partnerships with media outlets like Kompas Radio and by linking campaigns to recognizable sustainable products such as RSPO-labeled cooking oil. The project also influenced investor behavior through tools like RESPOND, which benchmarked asset managers' ESG integration, including on palm oil. Regional knowledge-sharing platforms, particularly the ISEAL-led South–South Learning project, allowed Indonesia's strategies and innovations to inform broader efforts across Asia.

Transformation of the palm oil market remains unfinished, although a strong foundation has been established. Challenges persist around consumer demand and behavior change, as well as certification, traceability, and pricing. Although the project met many logframe performance targets, national and regional demand for deforestation-free palm oil is still limited, policy frameworks remain fragmented, and structural incentives and pricing favor conventional palm oil production practices. The project also faced clear limitations in outcome-level monitoring. While an outcome harvesting approach was applied, it lacked the scale to fully capture behavior change across important stakeholder groups, enterprises and consumers. Nonetheless, WWF-Indonesia showed adaptive capacity, adjusting strategies during the pandemic and realigning deliverables to the changing context. The project is considered to have established a strong foundation for continued progress under FOLUR and related programs.

The GGP Demand project showed that shifting market dynamics requires both technical tools and compelling narratives. Progress was supported by strong national ownership, adaptive project

management, and strategic engagement with both private sector and regional actors. The project's credibility benefited from its integration with global initiatives like Trase and RESPOND, which connected local efforts with international accountability frameworks. At the same time, several constraints limited impact. These included the short project duration, challenges in measuring behavior change, limited consumer awareness beyond urban centers, and weak visibility of sustainable products in mainstream retail. As commented by some interviewed external observers, the GGP project budget also was too low to seriously promote and facilitate intake of certified products into the palm oil market and ensure attractive premium prices for producers. There are enduring obstacles in Indonesia in reaching smallholder producers, whose participation in sustainable supply chains remains limited by certification barriers and traceability challenges. The project underscored that demand- and supply-side (production) efforts must go hand in hand, a linkage that was only achieved to a very limited extent between the GGP Demand and Production projects in Indonesia.

FOLUR project

While notable foundational work in FOLUR has been achieved, field implementation has yet to fully commence. Slower than expected implementation progress is, however, not expected to affect achievement of development objectives. As of the 2024 PIR, the FOLUR Indonesia project remains in the early phases of implementation, with the inception workshop held in August 2022 and the Project Management Unit (PMU) fully operational only by late 2023. The 2024 PIR rated overall implementation progress as *Moderately Unsatisfactory (MU)*, largely due to slow financial delivery and delays in executing field activities. Nonetheless, the *Development Objective* (DO) rating is *Moderately Satisfactory (MS)*, reflecting the considerable work done to set baselines, build partnerships, and complete technical assessments.[8] The GEB targets set for the project include the restoration of 20,000 ha of land, conservation of 46,900 ha of High Conservation Value (HCV) forest, and placing 1.474 million ha under sustainable management. So far, the potential area identified for improved management across four provinces totals just under 415,000 ha—revealing a substantial gap between aspirations and current progress.

Despite limited implementation on the ground, the project has made important strides with preparatory analytical work and in establishing a supportive policy and partnership environment. Stakeholder engagement is a strength that stands out for this component, as seen in the volume and breadth of participation across consultations, scorecard assessments, and cross-sector dialogues. Over 200 documents—including technical studies, meeting minutes, gender-disaggregated sign-in sheets, and spatial maps—serve as evidence of progress. However, these efforts have yet to translate into formal regulatory instruments or active landscape-level interventions, as much of the effort remains in preparatory and planning stages.

In this context, district-level spatial planning offers a critical entry point for environmental impact, especially for conserving HCV and HCS areas. The promotion of traceability systems and farmer registration are promising early wins, offering a platform to build credibility and scale interventions. The FOLUR project has completed key assessments, including HCV surveys and Targeted Scenario Analyses (TSA) as central planning tools for ILM[9], which are already influencing local and provincial planning

[8] According to a photo shared by the FOLUR team with the evaluation, the quality of GEF PIR was rated Satisfactory in all respects (completeness, balance, consistency, substantiveness, and clarity.

[9] FOLUR uses Targeted Scenario Analyses (TSA) to evaluate different land use and sustainable development scenarios and pathways by projecting the costs, benefits, and economic, environmental and social trade-offs of each scenario over 50 years. Key TSA aspects include multi-stakeholder dialogues and consultations

processes. ILM is also being mainstreamed into jurisdictions through the *Signals of Change (SoC)* scorecard, guided by UNDP's effective collaborative action approach. Sanggau District has been singled out for urgent attention, especially regarding the inclusion of Customary Forest areas in the updated spatial plan due in 2024 by leveraging Government Regulation No. 17/2017 which provides a legal mandate for integrated spatial planning.

At the community and smallholder farmer level, the project's most tangible achievement lies in the early rollout of traceability systems for estate crops to track palm oil, cocoa, coffee, and rice, working with the Ministry of Agriculture. A total of 23,712 smallholders have already received farm registration certificates (STDBs) through co-financing partners, covering nearly 50,000 ha—primarily in palm oil. The project has conducted initial gap analyses of traceability systems and grading practices, revealing the need for greater support in creating value-added products and ensuring commodity quality differentiation. Local actors supported by co-financing agencies (GIZ, Unilever) have implemented over 100 technical training sessions, with about 41% of participants being women, notably in Sanggau.

Early assessments indicate modest adoption of best management practices, and while GAP and GHP frameworks exist, they are currently weak on gender inclusion and agroforestry content. The project has also begun identifying pro-climate and socially inclusive livelihood alternatives, particularly in forest-dependent communities, including women-led households and communities suitable for eco-tourism or NTFP-based activities. Overall, the foundations for farmer support, sustainable practices, and income diversification are being laid, but outcomes remain largely at the planning, assessment, and early mobilization stages (see also Box 2 for the Evaluation Team's observations in Sanggau and Sintang districts, West Kalimantan).

Factors supporting and limiting progress. Supportive factors include the resilience and coordination capacity of the strengthened PMU, robust stakeholder engagement, and strategic co-financing from the private sector and development partners such as GIZ. Alignment with government regulations and leveraging existing policy momentum—such as spatial planning mandates and agricultural credit facilities—have also helped anchor the project within existing institutional frameworks. Limiting factors revolve primarily around slow fund disbursement and the complex procedural requirements (involving multi-partner design and mobilization processes as well as finalization of inter-agency agreements). The extensive planning, coordination, and assessment processes required during the early stages of implementation have contributed to slower-than-expected field activities. While these foundational steps were necessary to establish a robust implementation framework, they have also created procedural bottlenecks, resulting in delayed disbursement and limited tangible progress on the ground. Several stakeholders expressed concern that this prolonged preparation phase may reduce momentum and partner engagement.

The strategy going forward emphasizes transitioning from assessment to implementation. This involves finalizing baselines by mid-2024, accelerating rollout of on-the-ground activities in selected priority districts, and using the dialogue platforms to formalize regulatory and conservation instruments. The project also aims to consolidate farmer support systems, build tailored training content (especially on gender and agroforestry), and operationalize traceability and value chain initiatives with the help of public-private-community partnerships. The project expects to recruit executing partners/consultants for field work and other purposes by late 2025.

to reflect local priorities. TSA are used to formulate a Jurisdictional Integrated Landscape Management (ILM) Plan, with zoning, monitoring, and costed action plans. (FOLUR project ProDoc)

Box 2: Observations from the evaluation field visits in West-Kalimantan

As part of the evaluation, field visits were conducted to Sanggau and Sintang districts (regencies) in West Kalimantan—both significant areas for oil palm production and key engagement sites for GEF-supported initiatives (FOLUR and GGP respectively). Sanggau is one of Indonesia's largest palm oil-producing districts in Indonesia, while Sintang has emerged as a frontier area for oil palm production, but with strong long-term NGO and multi-stakeholder engagement (including GEF through GGP).

In **Sanggau**, agricultural productivity, palm oil price fluctuations, and food self-sufficiency dominated the local agenda, with limited attention to environmental sustainability. Awareness of FOLUR objectives among district officials and farmers was low at this early stage of the project, and landscape-scale planning efforts, such as ILM, were skeptically perceived, reportedly facing complex regulatory and institutional barriers. District officials and farmers prioritized practical needs—agricultural inputs, road access, and basic services—over broader conservation agendas. The visit highlighted that unless tangible local benefits materialize quickly, the perceived value of FOLUR risks remaining limited.

Sanggau District

Organizing oil palm farmers in Sintang District

In contrast, **Sintang** presented an encouraging example of systemic progress, gained over a period of continuous work. Building, among others, on sustained engagement through WFF Indonesia and the GGP Production project, the district successfully institutionalized sustainability through multi-stakeholder platforms and local regulations promoting sustainable palm oil and land management. Farmer organizations were increasingly organized around certification (STDB, ISPO) and cooperative strengthening, although challenges around pricing, land legality, and company partnerships persist. Stakeholders stressed that effective sustainability transitions must be rooted in practical support and address farmers' immediate needs, such as legal land status and better market conditions.

The two districts underscore the importance of early engagement, local relevance, and tangible incentives for farmers. Multi-stakeholder processes, if effectively supported and grounded in practical realities, can catalyze sustainable practices and policy innovation. However, projects like FOLUR must work hard to ensure visibility, local ownership, and clear benefit pathways in complex and production-oriented environments like Sanggau.

Source: Country Evaluation Team; based on detailed report in Annex 2

CFI project

While the 2024 PIR rated the project performance as largely *Satisfactory*, particularly in terms of enabling policy achievements and inclusive planning processes, the MTR painted a more sobering picture. The MTR judged most performance indicators as *unsatisfactory or moderately unsatisfactory*, especially in terms of tangible socio-economic and environmental outcomes. It concluded that the project's actual effectiveness and progress toward GEBs—particularly improved management of marine resources and behavioral changes in coastal fisheries—remain limited. Despite a more positive recent trajectory, with renewed engagement from MMAF and strengthened PMU leadership, key impact areas, particularly behavioral change and private sector engagement, remain weak and underdeveloped.

The project made some clear progress in strengthening Indonesia's policy and regulatory environment for fisheries management. The development and partial implementation of Fisheries Management Plans (FMPs) for FMAs 715, 717, and 718 (see map in Annex 4, A.3 for FMA location), along with regulatory efforts targeting destructive fishing, represent concrete outputs. The project also facilitated more inclusive planning processes by embedding gender and indigenous rights considerations in the finalized plans. Stakeholder consultations—particularly on the Destructive Fishing Regional Action Plan and Governor-level flying fish egg regulations—helped promote awareness and build legitimacy around new rules. These efforts, according to the PIR, were well received and began shaping more accountable governance frameworks, especially through improved central–local coordination and transparency. **However, the MTR was more skeptical about the depth and sustainability of these achievements.** It noted that attribution to national-level policy changes remained questionable, and that the project's reliance on outputs such as management plans or decrees had not yet translated into outcomes—especially improved environmental conditions or changes in resource use patterns. Furthermore, the MTR emphasized that local benefits from these plans were unclear, and policy coherence across agencies remained a challenge.

At the community and fisher level, the project emphasized empowerment, especially through the revival and support of *Sasi*—a traditional co-management and conservation system. Sasi areas were formally recognized in Kataloka, Menarbu, and Ohoirenan, and linked to women-led enterprises under a new *Sasi label* which seeks to brand sustainably harvested marine products, batik cloth made out of natural dye and promote value addition. These interventions fostered community ownership and alternative livelihoods, especially for women, and were among the project's most tangible socio-economic achievements. Training activities were widespread: over 550 fishers received technical training on fish handling, and more than 600 individuals—many of them women—received skills certifications.

Several factors contributed to the project's progress, while others significantly constrained performance. On the enabling side, embedding the PMU within MMAF and the appointment of a capable new manager led to improved alignment with national systems and enhanced institutional legitimacy. Coordination and communication also improved, with more open planning processes and the use of digital platforms such as WhatsApp helping to increase transparency and foster stronger local ownership. Additionally, the project's strong gender mainstreaming—particularly through the involvement of women in Sasi-related enterprises—strengthened social resilience and garnered broader community support.

The CFI project illustrates the complexity of integrating community-based marine conservation with national policy frameworks and private sector development. While policy development and participatory planning advanced steadily, these achievements have yet to catalyze broader behavioral or systemic change. A central challenge identified in the MTR was the persistent gap between increased awareness and actual behavioral change. While the project delivered extensive outreach and knowledge transfer, destructive fishing practices largely continued, and tangible shifts in governance behavior were

limited. Many of the benefits cited by beneficiaries were confined to improved knowledge or minor equipment support, with little evidence of lasting environmental stewardship. Field-level enforcement remained weak, as community enforcement teams were under-resourced and lacked sufficient support. This disconnect was compounded by the absence of a monitoring and evaluation system to assess behavioral adoption. Additionally, frequent leadership changes within MMAF introduced institutional instability and disrupted political engagement. The project's emphasis on regulatory frameworks and planning (component A) came at the expense of field-level implementation and feedback loops. Compounding these issues, the project lacked sufficient adaptive management, failing to revise strategies or apply behavioral science approaches that might have more effectively shifted local norms and practices.

Despite the project's slow start, recent signs of renewed commitment—especially from the MMAF, a revitalized PMU and revised project steering mechanisms—suggest that the project still has a window of opportunity to realize more of its ambitious goals.

2.3.2 Role of women

Early integration of gender in project design, as in GGP Production, led to stronger results, while adaptive approaches—like those in CFI—can still be effective, particularly when paired with livelihood support. The **GGP Production project** made the most systematic efforts to mainstream gender. Although women's direct roles in palm oil production are limited—typically to support tasks like herbicide spraying or nursery work—the project made notable strides in increasing women's participation and visibility. Nearly 39% of the farmers trained in technical activities were women, and training extended to household financial management, harvesting, fertilizing, and pesticide application. The project also promoted occupational health and safety for women, in terms of adhering to protective guidelines during pesticide use. Gender was institutionalized through national and subnational planning: the **NAP M&E framework integrated gender indicators**, and gender consultants were engaged to support policy alignment across ministries. Webinars and assessments further examined women's role in the palm oil sector (GGP Production TE). In contrast, the **GGP Demand project** struggled with gender integration and tangible results due to its late incorporation during implementation. Although the project introduced a gender mainstreaming and action plan in 2019, gender remained largely siloed. The topic was often perceived as a separate issue that could not be addressed further with the actors in the project context. Although some activities targeted women, the limited integration into broader strategies and absence of specific outcome indicators curtailed meaningful tracking of gender-related results (GGP Demand TE).

The TE of the **IFC Transactions project** did not report any specific contributions to gender equality, although significant achievements were reported in IFC co-financing activities. An early survey showed the marginalization of women in palm oil production, with fewer rights, decision-making powers and access to resources. Through proactive targeting and activities, women in the end accounted for 45% of farmers trained, increasingly participated in farmer groups associations (FGA) for RSPO certification, and were represented in the Boards of four FGAs. Activities also included pilot training for women on nutritious vegetables and cooking, risks in oil palm plantations, and reproductive health care in North Sumatra and Riau Province that were highly appreciated. [10]

Gender outcomes in the **CFI fisheries project** gained traction in the second half of implementation. Gender-sensitive training and tools were developed, facilitating greater participation of women in community monitoring and fisheries governance and gender results were incorporated more explicitly into M&E. Notably, the project organized **15 alternative livelihood training sessions for 312 women**

[10] IFC. 2021/22. The IPODS Story

fishers in 2023/24, focused on product processing, marketing, and value addition. The development of the *Sasi Label – already reported above* – offered the opportunity to significantly enhance women's economic roles and livelihoods in sustainable marine product marketing.

In **FOLUR**, gender integration is still at an early stage but shows promising direction. The project has identified over **500 women-led households** in priority areas and initiated gender-sensitive approaches in social forestry, eco-tourism, and processing-based livelihood alternatives. A comprehensive **gender and safeguards training program—organized with support from the global FOLUR project—**was conducted with 57 participants, including ministry officials and the full PMU team at both national and provincial levels. However, gaps remain: initial assessments of Good Agricultural Practices (GAP) issued by the government lacked gender-sensitivity, resilient farming or agroforestry guidance, highlighting areas needing further attention.

2.3.3 Evolution of private sector engagement

While the vision and ambition for private sector engagement have grown from GEF-6 to GEF-7 and GEF-8, translating that ambition into sustainable investment, behavior change, and measurable environmental outcomes remains a significant challenge. Future success depends on integrating push (regulations, incentives) and pull (market demand, reputational drivers) factors more effectively across public and private domains, including smallholder farmer groups.

The IFC-led **GGP Transactions project** aimed to contribute to re-engaging IFC with the Indonesian palm oil sector through finance mobilization for sustainable production, targeting small-scale companies and engaging financial institutions like BNI. However, the GEF-funded component (~USD 1 million) was canceled and funds reallocated after two years due to a lack of eligible clients at target locations (e.g., North Sumatra). Prospective clients did not meet IFC's due diligence requirements on environmental and social (E&S) standards or lacked interest and co-financing capacity.

Despite this, IFC used co-financed resources to support enabling conditions and palm oil farmer groups. It helped at least four farmer groups obtain RSPO certification, which improved quality and extraction rates. IFC also worked with BNI to launch a loan product, though uptake was very low (only USD 145,000 disbursed to 19 farmers, versus a target of USD 25 million) (Terminal Evaluation). Barriers included rigid eligibility rules, weak demand for certified products, and a lack of regulatory pressure on environmental risk integration in financial institutions. Indonesian financial institutions also showed little interest in factoring environmental risks into credit assessments. This stemmed from short investment horizons, lack of regulatory pressure, and limited sustainable finance options.

Main lessons from this project were that private sector engagement requires not only access to finance but also demand-side incentives, stronger regulatory frameworks for financial institutions and farmer groups, and flexible financial products tailored to smallholder realities. Without these, behavioral change remains elusive.

The **GGP Production project** successfully established national and subnational multistakeholder platforms (e.g., FoKSBI, district-level forums in Sintang), involving major companies like Wilmar, Musim Mas, and Unilever. These platforms fostered cooperation in HCV/HCS area delineation and land use zoning. Private sector-backed farmer support systems (e.g., ADM Capital, PT ANJ) were considered financially sustainable and helped independent smallholders adopt better practices to supply reduced deforestation palm oil domestically, through adhering to national and international standards (ISPO/RSPO). Successful private sector engagement requires aligning business interests with sustainability goals, embedding collaboration in formal local structures, and translating high-level platforms into tangible support for smallholders.

Sustained government commitment and dialogue are essential, but long-term success depends on platforms achieving financial self-reliance.

The **GGP Demand project** in Indonesia worked with private firms to change their palm oil sourcing behaviors via the Palm Oil Buyers Scorecard and Sustainable Sourcing Guidelines. These tools influenced behaviours to some extent and also helped to push for greater transparency and accountability among over 130 global and domestic companies. Project efforts, alongside bilateral dialogues with Indonesian manufacturers and retailers (e.g., Super Indo and IKEA restaurants via Hero Group), helped build momentum for sustainable palm oil sourcing in domestic markets. WWF also engaged financial actors through its RESPOND platform to improve ESG integration in investment decisions. Campaigns and corporate dialogues helped build awareness, but structural changes remained limited.

FOLUR significantly aims to expand the private sector engagement model. It has developed partnerships with Unilever, Mondelez, and SCOPI and is working on PPPs and Public Private Community Partnerships (PPCP) across palm oil, cocoa, and coffee sectors. A study on private sector engagement mapped out existing initiatives, which now inform intervention design. Unilever alone has committed EUR 15 million to regenerative agriculture training for 28,000 farmers. FOLUR's approach emphasizes systemic engagement—linking upstream (farmers) and downstream (buyers) actors, mobilizing blended finance, and fostering investment-ready value chains. However, most activity remains in the preparatory and coordination phase; measurable outcomes are yet to materialize.

The **CFI project** aimed to advance MSC certification[11] through Fisheries Improvement Plans (FIPs), including through strong private sector engagement and financing. While intentions were clear, engagement and investment from companies remained weak. CFI Mechanisms like the Blue Abadi Fund (implemented by Conservation International) and the World Bank Challenge Fund underperformed or were poorly integrated. Based on interviews and CFI project document reviews the evaluation did not find any indication about presence and activities of the Challenge Fund in Indonesia that may have been linked to the CFI project. Women-led groups in the CFI project showed significant initiatives for commercial marketing (e.g., Sasi labeling), but market linkages with companies were nascent. The MTR criticized missed opportunities to reform regulatory incentives and the project noted the need for better communication between communities and the private sector as a major constraint. The project indeed facilitated several MoUs between community groups and private actors, but tangible investment or linkages remained weak or are just about to emerge.

Summary observations and evolution of private sector engagement:

- **From vision to implementation:** GEF-6 projects like GGP and CFI laid the foundation for PS engagement, but results were mixed. GGP Production succeeded in building dialogue platforms, while the IFC Transactions and CFI struggled to translate finance or partnership goals into results.
- **Market and policy signals matter:** Weak demand for certified products and a lack of strong environmental regulation made it difficult to motivate companies to invest in higher standards.
- **Shift toward systems thinking:** GEF-7's FOLUR has shifted toward systemic partnerships, aligning commodity value chains with jurisdictional planning and aiming to mobilize private investment

[11] MSC certification refers to certification by the Marine Stewardship Council, an international non-profit organization that sets standards for sustainable fishing, by ensuring that fisheries leave enough fish in the ocean; minimize environmental impact on marine ecosystems; and are effectively managed, with clear, science-based rules and enforcement.

through coordinated platforms and studies. The enabling groundwork is robust, but results are early-stage.

- **GEB linkages still thin:** Across all programs, actual linkages between private sector engagement and measurable GEB outcomes (e.g., deforestation avoided, emissions reduced) and other outcomes remain limited.

2.4 Program Value Addition

All Indonesia child projects planned for close connections with their global coordination project(s) and child projects in other countries. CFI and FOLUR in particular are actively linking up with global coordination projects. From the outset, the GEF-6 GGP and CFI programs had clearly articulated ambitions to go beyond isolated project-level interventions. Both were designed to foster complementarity across projects and implementation partners, promote systemic change, and enable multi-level engagement—from local implementation to global learning. These ambitions were foundational to their design and reflected in the objectives and structures of their country projects/activities. Building on these early models, FOLUR and FSIP were conceived with even more comprehensive approaches. This is particularly visible in the FOLUR Indonesia ProDoc and FSIP livestock concept note, which strongly emphasize alignment with global platforms and multi-country collaboration mechanisms.

While **GGP's** programmatic design intended to enable additionality through interlinked interventions (production, demand, and finance), implementation in Indonesia fell short of these aspirations. The Terminal Evaluation of the GGP Production project found no clear evidence that the Indonesia child project was actively linked to global supply chains or international exchanges, despite being part of a three-country setup. Inter-country cooperation and engagement with global fora were largely absent during implementation, even though they may have occurred at headquarters level. Thus, while each project addressed important dimensions of the food system, the additionality expected from their integration was not realized in practice. Another core lesson from the GGP Demand project was the importance of adapting global program strategies more effectively to local country contexts at design.

In contrast, **FOLUR** in Indonesia was designed with strong programmatic additionality in mind. The project aims to engage in global Communities of Practice, learn from other FOLUR country experiences in Asia, and connect to international buyer networks and certification bodies. This exchange is expected to particularly enhance commodity traceability and policy alignment. Regular Zoom meetings are held with the FOLUR global project team. While most international learning is still in early stages due to the delayed start-up, the design provides a strong enabling framework for leveraging global knowledge and ensuring programmatic added value.

The **CFI** Indonesia project was also envisioned as the first GEF-supported effort in Indonesia to bring all EAFM dimensions (policy, tools, financing, and global knowledge exchange) together across a broad marine geography, rather than approach them in a piecemeal fashion. For instance, the CFI project in Indonesia is the first project to apply a comprehensive approach to address policy needs and tools (such as FIPs and MPAs), sustainable financing and knowledge sharing. In implementation, the project participated in quarterly meetings of the International Waters Learning Group, with all CFI project managers joining biannual global coordination sessions. These fora supported mutual learning, e.g., from Latin America (Ecuador, Peru) on market systems and Senegal on high-tech fish processing. The CFI project plans to proactively share best practices coming out of the Indonesia project with the global program and community.

Though still in its early stages, the **FSIP** livestock project is designed with global engagement and programmatic learning as key features. According to the FAO Concept Note, Indonesia plans to participate in the FSIP Global Platform and Asia-Pacific exchanges (with China, Bhutan, Solomon Islands), share experiences and lessons on sustainable livestock practices, and collaborate on joint evaluations, innovations, and policy development, including with OneCGIAR, ACIAR, and private sector actors. The project explicitly links its national objectives with regional and global systems transformation goals.

The case study team also found considerable interest from the Ministry of Agriculture in regional-level cooperation, particularly in rice production. However, any partnerships beyond Indonesia must involve the Ministry of Foreign Affairs, which can pose an administrative hurdle that has to be considered.

Summary lesson across programs. To fully realize the potential of programmatic approaches, cross-country learning works best when it is not only built into design, but knowledge management and cross-country exchanges are also adequately budgeted for, operationalized, incentivized and monitored during implementation.

2.5 Efficiency

The GGP projects demonstrated mixed levels of efficiency. The GGP Production project was hampered by excessive design complexity, unrealistic timelines, and limited resources compared to its ambitions. The TE highlights that stakeholders considered the project underbudgeted and overly ambitious, especially given the multiple outcomes and "moving parts" involved in landscape-level transformation. While project management at the national level was strong and adaptive, inefficiencies arose due to delayed field-level coordination and mismatched expectations between national and local actors. In contrast, the GGP Demand project was more efficient, earning a "Highly Satisfactory" rating in the TE. It was able to rapidly adapt and deliver against outputs despite COVID-19 delays, and also significantly exceeded co-financing targets (USD 130 million vs. USD 42 million planned). Execution was lean and effective, with innovative outputs like the Palm Oil Buyers Scorecard and sustainable sourcing guidelines.

Efficiency issues in terms of delays in FOLUR start-up have been significant, although not unexpected, given the complexity of recruitment of the PMU due to Indonesian government regulations and the complexity of the project and its implementation modalities. Although the project inception workshop occurred in August 2022, full staffing of the PMU only concluded in April 2024 and baseline assessments were done in mid-2024 (PIR 2024). The long start-up phase, especially of project preparation (Project Preparation Grant/PPG phase) and full project design, was also pointed out by CMEA, which noted that the project had been under preparation since 2017 but effectively started only in 2022. At least some of this timing was due to the distinct roles, functions and coordination requirements of the two GEF Agencies (UNDP and FAO) and, in particular, of the multiple ministries directly involved (CMEA, MoA, MoEF, BAPPENAS). While much has already been achieved by FOLUR (see Performance Chapter), thanks to the PMU's dedication and hard work, a significant portion of the National Project Manager's time and effort has been absorbed by coordination with partners and compliance with GEF agency requirements (PIR 2024).

The GEF objective of encouraging national ownership through the use of the National Implementation Modality (NIM) – in UNDP terminology – and the Operational Partners Implementation Modality (OPIM) – in FAO terminology – contributed to certain inefficiencies and delays. The use of NIM/OPIM was particularly problematic for FAO, which lacked institutional familiarity with it and operates under more stringent constraints than UNDP under this modality, especially for the recruitment of Consultants and Service Providers that all have to be carried out directly through the Executing Ministries following their procedures. FAO also has to coordinate workplans and budgets directly with technically large

ministries as MoA and MoEF, making execution slower and more cumbersome. According to FAO staff, limited decentralization within FAO itself further constrained delivery. In fact, cumulative project delivery remains under 12%, largely due to FAO-related disbursement delays (PIR 2024).

Efforts are underway in the PMU to explore alternative implementation modalities, including field-level execution by third parties which is expected to commence towards the end of 2025. There is also a need to expedite policy-related components, where CMEA and BAPPENAS have been asked to take stronger leadership. Despite these hurdles, the PMU has worked intensively to coordinate across five provinces, and the Project Board is expected to become more operationally effective going forward.

The CFI project also faced significant start-up delays, including a one-year lag in PMU establishment after approval and disconnects between CI and WWF-implemented components. A key cause of inefficiency was the exclusion of WWF-Indonesia as an executing partner, which removed important in-country technical capacity (MTR 2024). During implementation, the PMU lacked decision-making authority in its early years, contributing to mismanagement, alleged misuse of some funds (now addressed) and delays. Budget inefficiencies were noted, with too much spent on travel and not enough on staffing—especially at decentralized field sites. Although recent changes have empowered the PMU and diversified the Project Steering Committee (PSC), workload remains very high, with over 100 activities needing monitoring annually. The MTR called for more targeted technical assistance to site managers and greater local staffing (at least 20 personnel across HQ and field sites), as well as better feedback loops from the field to ensure adaptive management.

Government counterparts highlighted inherent coordination and administrative complexity within the Indonesian Government system as major sources of inefficiency. A CMEA representative emphasized the difficulty of engaging four ministries with unclear roles and slow adaptation processes. Frequent turnover of focal points also disrupted momentum. An MoA representative noted that while inter-ministerial coordination was possible, administrative burdens, such as forming standing committees and appointing responsible persons, were major obstacles. The GEF Operational Focal Point flagged the institutional transition from CMEA to CMFA as a critical challenge, mainly for the ongoing FOLUR project. According to interviewees, the new CMFA National Program Director (NPD) is, however, well experienced in GEF project guidance and management.

Across all projects, several common efficiency constraints emerge:

- **Ambitious designs** often misjudged the institutional capacity, timelines, and resource needs for delivery.
- **Multi-agency and multi-ministry coordination** proved complex, particularly where roles and incentives were not clearly aligned or adequately resourced.
- **The NIM approach** poses serious implementation barriers when unfamiliar to executing partners (notably for FAO).
- **Project startup delays** were especially acute in FOLUR and CFI, often linked to bureaucratic requirements for contracting, staffing, and AWPB approval.
- **Decentralized execution** remains limited, even though many interventions are at the district level.

Efficiency and effectiveness in addressing a complex food systems agenda

The GGP was ambitious in its intent to address multiple food systems dimensions—production, markets, finance, and demand—but struggled to implement them in an integrated manner across its three separate projects. There were several reasons for this: differing institutional mandates, timetables, metrics, and organizational structures made coordination difficult across the different implementing agencies (UNDP, WWF-US, IFC). Crucially, the absence of a shared Theory of Change or Logframe during project design resulted in fragmented implementation and limited synergies (GEF 2022 IEO Integrated Approach evaluation). To some extent, logistical and institutional challenges, including the regional dispersion of key international CP implementing agencies, further hindered joint implementation, fieldwork and cross-learning despite the involvement and oversight of Jakarta offices for each Implementing Agency involved in the relevant GGP CPs for Indonesia (GGP Production, Demand and Transactions). The lack of a dedicated coordination budget for travel or integration among the different GGP CPs meant that each component operated largely independently, undermining the GGP's systems-level ambitions.

In contrast to the GGP projects, FOLUR was designed as a single integrated project aiming to address the full spectrum of food systems—from production to governance and demand—under one umbrella. While this bundled approach allowed for better alignment with national systems, it also introduced considerable complexity, in design and early implementation. The project's early years have been marked by an extensive volume of assessments, surveys, and dialogues contributing to delays in transitioning to field level implementation. The PIR also notes that the heavy procedural load driven by requirements for the basic agreement between UNDP and FAO (which took some time to be signed) and for workplan agreements between FAO and Executing Government partners contributed to delays in the start of field work and delivery of early outcomes especially on forest restoration, HCV protection, and livelihood improvements in (sub-)components managed by FAO. To manage this and other complexities, the project selected 25 high-impact villages for concentrated investment. This strategic bundling aims to create demonstration effects in production, value addition, and traceability, which could then spill over to surrounding areas.

The CFI fisheries project faced a different set of complexity-related challenges rooted in internal project fragmentation and contextual difficulty. First, the project had two distinct results frameworks, managed by WWF and CI respectively, which were poorly aligned and connected (MTR 2024). Legal agreements with different agencies and separate timelines further complicated internal coherence. Moreover, the nature of the work—marine protected areas, customary rights, and fisheries governance—required deep engagement with diverse stakeholders and regulatory layers. However, a limited understanding among implementers at the Ministry of Marine Affairs and Fisheries of what "ecosystem approach to fisheries management" (EAFM) actually entails hindered initial progress and the project was used as a fund for all types of activities not directly related to its objectives. Moreover, the individuals implementing the project often had little connection to those who designed it, and lacked shared clarity on the project's full scope (MTR 2024). Insufficient focus on enabling community-level transformation further limited the project's ability to integrate food systems dimensions. Changes in the Project Management Unit in 2023/24 and more independent PMU decision-making helped to turn the project around, but with only 2 years to go until its completion. The Project Steering Committee (PSC) was also highlighted as a critical missing link in managing this complexity. WWF emphasized the need to diversify PSC membership to better reflect its range of activities and stakeholders and give new members voting rights in order to strengthen cross-sectoral collaboration.

Cross-Cutting Observations and Lessons

Across the three programs, several patterns emerge:

- **Design structure shapes integration capacity.** GGP's fragmentation across agencies limited integration, while FOLUR's bundled approach improved coherence but introduced management complexity. CFI suffered from siloed implementation tracks, initially weak understanding of the project by the executing ministry, and unclear project ownership.
- **Common frameworks and shared understanding are essential.** Projects with distinct results frameworks (GGP, CFI) lacked the shared logic needed to operate systemically.
- **Governance and decision-making structures matter.** Weak PSCs or lack of inclusive representation (as in CFI) constrained adaptive management. Clearer governance mechanisms could help navigate food systems complexity.
- **Trade-offs are inevitable.** Bundled designs (e.g. FOLUR) offer more integrated potential but risk slower implementation; split-component designs (e.g. GGP) are easier to manage but may not deliver systemic outcomes.
- Addressing food systems complexity requires not just whole-of-system design, but also fit-for-purpose implementation strategies, aligned stakeholder incentives, and institutional structures that promote collaboration and learning.

3. Summary of findings and emerging lessons

Lesson 1 – Balancing food sovereignty and environmental objectives: Navigating trade-offs

The Government of Indonesia's strong political drive for food sovereignty—emphasizing expanded rice, maize, and to some extent livestock and palm oil production—creates clear tensions with environmental sustainability and the preservation of traditional export crops like coffee and cocoa. GEF projects, particularly GGP Production and FOLUR, aim(ed) to reconcile these goals through sustainable intensification, agroecological practices, and traceability. However, national declarations to open up to 20 million hectares of forest for agriculture reveal persistent trade-offs and risks of inverse incentives (e.g., food self-sufficiency, palm oil for biofuels). GEF programming that navigates this political economy carefully—promoting win-wins while guarding against displacement effects is more likely to succeed. Supporting institutions like the new CMFA and aligning with spatial planning mandates can strengthen coherence, but require safeguards and clearer GHG mitigation strategies. Sustainable intensification—including via improved seeds and balanced inorganic fertilizer use—gains potential when backed by land governance reforms, market alignment, and well-enforced forest protection regulations.

Lesson 2 – Managing complexity: The tension between program ambition and operational focus

All major GEF food systems projects in Indonesia—GGP, FOLUR, and CFI—grappled with the inherent complexity of working across multiple commodities, scales, and administrative levels. FOLUR's broad commodity scope and geographic dispersion, while conceptually sound, created challenges in targeting, coordination, and early implementation. The CFI project struggled to move from policy and planning to actual fisher behavior change partly due to institutional silos and unclear ownership and priorities. Measurable behavioral changes in demand for deforestation-free palm oil also remained largely elusive under the GGP. Program designs often overestimated the feasibility of operationalizing transformation without first investing in adaptive structures, feedback mechanisms, and localized buy-in. The FOLUR experience in particular highlights the need for complexity-informed design: allowing space for bottom-

up prioritization, iterative adjustments, and differentiated engagement strategies. Simpler, commodity-focused models like FSIP may offer greater traction if coupled with strong governance and buy-in across national, provincial and district levels. Across cases, a key lesson is that transformational ambition is more likely to be achieved when matched by implementation realism, adaptive governance, and a willingness to depart from overly top-down, blueprint-style planning.

Lesson 3 – Clarifying GEF's role and maximizing programmatic value

The GEF has played a catalytic role in advancing integrated food systems thinking in Indonesia, particularly in areas such as sustainable palm oil, jurisdictional planning, and ecosystem-based fisheries—at a critical juncture in Indonesia's national policy development. Its comparative advantage, however, has varied by context and remains somewhat undefined. In the GGP Demand project, GEF support enabled WWF to elevate sustainability discourse into the private sector and consumer arenas. In Sintang district, the GGP Production project helped build sub-national platforms that informed national palm oil action plans. Yet the case also highlights that in the absence of strong IFI involvement—IFC being the only presence, with limited success—GEF's leverage depends heavily on robust co-financing, intra-governmental coordination, and alignment with development partners. Without these, effectiveness and sustainability are hard to ensure. While programmatic coherence has improved—FOLUR's alignment with RAN-KSB and TORA being one example—coordination across child projects and with non-GEF initiatives remains largely ad hoc. GEF's greatest value may lie in creating trusted platforms, fostering reform processes, and piloting approaches such as integrated land management and attractive STDB traceability models for farmers that others can later scale.

Lesson 4 – Implementation efficiency and institutional readiness

Nearly all projects suffered from protracted start-up phases due to complex implementation modalities (e.g., NIM/OPIM), administrative requirements, and coordination challenges across agencies. FOLUR faced delays in fund disbursement, consultant procurement, and translating analytical work into action. CFI struggled with institutional instability and gaps in adaptive management. These experiences highlight the importance of early establishment of empowered PMUs with adequate political backing (such as by National Program Directors and program Lead Agencies), diverse and well-mandated Project Steering Committees, and technical capacity to broker partnerships, navigate bureaucracy, and push field implementation. High transaction costs are endemic to multi-stakeholder food systems projects, but these can be mitigated through phased implementation, early field-level pilots, and flexible workplans. Stronger feedback loops between ground-level realities and national project planning (e.g., STDB rollout, Sanggau land use planning, CFI community success stories) can also accelerate implementation and foster relevance. GEF's challenge is to design processes that are both credible to national institutions and agile enough to adapt to field dynamics.

Lesson 5 – Engaging the private sector and addressing gender inclusively and early on

Private sector and gender integration varied widely across projects. In terms of private sector engagement, GGP Production and FOLUR offer promising models for aligning corporate incentives with sustainability, particularly through traceability, jurisdictional engagement, and public-private-community partnerships. However, IFC's GGP Transactions experience reveals the limits of finance-led approaches when private sector ESG uptake is weak, too narrowly targeted, and smallholder access is constrained. Similarly, private sector buy-in for fisheries sustainability in CFI remained minimal. Effective private sector engagement requires a mix of enabling policy signals, credible demand-side pressure, skilled

communication, and grassroots capacity-building—elements that are still being pieced together across projects. On gender, GGP Production and FOLUR invested in mainstreamed approaches from the outset, while the CFI project retrofitted gender activities mid-stream, but with encouraging results. Across the portfolio, structured gender analysis was common, but power dynamics and potential backlash from shifting gender norms were seldom addressed. Embedding both gender and private sector strategies into core design, implementation pathways and adaptive management—instead of treating them as peripheral or downstream add-ons—makes it more likely to avoid these shortcomings.

Annex 1: List of Interviewees

Organization	Sample size
Government (various Ministries)	5
Development Partners (national level)	2
GGP (Production, Demand and Transactions projects)	
Project Management and Execution	3
Implementing Agencies (UNDP, WWF-ID, IFC)	7
Sintang District Govmt. Implementing Agencies (GGP Production)	4
Beneficiaries and Frontline Workers (GGP Production)	2
FOLUR	
Project Management and Execution	6
Implementing Agencies (UNDP and FAO)	4
Sanggau District Govmt. Implementing Agencies	7
Beneficiaries and Frontline Workers	2
CFI	
Project Management and Execution	2
Implementing Agency: WWF-US	1
FSIP Livestock	
Implementing Agency: FAO Country Office	2
FAO Crop Biodiversity project	
Implementing Agency: FAO Country Office	1
Total	46

Annex 2: Project Sites Visited

Below are descriptions of project site visits conducted during a fieldwork mission from January 19 - 22, 2025.

Site Visit #1			
Site Name	*Sanggau District. Sami village (Bonti Sub-District), Smallholder oil palm plantation*	***Date of Site Visit***	*January 20, 2025*
Region	*Sanggau District, West-Kalimantan*	***Geo-Coordinates***	*0.4035, 110.5630 Sami village* *0.1938, 110.4587 Smallholder oil palm plantation*
GEF FS Project	*FOLUR project GEF 10238*		

Site Visit #2			
Site Name	*Sintang*	*Date of Site Visit*	*January 21, 2025*
Region	*Sintang District, West-Kalimantan*	*Geo-Coordinates*	*0.0728, 111.4952*
GEF FS Project	*GGP Production 9180*		

Sanggau District Field Visit Report

Introduction and context

Sanggau District is one of Indonesia's largest palm oil-producing areas, with palm oil production starting in 1981. It now has 42 large companies cultivating approximately 180,000 ha of land and an additional 180,000 ha farmed by smallholders. The region has over 733,000 ha of other land uses, mainly agriculture and forestry, and 500,000 ha of protected forests. The district has been at the center of expansion and

sustainability debates, particularly as oil palm cultivation has grown significantly over recent decades. The evaluation team visited several district offices and met with stakeholders involved in agriculture, livestock, environment, and regional development. The field mission included a site visit to Sami Village in Bonti Sub-District—one of FOLUR's planned five high priority villages in the District.

Findings from district government interviews

District-level stakeholders expressed strong concerns about agricultural productivity, low and fluctuating palm oil prices (ranging between 1,000 and 3,000 rupiah per kg of kernel[12]), limited traceability mechanisms, and the district's ongoing struggle to meet food self-sufficiency goals. Yield improvements in oil palm had reportedly risen from 9.5 to 13–14 tons/ha between 2019–2024, mainly pulled by larger plantations, and still lagging behind Malaysia's average of 24 tons/ha. Officials noted some support from the Government's Crude Palm Oil Supporting Fund (short CPO Fund) for replanting but highlighted that only 6,000 farmers had completed STDB (Surat Tanda Daftar Budidaya - smallholder registration) covering just 13,000 ha, mainly due to lack of agriculture funding. STDB is a cultivation registration document that helps identify who is growing what, where, and on how much land. While not a proof of ownership, it plays an important role in improving traceability, formalizing smallholder engagement in sustainable supply chains (such as ISPO and RSPO), and facilitating access to support programs. Livestock integration is also a district objective. Although Sanggau has 10,000 cattle, it requires about 50,000 to reach self-sufficiency in meat. One model farm, that was also visited by the evaluation team, integrated 25 cattle on 5 ha of oil palm land. Officials proposed that FOLUR help facilitate this integration and support the permitting process with the Ministry of Agriculture.

Environmental concerns were given comparatively lower priority in most agricultural and other government services, although the Environmental Services Bureau emphasized enforcement of no-burning regulations in oil palm area expansion. But awareness and engagement with the ongoing FOLUR project remained limited, especially regarding its environmental objectives. Key FOLUR activities such as the Targeting Scenario Analysis were conducted without clear involvement of local agencies, except for some data provision. Perceived benefits from FOLUR activities have yet to materialize at the district level. With regard to broader landscape planning and Integrated Landscape Management (ILM), interviews with BAPPERIDA and the Environmental Services Bureau revealed several coordination challenges. Advancing jurisdictional ILM may prove challenging due to complex and sometimes conflicting land use regulations, overlapping mandates among government agencies, and inconsistencies in land mapping that cannot easily be resolved at the district level. BAPPERIDA also noted the complexity of aligning district, provincial, and national frameworks.

FOLUR Project: Field Visit to Sami Village (Bonti-sub District)

In Sami Village, the FOLUR project builds on a prior KfW-funded initiative to protect a 133 ha High Conservation Value (HCV) forest area. This area is both culturally and ecologically significant, serving as a tribal heritage zone, source of spring water, and habitat for bird species. KfW had previously introduced mixed-use forest enrichment with durian and jackfruit trees. Despite this promising baseline, community awareness of FOLUR's broader food systems and environmental objectives remains low. Local stakeholders expressed interest in palm oil management training, access to quality seedlings and inputs, and road infrastructure to support tourism and access to the HCV area. A speedboat ambulance was also proposed due to limited health access. Several of these demands are clearly not in line with the project's ability to support.

[12] About 7 – 20 USD cents

Take-away messages from Sanggau

- **Limited local awareness of FOLUR**: District officials and communities in Sanggau have limited understanding of FOLUR's objectives.
- **Production priorities dominate**: Agriculture and livestock services emphasize production, palm oil pricing and food self-sufficiency, with limited attention to environmental protection and sustainability.
- **Jurisdictional ILM remains low-priority**: Due to regulatory complexity, limited capacity, and unresolved spatial data conflicts; with a large number of multiple-layer government organizations having jurisdictions related to lands and forests, enforcement and permits.
- **Community expectations are practical**: Farmers in Sami village primarily seek agricultural inputs, training, and infrastructure—not landscape-scale planning.
- **FOLUR must show clear benefits**: Officials emphasized that unless clear differences are visible between assisted and non-assisted villages, FOLUR's value could be questioned.

Maps of Sanggau district with forest and forested areas (various shades of green, left) and main crops grown

Sanggau town

Forested area in Sanggau

Smallholder Palm oil plantation in Sanggau with mixed livestock farming

Environmental analysis for a new palm oil plantation

Environment Department, Sanggau District, Meeting with the Secretarat

Sintang District Field Visit Report

Introduction and context

Sintang District lies to the east of Sanggau and is considered a frontier district for oil palm, where plantations began later (1992) but expanded rapidly from 2004. The first palm-oil intensification study was conducted in Sintang in 2015. The area now has approximately 200,400 ha of plantations and a strong civil society presence, with more than 40 NGOs active across sectors. Sintang has benefited from considerable donor and NGO engagement since 2012, especially through WWF-Indonesia (WWF-ID) which was supported by the GGP production project (9180).

The evaluation team participated in a one-day workshop on organizing smallholder oil palm farmers, hosted by the Rainbow Alliance, which brought together representatives from government, NGOs, and farmer organizations. Interviews with government officials and a prominent palm oil farmer were also conducted.

Achievements of the GGP production project (2018–2021)

Sintang was a key district for the Good Growth Partnership (GGP) production project, especially through the efforts of WWF-ID (sub-contracted by UNDP). The project focused on improving agricultural practices, institutional coordination, and strategic policymaking. In 2017, the Indonesian Sustainable Oil Palm Forum (FKSB) was formed in the district, contributing eventually to the National Action Plan on Sustainable Palm Oil, ratified under Presidential Instruction No. 6/2018.

Major GGP achievements in Sintang included:

- Development and implementation of the Sintang District Action Plan for Sustainable Palm Oil and Land Management (2018–2020). This plan has been annually reviewed for five years, with 50% achievement rates in 2022/23.
- Training for independent smallholders and capacity-building on sustainable practices.
- Mapping and land rights documentation for over 100 smallholders.
- Establishment of a multi-stakeholder task force (MSF) including local government, farmers, NGOs, and academics.

Important tasks of the MSF in Sintang are: (1) improving infrastructure in the District, (2) establishing and managing oil farmer groups, (3) awareness generation to environmental issues, including HCV/HCS areas; and (4) promoting ISPO mechanisms and developing partnerships with oil palm and other companies/ This MSF also facilitated two important district regulations:

- **Regulation No. 70/2023** on HCV/HCS conservation, including lake protection (which was one of the priorities of GGP in the district). Processes for this Regulation are advanced but not finalized); and
- **Regulation No. 104/2024** on multi-stakeholder land use and zoning cooperation.

WWF and partners also released an HCV/HCS baseline study in 2023 showing that 51.2% of the area has high conservation value, although the map has yet to be officially adopted.

Insights from farmer interviews

The workshop revealed significant momentum among smallholder organizations to professionalize oil palm farming and pursue STDB and ISPO certification. Two cooperatives have already been certified. Farmer Yoanes, interviewed during the workshop, expanded its oil palm farm from 2 to 8 ha since 2009

and emphasized the needs for good prices, road infrastructure, and legal land status (STDB). His multi-purpose farmer organization, formed in 2018 with WWF support, has 178 members. Its main purpose include the facilitation of loans and input delivery for members. His wife also works in the plantation, women usually are involved in weeding and gleaning of fallen oil palm seeds.

Despite much progress in Sintang on sustainable palm oil production, concerns remain regarding enforcement of sustainable practices, gaps in company-farmer partnerships (companies manage 8 ha vs. 2 ha for farmers), and the lack of a pricing premium for ISPO certification. While they appreciated GGP's facilitation of dialogue, farmers were cautious about whether long-term benefits would materialize in the absence of better price incentives for sustainability standards.

Take-away Messages from Sintang

- **Sintang demonstrates strong momentum**: The district is a clear example of how sustainability and governance can be advanced through coordinated efforts.
- **Multi-stakeholder platforms are working**: The MSF in Sintang functions effectively as a forum for planning, coordination, and policy innovation.
- **GGP had catalytic impact**: The project influenced both field-level practices and policy, and its legacy is institutionalized in the MSF.
- **Field-grounded strategies are key**: Stakeholders emphasized that effective policy must be built on practical realities, local needs, and sustained support. Or as stated by one interviewee: 'You cannot talk directly about deforestation with farmers; you have to offer them something first'.
- **Farmers are engaged and organized**: Farmer cooperatives are actively seeking certification and partnerships but need continued support on pricing, legality, and capacity.

Interview with head of palm oil farmer organization in Sintang

Workshop on organizing palm oil farmers in Sintang

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Part 3
Peru Country Case Study

Acronyms

ASL	Amazon Sustainable Landscapes
AIDESEP	Interethnic Association for the Development of the Peruvian Rainforest
CFI	Coastal Fisheries Initiative
CN	Concept Note
CONMANOPE	Consortium Mangroves of the Northwest of Peru
CUSAF	Assignments in Use for Agroforestry Systems
DGFFS	Directorate of Forestry and Wildlife Management
ECA Chayu Nain	Executor of the Administration Contract of the Chayu Nain Communal Reserve
EUDR	EU Deforestation Regulation
FAO	Food and Agriculture Organization
FOLUR	Food, Land Use, and Restoration
FPAI	Fisheries Performance Assessment Instrument
FSIP	Food Systems Integrated Program
GEF	Global Environment Facility
GGP	Good Growth Partnership
IADB	Inter-American Development Bank
IEO	Independent Evaluation Office
IFAD	International Fund for Agricultural Development
ILM	Integrated Landscape Management
IPLP	Indigenous People's Life Plan
MIDAGRI	Ministry of Agricultural Development and Irrigation
MINAM	Ministry of Environment
NIM	National Implementation Modality
ORDEPIAA	Regional Organization for the Defense and Development of Indigenous Peoples of Alto Amazonas
PRODOC	Project Document
PRODUCE	Ministry of Production
PROFONANPE	Fund for the Promotion of Natural Protected Areas of Peru
RFS	Resilient Food Systems
SERFOR	National Forestry and Wildlife Service
SIPAM	Sustainable Management of AgroBiodiversity and Vulnerable Ecosystems Recuperation in Peruvian Andean Regions Through GIAHS Approach
SNLMT	National Sanctuary Mangroves of Tumbes
TDP	Territorial Development Plan
TNC	The Nature Conservancy
UNICAs	Credit and Savings Unions (Uniones de Crédito y Ahorro)
UNDP	United Nations Development Programme
WWF	World Wildlife Fund
YLL	Yield Lab Opportunity Fund I

1. Introduction

This Peru case study is part of the Evaluation of Global Environment Facility (GEF) Food Systems Programs. This evaluation seeks to assess the quality of design and achievement of results of food systems programs in GEF-6, GEF-7, and GEF-8, as well as to evaluate how the GEF has adapted to changing contexts and incorporated lessons learned into the design of later programs. The global evaluation covers three GEF-6 programs (Resilient Food Systems [RFS], Coastal Fisheries Initiative [CFI], and Good Growth Partnership [GGP]), one GEF-7 program (Food, Land Use, and Restoration [FOLUR] Impact Program), and one GEF-8 program (Food Systems Integrated Program [FSIP]). The evaluation scope also includes 21 standalone country and regional projects focused on food systems from GEF-6 through GEF-8 that were identified by the GEF Independent Evaluation Office (IEO) using a keyword search.

Country case studies are a key component of the evaluation, intending to help:

- Gain a deeper understanding of the outcomes resulting from GEF food systems interventions and the explanatory factors for and sustainability of these changes;
- Understand how the GEF integrated programs' approach to food systems has evolved at the country level by assessing the similarities and differences between projects from each replenishment cycle and capturing links and interconnection; and
- Collect the perspectives of local communities affected by GEF interventions.

Peru was one of four case study countries selected purposively by the GEF IEO. Case study countries were selected based on having food systems program child projects from all three GEF replenishment cycles included in the scope of the evaluation. Other factors considered include maturity of projects and variation across regions, GEF Agencies, and sectors targeted through FSIP.

1.1 Methodology

This Peru case study used a systems thinking approach that was guided by the global evaluation's theoretical framework for understanding food systems that integrates GEF concepts with relevant literature to identify the drivers, actors, parts, and outcomes of a given system. The case study sought to answer thirteen overarching evaluation questions pertaining to design, relevance and coherence, performance and results, value addition, and efficiency of GEF food systems programming. Questions on performance and results were only relevant for the one closed project.

The case study used mixed methods to extract robust and credible findings, including desk reviews of project and program documents, virtual and in-person interviews, and direct observation through site visits. The case study team conducted a stakeholder mapping exercise to develop an initial list of key informants, then used a snowballing approach to identify additional key informants through interviews with representatives of the national, regional, and local government of Peru, GEF Agencies, private sector actors, producers' organizations, as well as NGO and academia (see Annex 1). The case study team visited sites in Tumbes and Piura regions associated with the CFI project (GEF ID 9124), including the National Sanctuary Mangroves of Tumbes and the Estuario de Virrilá (see Annex 2 for geographic coordinates).

Key limitations faced during the study included a high rate of staff turnover within government institutions, such as the Ministry of Environment (MINAM) and the Regional Governments of Piura and Tumbes, and gaps in individual memory and knowledge of available interviewees. This was especially applicable to the CFI project, which was closed for over two years at the time of conducting this case study. To mitigate this limitation, the evaluation team interviewed the original project staff, including

those who had moved to other parts of the government, rather than those individuals who currently occupy relevant positions in the regional and local governments. Staff turnover at UNDP also impacted the FOLUR project (GEF ID 10307), so the evaluation team conducted two GEF Agency interviews, one with the technical advisor who accompanied the design process, and one with the programme officer who is now involved in implementation. Another limitation was the delayed start to implementation of FOLUR, which prevented the realization of a second site visit to collect the perspectives of additional project-affected people.

1.2 Scope

Peru was selected for a case study due to the existence of child projects from GEF-6, GEF-7, and GEF-8 food systems programs, as well as a standalone food systems project. The table below shows the four projects in Peru included in this case study and is followed by brief project descriptions.

Table 1.1. Overview of projects included in case study

GEF ID	Project Name	GEF Agency	FS Program	Project Status	Target Food System	Target Environmental Impact
9124	Coastal Fisheries Initiative- Latin America	UNDP	CFI	Closed	Artisanal fisheries (black mussel, crab)	Marine-coastal biodiversity loss
10307	Deforestation Free Commodity Supply Chains in the Peruvian Amazon	UNDP	FOLUR	Active	Cocoa and coffee production landscapes	Commodity production-driven deforestation
11221	Regenerative livestock farming to promote sustainable landscapes	FAO	FSIP	Concept	Livestock	Ecosystem degradation and loss of land productivity
11066	Yield Lab Opportunity Fund I: Accelerating technology and local innovation for sustainable and decarbonized food systems in LAC*	IADB	Standalone	Active	Agritech for sustainable food production	Carbon-intensive agriculture

**Regional project portfolio includes: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Panama, Paraguay, Peru, and Uruguay.*

Other GEF projects relevant to food systems from GEF-6 through GEF-8 were mentioned by key informants during data collection, but they were not included in the scope of this case study. These include child projects under the first and second phases of the Amazon Sustainable Landscapes (ASL) Program (GEF ID 9387 and GEF ID 10248), as well as standalone projects focused on preserving traditional agricultural systems (GEF ID 9092) and sustainable livestock (GEF ID 10541).

Table 1.2. Brief project descriptions

Project	Objective	Components
CFI	To demonstrate holistic ecosystem-based management and improved governance in southeast Pacific coastal fisheries	1. Increase and strengthen the capacities of key actors for improved governance of coastal fisheries with an inclusive, poverty reduction and gender sensitive approach; 2. Test methods and tools for marine and coastal spatial planning with an ecosystem-based approach to disaster risk reduction; 3. Knowledge management (KM) and monitoring and evaluation (M&E).
FOLUR	To introduce sustainable commodity production models	1. Development of integrated landscape management (ILM) systems;

	to reduce deforestation and land degradation caused by the ongoing increasing unsustainable production of agricultural commodities	2. Promotion of sustainable deforestation-free commodities and responsible value chains; 3. Reducing biodiversity loss and restoring ecosystems, HVCF and natural habitats; and 4. Coordination, M&E and KM
FSIP	To transform and enhance the resilience of food systems in productive landscapes vulnerable to biodiversity loss and climate change	1. Strengthened enabling environment to catalyze food systems transformation at national and subnational levels; 2. Improved and increased financing deployed in support of food system transformation; 3. Environmental benefits leveraged through sustainable management of food systems; 4. Knowledge, innovation, M&E and coordination promoted
Standalone	To support a transition to decarbonized and sustainable food systems through the acceleration and upscaling of catalyst tech-based innovation as enablers to achieve climate change mitigation, adaptation, and restoration	1. Increased private finance for investment in tech-based food systems innovation for decarbonization and inclusive, sustainable development; 2. Strengthening of the innovation ecosystem as an accelerator, support and leverage of tech-based innovations for sustainable and resilient food systems; 3. Enhanced adoption and scaleup of tech-based innovation available supporting resilience, adaptation and less environmentally harmful models in agriculture and food systems in LAC as a result of the Yield Lab Opportunity Fund I investments; 4. Increased number of people benefiting directly from climate smart innovation in agriculture and food systems; 5. Project M&E.

2. Findings

2.1 Design

2.1.1 Systems Thinking

GEF food systems interventions in Peru primarily address the production element of the value chain, while engaging with other elements to a much lesser extent. Each project pilots improved techniques in production landscapes/seascapes and strengthens natural resource governance through capacity building (i.e., knowledge element), coordination, and policy support at national, regional, and local levels. CFI, for example, sought to foster sustainable production through capacity building for improved governance of crab and black mussel fisheries and black mussel repopulation in the National Sanctuary Mangroves of Tumbes (SNLMT). CFI was also the only project with an explicit focus on the access to natural resources core system element, which was addressed by strengthening management committees for protected areas. Although not in the original project design, CFI introduced pandemic response activities that sought to address socioeconomic challenges created by COVID-19, including the installation of a small processing plant for crab and shrimp (extracted mostly from the SNLMT and its buffer zone) in Tumbes. None of the projects focus on the aggregation, distribution, consumption, nutrition, or health value chain elements. In CFI, the species selected (crab and black mussels) are not used for local consumption or nutrition, but rather are delicacies consumed primarily outside the project area.

GEF-7 and GEF-8 projects take more of a value chain approach, relying on partnerships to connect to other elements. FOLUR and FSIP have a strong focus on governance, capacity, and sustainable

management of production landscapes for cocoa and coffee and regenerative livestock, respectively, but they go beyond CFI to include activities focused on improving market access for smallholder producers. In FOLUR, this entails plans to promote the commitment of buyers—who will take on other parts of the food system (e.g., processing, transportation)—to support producers in adopting good practices. Though not part of the formal project design, FOLUR is promoting compliance with the European Union Deforestation Regulation (EUDR), which is expected to help producers access EU markets (see Relevance and Coherence). FSIP design is still under development but is expected to take a similar approach to enhancing access to finance and market participation for small regenerative livestock producers.

The standalone project, The Yield Lab Opportunity Fund I (YLL), has a regional agritech investment focus that could be applied to multiple elements of the value chain, although supporting production-oriented companies is a core competency of the executing entity, The Yield Lab Latam. The project so far has selected one production-oriented company to support in Peru.

Project designs identify and target multiple root causes and barriers in target food systems, but CFI's experience demonstrates how a lack of integration and attention to policy barriers can undermine results. The CFI project aimed to tackle two major challenges: overfishing and resource depletion in small-scale fisheries, and conflicts among coastal and marine resource users. The project identified capacity, coordination, and behavior barriers, as well as challenges related to open access policies and unclear or overlapping jurisdiction of marine and coastal zones. The latter challenges were not addressed, although the project did strengthen enforcement of existing restricted access policies in the protected areas targeted by project interventions (see Performance and Results). The SNLMT extends to the border with Ecuador with no buffer zone, which makes it a common entry point for illegally extracted black mussels from Ecuador and illegal extraction by Ecuadorian fishers. The volume of the product from Ecuador often crowds out the local product in the national market, forcing extractors in Tumbes to engage primarily with regional markets. Despite being a binational project, there was no cross-boundary exchange of learning or joint activities to address the impact of illegal fishing in Ecuador on Peruvian fisheries.

The CFI project design sought to deliver GEBs by protecting biodiversity and over-exploited fishery resources but missed the chance to integrate components for mutual reinforcement. Instead, the project supported biodiversity conservation through marine spatial planning in Piura and sustainable fisheries management in Tumbes, without coordination or knowledge sharing between the two regions. Although not part of the original design, adaptive management during COVID-19 introduced financial support through credit and savings unions (UNICAs), which helped to address the lack of income during the closed season, which is a root cause of illegal fishing (see Performance and Results).

While FOLUR and FSIP intend to take an integrated approach to address environmental impacts, root causes, and barriers, doing so is proving challenging. The FOLUR PRODOC includes detailed analysis of how structural/root, underlying, and immediate causes impact the promotion of deforestation-free commodities in landscapes experiencing significant deforestation-driven CO_2 emissions, wildlife habitat loss and fragmentation due to expanding commodity production. Approximately 80 project interventions aim to collectively address these challenges from multiple angles, including by strengthening local and regional governance, increasing access to finance for regional governments and smallholder producers, encouraging adoption of climate-smart agriculture and conservation/restoration practices to reduce biodiversity loss, and fostering new relationships between smallholder producers and private commodity buyers. But stakeholders believe that the large number of interventions, along with a lack of clarity around the roles and responsibilities of some different stakeholders and the sequencing of interventions, will complicate implementation. This lack of clarity is exacerbated by the withdrawal of FAO and IFAD as implementing agencies in December 2023 (see Efficiency), which prompted revisions of the PRODOC and budget to transfer all responsibility to UNDP. Some actors indicated that the revisions to the PRODOC

made it harder to comprehend, with one stakeholder referring to the revised PRODOC as a "Frankenstein" document that is proving overly complicated to understand and implement, while others believe that the revisions have improved the document by making the roles of different actors clearer, compared to when there were other agencies involved too.

The FSIP child project aims to address ecosystem degradation, loss of land productivity, and GHG emissions resulting from livestock production-induced land use change through the introduction of regenerative production practices. The theory of change presented in the Concept Note (CN) offers a detailed list of drivers, barriers, and environmental impacts from the target food system, with some mapping between the barriers and expected project outcomes. The results framework presented in the CN and interviews with government and GEF Agency stakeholders suggest that the project will aim to take a similar approach to FOLUR in terms of addressing these challenges from multiple angles. Given that the FSIP project is still under design, it is too early to assess whether the components will be designed in an integrated manner.

Projects consistently identify and seek to deliver benefits to multiple actors across administrative levels, but unclear design and interministerial tensions have made more meaningful collaboration difficult, especially at the national level. All three projects involve a range of national and sub-national government institutions, smallholder producers and producers' organizations, and relevant private sector actors. MINAM and GEF Agencies have played the most substantial role in project design and implementation so far. Since GEF-6, MINAM has increasingly taken ownership of GEF projects in Peru,[1] leading to both benefits and challenges. Political support from MINAM leadership has allowed staff to dedicate significant time and resources to project design and implementation. Coordination with other national government actors has been challenging, including the Ministry of Production (PRODUCE) and the Ministry of Agricultural Development and Irrigation (MIDAGRI), and their active participation in the design process has been perceived as limited. One interviewee explained, for example, that their ministry was only consulted once the project was nearly fully designed. There has also been confusion about MINAM's leadership in food systems projects that appear to be focused on agricultural commodities and livestock, which are typically the purview of MIDAGRI. Some key informants from MINAM and MIDAGRI explained that despite their initial confusion, MINAM's role made sense once they understood the environmental objectives of the projects, while other national government informants noted that they feel excluded from GEF support, as all funds are channeled through MINAM.

MINAM has effectively engaged with regional and local government actors, who are active in regions where MINAM itself is not present. It is also easier for MINAM to work with regional actors because of the emphasis on production activities in the child projects. While regional and local governments are closely involved in production activities, national actors like PRODUCE, are typically involved in later stages of the value chain.

Further opportunities to engage multiple stakeholders, especially on the local and regional level, arise through strengthening and facilitating multi-actor spaces such as mesas técnicas[2] and management committees, which are considered in all three child projects. For example, CFI has strengthened the mesa técnica of benthonic resources in Tumbes, which led to a collaboration between a private research company, a local university, and a fishermen's consortium on reproduction and repopulation of black mussels in the SNLMT (see Performance and Results).

2.1.2 Learning

GEF food systems projects in Peru focus on different value chains and regions of the country, with limited learning among them, but projects have built on other GEF interventions in the country. Projects have focused on different value chains, including fisheries for CFI, cocoa and coffee for FOLUR, and

livestock for FSIP. This has also meant that different actors from MINAM and MIDAGRI are engaged for FOLUR and FSIP. The projects have also targeted different regions of the country. One area—Piura—is involved in both CFI and FSIP, but the target food systems were different, and the CFI did not conduct any direct food systems work in Piura (focusing instead on protected areas). Lessons from the CFI project have informed UNDP's efforts to scale sustainable fisheries governance in Peru and Chile through the Humboldt II project (GEF ID 9592).

Although not included in the scope of this evaluation, the GEF-6 Sustainable Productive Landscapes (SPL) project (GEF ID 9387) and Sustainable Management of Agro-Biodiversity and Vulnerable Ecosystems Recuperation in Peruvian Andean Regions Through Globally Important Agricultural Heritage Systems Approach (SIPAM) project (GEF ID 9092) have provided key lessons for FOLUR and FSIP, respectively. Multiple stakeholders referenced SPL as a strong predecessor for FOLUR, which is expected to use similar financial instruments as those developed under SPL to support sustainable production and other activities along the cocoa and coffee value chains. Key informants also noted that MINAM has learned how to more effectively engage in the cocoa value chain and work with relevant actors, especially producer organizations, through SPL. Stakeholders also referenced learning related to project governance from SPL (e.g., the importance of involving a range of actors in design) as a benefit for the FOLUR project. One key difference between the projects is that UNDP was responsible not only for the administrative aspects of SPL, but also for the technical aspects, and was therefore considered a UNDP project. Learning from this, the FOLUR project is using the National Implementation Modality (NIM), which ensures greater ownership by MINAM. SIPAM has strengthened the capacity of MINAM and other relevant actors (i.e., the Fund for the Promotion of Natural Protected Areas of Peru [PROFONANPE] which may be closely involved in FSIP implementation). Key learnings include effective stakeholder communication, incorporating social inclusion into project design, and effectively managing GEF resources.

Child projects have also learned from non-GEF projects in Peru, including some implemented by GEF Agencies. For instance, WWF is implementing a regenerative livestock project in the Madre de Dios region that heavily influenced the design of the FSIP project. Although the FSIP project will target different regions, the WWF project has demonstrated effective ways to socialize and increase buy-in for regenerative livestock production and has shared technical knowledge through a site visit with the FSIP design team. Through a project socialization workshop, FSIP has also engaged somewhat with The Nature Conservancy (TNC), which works on regenerative livestock. FOLUR stakeholders also highlighted other UNDP interventions (e.g., UN-REDD Programme, German IKI Fund, SECO projects in Cajamarca and San Martin) as providing learning opportunities, however the depth and breadth of this learning were not clear.

2.1.3 Gender and Social Inclusion

Opportunities to engage women have been constrained by the choice of commodities and project design decisions. All three CPs primarily focus on production activities, but women do not play a large role in production of the commodities addressed by CFI and FSIP (i.e., crab, black mussels and regenerative livestock). Instead, they most often participate in post-production activities, which are not a central part of either project's design. Neither project has specific activities designed to address barriers to women's participation in production activities.

The CFI project did not undertake the food consumption activities focused on women as described in the CEO endorsement document (e.g., conducting studies, training sessions, and communication campaigns to understand the role of women in determining household food consumption and to ensure their participation in the project). Instead, women primarily benefitted from the implementation of UNICAs.[3] FSIP project design documents (e.g., CN, socialization slide deck) and MINAM stakeholders reference

gender inclusion and intergenerational learning and knowledge, but the specific activities are not yet determined. FSIP also faces a similar risk, given the traditionally small role of women in livestock production, although one stakeholder noted that FSIP may focus on certain types of livestock that could increase the opportunities to benefit women. YLL also struggles to promote gender inclusivity due to the limited number of women-led startups in Latin America. Nonetheless, the project's investment thesis promotes women's leadership within the fund and requires funded startups to contribute to inclusion efforts. For instance, one startup is digitizing aspects of the work of day laborers to open new opportunities of financial inclusion, such as through microfinance.

Although not a central feature of the original project design, FOLUR offers the greatest opportunity to engage women, as they are already active in coffee and cocoa production. A gender specialist was hired to find opportunities to engage women through the project, but the original budget lacked funds for the gender action plan. MINAM is now amending the budget to allocate adequate resources to gender activities. FOLUR is also using gender equality as an entry point to the crowded development landscape in the San Martin region (see Relevance and Coherence). In addition to working with women producer networks, the project has begun supporting the implementation of Assignments in Use for Agroforestry Systems (CUSAFs)[4] in target landscapes and expects to implement specific activities to ensure women benefit from this support. These include training for women farmers on the concept of CUSAF and including women's names on CUSAF titles. During project startup, the project also consulted women community leaders in cocoa and coffee landscapes to assess the need for and added value of creating a network of women leaders in coffee and cocoa. The consultations highlighted that such a network for cocoa already exists but would benefit from project support to strengthen its regional representation.

FOLUR also aims to contribute significantly to promote sustainable development and mitigate deforestation among Indigenous communities, especially in Alto Amazonas (Loreto) and Amazonas. To this end, it will promote the integration of Integrated Landscape Management (ILM) principles into Territorial Development Plans (TDP) and Indigenous Peoples' Life Plans (IPLP) to improve governance and promote sustainable production practices. Beneficiary communities have been selected by the project based on criteria developed jointly with Indigenous organizations. In Alto Amazonas, six Shawi communities have been identified as beneficiaries that will receive support through collaboration with the Regional Organization of Indigenous Peoples of Alto Amazonas (ORDEPIAA). The project has developed tailored work plans to provide technical assistance to empower these communities through the implementation of life plans, the restoration of degraded areas, and the promotion of deforestation-free production practices, such as sustainable cocoa cultivation. The project is also reaching Awajun communities in Amazonas through partnerships with organizations such as the Executor of the Administration Contract of the Chayu Nain Communal Reserve (ECA Chayu Nain) and the Interethnic Association for the Development of the Peruvian Rainforest (AIDESEP).

2.2 Relevance and Coherence

2.2.1 Alignment with Country Priorities and Needs in Key Sectors

All three child projects align with key Peruvian policies and strategies. For instance, the CFI project aligns with the National Biodiversity Strategy for 2021; the "Plan Bicentenario," focusing on conserving natural resources and biological diversity through the participation of local populations; and the Organic Law of Regional Governments, contributing to improved management of small-scale fisheries. The FOLUR project seeks to strengthen collaboration between MINAM and MIDAGRI to promote deforestation-free commodities and strengthen smallholder livelihoods, aligning with Peru's national strategies and international commitments, such as the National Forests and Climate Change Strategy and the Joint Declaration of Peru, Norway, and Germany on reducing deforestation in Peru. Both FOLUR and FSIP are

also expected to contribute to achieving Peru's NDC GHG emission reduction commitments in the agriculture and livestock sectors, respectively.

The FSIP project also plans to support Peru's *Roadmap to Achieve Sustainable Food Systems in Peru*, a national strategy document prepared by MIDAGRI in 2021 to guide the development of actions by the public and private sectors to resolve the country's problems regarding health and nutrition, poverty and inequality, and the degradation of ecosystems originating from food production. One of the key roadmap actions is to improve pastures and reduce agricultural vulnerability to climate events. However, some key informants indicated that the FSIP project design does not yet reflect a meaningful linkage with the roadmap, suggesting the need for a closer assessment once the project is fully designed.

Although the projects clearly describe policy alignment, they also reveal challenging tensions between environmental drivers and political economy issues. The FOLUR PRODOC discusses the environmental impacts (i.e., deforestation) of the three target commodities (coffee, cocoa, and palm oil), but does not adequately assess the political economy implications of each commodity. During project startup, MINAM determined that it could not promote sustainable palm oil production because of the inherent negative environmental impacts and chose to proceed with coffee and cocoa only. FSIP may face similar challenges if it selects cattle livestock, although it is too early to assess. Key informant interviews suggest that both MINAM and MIDAGRI are well aware of these potential complications and may support other kinds of livestock with less of an environmental impact. Some stakeholders also questioned the selection of project areas, which span a large geographic scope (i.e., one northern landscape and one southern landscape) that may create challenges for internal project coordination across regions.

The FOLUR project has maintained relevance by adapting to the changing policy context. The project redid its policy analysis twice: once to consider developments due to COVID-19, and again to adequately consider the new EU Deforestation Regulation (EUDR) that passed in 2023. Even though EUDR is not mentioned in the revised PRODOC, the project is promoting compliance with the European regulation and the Forestry Law from 2011 (Law N° 29763) to ensure conservation and improved management of agroforestry systems. This is being done through CUSAF, which are an opportunity to ensure land use rights for smallholders, especially those that cultivate products such as cocoa and coffee, without making the land private property. Although mentioned in the current forestry law, CUSAF have not yet been widely implemented.[5] They will be implemented through collaboration between the project, SERFOR and the regional governments. Both CUSAF and EUDR are now highly relevant for the project's restoration activities, and compliance with EUDR is one of the reasons that regional governments are interested in working with FOLUR, as they need to ensure their producers continue to have access to the European market.

2.2.2 Interaction with Similar Activities and Initiatives

CFI collaborated with other initiatives to promote synergies. While it is too early to assess for FOLUR or FSIP, stakeholders seem aware of opportunities for interaction. During the pandemic, CFI established an alliance with the Ministry of Production's (PRODUCE) initiative "A Comer Pescado" ("Let's Eat Fish"), which is still supporting the processing plant in Tumbes with the marketing of their products. There was also collaboration with WWF, who had designed a smartphone app for traceability that reports directly to the Regional Directorate of Production. CFI helped deploy the app, including encouraging its use by local fishermen in both regions. The app is still in use today and generates important benefits for fishermen, buyers and regional authorities. It is also worth mentioning that when CFI ended, the GIZ project "EVEMAR" stepped in to help implement the management plans in the bay areas. The TNC project "BAF [Blue Action Fund]: Mar 2025", which is currently being implemented, has also been inspired by CFI to work with the protected areas, women and fishermen in the regions.

Because the FOLUR project management unit was not established until 2024, FOLUR has not had significant collaboration opportunities yet. However, it has identified valuable entry points in sustainable coffee and cocoa production, such as established mesas técnicas. These groups will receive capacity building support related to deforestation-free commodity value chains and represent an important opportunity to engage different stakeholders and exchange knowledge. It is still too early to assess FSIP's engagement with similar initiatives, but interviewees demonstrated a good understanding of relevant stakeholders and projects that could add value.

2.2.3 Policy Coherence

Policy coherence is not a key focus in any of the child projects, however FOLUR has found opportunities to promote policies that are outside of MINAM's purview but contribute to its objectives. CFI did not have any activities related to mutually reinforcing policy actions across government departments or agencies, or across different stakeholder groups. Although policy coherence was not one of the objectives in its design, the FOLUR project has started promoting multiple policies within MIDAGRI's jurisdiction during implementation to ensure effectiveness. First, FOLUR is advancing the CUSAF mechanism recognized under the Forestry and Wildlife Law, which is implemented by SERFOR. Relatedly, the project expects to be involved in efforts to enact or support the implementation of a regulation needed to apply a new law on agricultural extension that mandates coordination between SERFOR and the National Institute of Agricultural Innovation (INIA, also under MIDAGRI) to provide agroforestry extension services, which are currently being provided by both actors to a limited degree. It is not clear what the project's involvement will entail, however the regulation, if approved, would be highly relevant to the success of CUSAF implementation.

A new law passed in January 2024 which may become a significant challenge for FOLUR, or it may present an opportunity to promote environmentally sustainable production despite this policy constraint. Law N° 31973, which is implemented by MIDAGRI, modifies the current Forestry Law and promotes the implementation of private property titles for producers. This stands in direct contrast to CUSAF, and its many critics do not consider the law an environmentally sustainable option. FOLUR will have to find its path to promote and ensure the implementation of CUSAF as a key instrument to securing market access for smallholder farmers of cocoa and coffee, while at the same time avoiding conflict and reducing interference from this new law's implementation through MIDAGRI.

2.3 Performance and Results

The CFI project achieved its objective of piloting approaches for improved governance of coastal fisheries and marine areas and building capacity among various stakeholders at the local and regional levels. The project was not designed to produce any results at the national level and missed opportunities to pursue greater global results through binational coordination.

- Activities in Piura were focused primarily on biodiversity and environmental conservation, without explicit attention to the interaction of those activities with food systems. Key results included the development of management plans for three Sechura, Talara and Paita bays; recognition of the Estuario de Virrilá as a Ramsar site and support in the establishment of the Environmental Conservation Area Balcones; development of management plans for two Ramsar sites (Estuario de Virrilá and Manglares de Vice); and strengthening of SERNANP and management committees of protected areas, bay areas and Ramsar sites through capacity building and support with coordination. There was a missed opportunity to strengthen monitoring and surveillance within the protected areas; such activities were not included in the management plans and the

municipality did not allocate any funding to the voluntary park rangers association in Estuario de Virrilá.

- In Tumbes, the project focused on implementing and promoting sustainable fisheries practices, specifically among extractors of crab and black mussel from the SNLMT, which is also a Ramsar site. Results include the strengthening of the Consortium Mangroves of the Northwest of Peru (CONMANOPE, a group of six fishers' and extractors' organizations that is in charge of executing the contract of administration of the SNLMT); strengthening of multi-actor spaces, such as a mesa técnica of benthonic resources and the technical committee of the SNLMT; the implementation of community-supported practices of monitoring and surveillance in the SNLMT; and progress with the repopulation of crab and black mussel in the SNLMT. Interviewees highlighted the importance of the improved monitoring and surveillance, which led to better compliance with extraction bans and minimum sizes and reporting of unusual occurrences (e.g., entry of unregistered fishermen, or the felling of mangroves). There was also consensus that black mussel density increased from before CFI to after the repopulation efforts, with most interviewees citing reports[6] from IMARPE, which annually monitors the population density of different species of benthonic resources. Some interviewees credited the improved monitoring and surveillance for the increased density while noting that climate factors (e.g., ingress of freshwater and sediment in years with the occurrence of "El Niño" events) remain a barrier to greater density. There is also a lack of information related to pathological agents that can affect the populations of natural banks. The research firm Incabiotec S.A.C. also continues to use knowledge gained under CFI to continue strengthening their black mussel and crab repopulation efforts today. The project also worked with SERNANP and the Regional Directorate of Production (DIREPRO) to strengthen capacity to administer the fisheries and implemented a small plant for processing crab and shrimp for distribution in the national market. The results in Tumbes have contributed to livelihoods impacts for the local population, including sustained or increased income for black mussel extractors due to the repopulation efforts, employees of the processing plant, and ecotourism operators in the protected area.
- During the COVID-19 pandemic, the project introduced activities to mitigate the economic impacts on the local population, including the implementation of UNICAs with a seed capital of USD 1,000 each. The UNICAs established by CFI in both Piura and Tumbes have become so popular that they grew substantially in number, members, and capital. For example, an interviewee mentioned that the UNICAs in Tumbes have increased from 12 to 17, and many of them are managing tens of thousands of dollars by now. Funds from the UNICAs are used to repair fishery equipment (e.g., boats, motors, fishing nets), establish additional sources of income (e.g., small stores, food stands), and attend to family emergencies (e.g., illness). In Piura, CFI has also worked with women's cooperatives, with a focus on generating additional family income, for example, to overcome the slow season of fishing. The processing plant in Tumbes was also implemented in response to the pandemic, as a means of decreasing the pressure that was on the extractors and, consequently, the SNLMT. Furthermore, CFI promoted and facilitated the digitalization and modernization of public institutions in both regions, in particular, DIREPRO, through capacity building as well as by providing equipment.

- The project generated limited results for women, as that their participation was mostly through UNICAs. Only one woman participated in the fisheries activities with CONMANOPE, and the project did not achieve targets for women reached through regional government capacity building efforts. Nonetheless, the project achieved more than 200% of its target for the number of women achieving better conditions of economic autonomy (i.e., via UNICAs), after participating in knowledge transfer processes (393 achieved; 129 target).

Some of the results achieved by CFI can be replicated and scaled, although there is limited evidence of scaling so far. For example, there is potential to scale the black mussel repopulation, marine-coastal spatial planning, and UNICAs. According to one interviewee, MINAM continues to work on and generate knowledge about marine-coastal planning in many places along the Peruvian coast. However, it is still an incipient process and progress is slow. On the other hand, the aforementioned project BAF: Mar 2025 continues to support the implementation of management plans for protected areas, capacity building for fishermen's organizations, and supporting UNICAs in Tumbes, Piura, and a third region, Ica.

Adaptive management and flexibility in the face of the COVID-19 pandemic and political instability were central to achieving results in the CFI project. CFI showed great adaptability in the context of COVID-19; instead of being paralyzed due to the extreme unforeseen events, the project found ways to mitigate the impact of the pandemic on project beneficiaries and partners, continued to work closely with the public sector and was able to keep up progress towards project results. Unrelated to the pandemic, CFI also demonstrated flexibility when reallocating funding that was not sufficiently used in Piura to Tumbes**,** as well as in adapting to the frequent changes in key positions of public institutions. In Piura, multiple people passed through the position that was established as the main point of contact with CFI, and each time a new person took over, there was a period of adjustment and learning that slowed down implementation.

FOLUR is not yet reporting results because implementation did not begin in earnest until 2024. GEF CEO Endorsement for FOLUR was in 2021, but the PRODOC was not signed until 2023 and the Project Management Unit was established in 2024 (see Efficiency). MINAM began to implement the project through the NIM whereby it assumed full leadership of the project, with UNDP focused on oversight. Startup activities are ongoing, but there are doubts about how to proceed. MINAM and UNDP are now considering transitioning the project to a supported NIM, whereby the project management unit and all administrative responsibility would sit within UNDP.

All three child projects engage or plan to engage different types of private sector, resulting in different advantages and challenges. CFI partnered with a private research firm, Incabiotec, to improve processes for black mussel production and reproduction in a lab environment, with the goal of repopulating the SNLMT and its buffer zone. CFI stakeholders report positive experiences through the collaboration due to shared interest in generating innovative scientific knowledge about an important environmental topic, and Incabiotec's existing relationship with CONMANOPE based on previous repopulation efforts.

Meanwhile, FOLUR and FSIP project designs rely on engaging the private sector to strengthen sustainable value chains by establishing purchasing agreements with national and international commodity buyers and deploying sustainable finance instruments for smallholder producers and regional governments facilitated by financial institutions. Yet, key informants shared the view that the success of this approach may be constrained by MINAM's perception that the private sector's interests are fundamentally different from its own. To date, only one meeting has been held with a private sector buyer, which resulted in the establishment of a work plan to promote collaboration agreements to coordinate activities for the benefit of producers. This contact was established through personal relationships between staff working on the project and at the buying firm. To date, the global program has not yet provided support to the child project in making these value chain connections. The FOLUR project team is also struggling to identify

financial institution partners due to their limited presence in the target landscapes. Although they focus on different value chains, MINAM has an opportunity to use learning from FOLUR about engaging with commodity buyers and financial institutions to strengthen the design and implementation of FSIP.

YLL, implemented by a private firm, takes a different approach by targeting private businesses that aim to transform the agriculture, forestry, and other land use (AFOLU) sector through innovative technology. The project began implementation in 2024 and plans to begin reporting on results in 2025. To date, there is no evidence that lessons from the YLL experience are being sought or used to inform FOLUR or FSIP.

2.4 Programmatic Value Addition

MINAM and GEF Agency staff involved in FOLUR and FSIP generally perceive participation in global programs valuable, though benefits and costs are limited. Staff report improved project design and implementation through guidelines, trainings, and knowledge sharing events, and they value opportunities for South-South knowledge exchange. The voluntary nature and minimal time requirements for global program activities keep participation costs low for country actors. One stakeholder emphasized that benefits of the global program depend on the country's ownership and efforts invested in the relationship with the global program.

Not all country stakeholders are benefitting equally from the global programs. While MINAM has engaged with the global program, other government actors involved in CPs, like MIDAGRI and regional governments, have had little contact with or awareness of the global programs. Engaging these actors could build capacity and foster coordination across sectors and levels of government. Stakeholders also pointed to a potential missed opportunity for the FSIP global program to add value to the Peru CP during project design. Regenerative livestock farming is new in Peru and mostly applied on a smaller scale through NGO-led projects. FAO introduced this innovative practice in the CP proposal, and MINAM and MIDAGRI were both initially skeptical of the approach. Participation in the Regional Conference on Sustainable Livestock Transformation in Uruguay in 2024 may have helped increase the government's familiarity with the concept, but due to poor communication, Peru did not send a delegation to the conference. FAO's Livestock Environmental Assessment and Performance Partnership (LEAP) is working with FSIP to explore collaboration and strategies tailored to the LAC region's unique needs, including through this conference.[7]

Participation in the global program added limited value to the CFI child project in Peru due to misalignment with the global project timeline and limited collaboration with Ecuador. CFI-LA was approved in 2016, a year before the global program and other child projects. Also, global project implementation was delayed by two years. CFI-LA was expected to pilot the Fisheries Performance Assessment Instrument (FPAI), a key monitoring and evaluation tool developed by the global program for social, economic, and environmental assessments of fisheries. However, due to implementation delays, the tool was not completed in time for the project to pilot it. Nonetheless, CFI-LA, having started earlier, served as a learning example for representatives from other countries during a knowledge exchange visit to Tumbes. Lessons learned related to project governance, black mussel repopulation, women's participation in productive processes, monitoring and surveillance mechanisms, and fishermen's involvement in supervision and oversight of fishing activities. CFI-LA also had a unique opportunity for cross-border learning and collaboration as a binational project, but strong linkages between Peru and Ecuador were lacking.

Being a standalone project did not appear to create any challenges or drawbacks for YLL. This is likely because it was a private sector project and the YLL is a global network, so there are in-house resources and a high level of efficiency that wouldn't exist in a public sector project.

2.5 Efficiency

The original FOLUR project design included three GEF Agencies sharing implementation responsibilities, leading to inefficiencies in design and startup. MINAM encouraged GEF Agencies to submit project proposals together and selected one prepared by UNDP, FAO, and IFAD. Project design was a lengthy and complicated process due to the impacts of the COVID-19 pandemic and increased political instability in Peru, but also due to the difficulties that the three agencies faced in agreeing on methodologies, vision, and concepts. Despite obtaining CEO Endorsement in 2021, the PRODOC was not signed until two years later in 2023. This was due to delays by UNDP in translating the PRODOC into Spanish and revising its Social and Environmental Screening Procedure, and by MINAM in signing the translated PRODOC due to staff turnover. In 2023, after signing the PRODOC, the implementation arrangements were revised to remove IFAD and FAO as implementing agencies. This led to substantial revisions of the PRODOC, including the results framework and budget, delaying the start of activities until 2024. Some Government and Agency stakeholders perceive the resulting project document as complex, with unclear roles and responsibilities, which may further hinder efficient implementation.

3.Summary of main findings and emerging lessons

- **Systems thinking design.** Projects focus primarily on the production element of food systems, while seeking to address multiple environmental, social, and governance barriers. Yet, comprehensively addressing these barriers and implementing an integrated approach is proving challenging. Projects consistently identify the root causes and barriers for food systems challenges, but vary in the extent to which activities are designed to address these challenges. In CFI, a lack of integration across approaches within Peru and with Ecuador led to missing an opportunity to generate greater environmental and socioeconomic results. FOLUR is also struggling to implement its integrated approach due to the complexity of navigating environmentally and culturally diverse regions, although this is being managed by identifying the most appropriate intervention strategies for each of the six landscapes. While FOLUR and FSIP seek to build private sector partnerships to connect producers to other value chain elements, FOLUR is already facing some challenges in this regard. MINAM is struggling to engage private commodity buyers due to the perception of differing interests and the limited presence of financial institutions in target landscapes. A key lesson may be that to implement a systems thinking approach, child projects need to expand their focus beyond production to encompass other parts of food systems and ensure that activities are designed to work together in a way that can maximize impact without making implementation overly complicated.
- **Multi-stakeholder engagement.** Collaboration among government agencies with relevant responsibilities is critical for transforming food systems, but has been challenging and limited in GEF projects in Peru. Stakeholders express initial confusion about whether GEF food systems projects are “agriculture/livestock” or “environmental” projects. Ultimately, MINAM has taken a leading role in GEF projects while other national government ministries responsible for agriculture, livestock, and production have had more limited engagement during project design, which may limit the transformative potential of GEF projects.

- **Gender and inclusion.** Project designs have tended to focus on parts of the value chain (production) where women are traditionally not involved, although FOLUR has a stronger opportunity to benefit women due to their existing involvement in coffee and cocoa production. FOLUR plans to focus on promoting women's leadership and financial inclusion, while FSIP seeks to increase women's participation in production. Projects have not focused on consumption or nutrition, elements of the food system where women are key decision-makers. Still, women experienced socioeconomic and resiliency benefits through the UNICAs under CFI. FOLUR is the only project with specific efforts to meaningfully engage Indigenous People in its activities.
- **Policy alignment and coherence.** Project documents assert alignment with key national policies, although interviews paint a more nuanced picture. For example, the FSIP CN suggests that the MINAM-led project will support MIDAGRI's Roadmap for Sustainable Food Systems in Peru, although key informants could not identify meaningful linkages. Through FOLUR, MINAM is helping to implement policies within MIDAGRI's jurisdiction, such as advancing the CUSAF mechanism and supporting a new regulation for agroforestry extension services. However, FOLUR is now facing challenges due to emerging policy misalignment. A new law modifying the Forestry Law and promoting private property titles poses a challenge to successfully implementing CUSAF and securing market access for smallholder farmers.
- **Results.** CFI successfully delivered on its objective to demonstrate improved governance of coastal fisheries and marine areas but impact was tempered by the lack of integration in activities across sub-regions and countries. Results in Piura and Tumbes were separate, but notable. In Piura, the project strengthened management of protected areas to generate conservation impacts, while in Tumbes, results included enhanced governance of fisheries in the SLNMT and advancement of the repopulation of black mussels. The COVID-19 response measures also introduced socioeconomic benefits in both regions. The project missed a key opportunity to address illegal fishing activities at the Peru-Ecuador border, as there was no interaction between relevant authorities in the two countries to address the issue.
- **Programmatic value addition.** MINAM and GEF Agency country staff find participation in global programs valuable for strengthening design and implementation and sharing learning across countries, although not all country stakeholders have yet benefitted, such as MIDAGRI. FOLUR stakeholders praised the voluntary opportunities to benefit from global program guidelines, trainings, and knowledge sharing. The CFI project in Peru saw limited value from the global program due to the misaligned timeline of the global child project, which especially impacted the piloting of a tool to evaluate environmental, social, and economic performance of the target fisheries. Despite this, Tumbes served as a learning example for other CFI projects.
- **Efficiency.** MINAM initially accepted a proposal for FOLUR led by three GEF Agencies, but coordination and agreement between them proved difficult, delaying project design and implementation. The decision to move to one Agency during implementation required significant revisions to the PRODOC, causing even further delay. Despite the efficiency gains resulting from having only one GEF Agency involved, implementation remains slow due to unclear roles and responsibilities, including for key government actors like MIDAGRI.

Annex 1: Number of Stakeholders Interviewed

No.	Category	Total	Men	Women
1	**Public Sector, National**	10	5	5
2	**Public Sector, Regional and Local**	12	9	3
3	**GEF Agencies**	5	2	3
4	**Private Sector**	7	5	2
5	**Producers' Organizations and Cooperatives**	5	2	3
6	**NGO and Academia**	4	3	1
	Total	**43**	**26**	**17**

Annex 2: Project Sites Visited

Below are descriptions of project site visits conducted during a fieldwork mission from December 17 to December 20, 2024.

Site Visit #1			
Site Name	Environmental Conservation Area and Ramsar Site "Estuario de Virrilá"	**Date of Site Visit**	12/18/24
Region	Piura	**Geo-Coordinates**	05°50'S 80°49'W
GEF FS Project	Coastal Fisheries Initiative Latin America (CFI-LA)		
Description of the Intervention	The Estuario de Virrilá has been recognized as an Environmental Conservation Area (ACA) since 2015. ACAs are managed by the local governments, in this case, the Municipality of Sechura. It preserves a sample of the Sechura Desert ecoregion and has a high ecological value, given that it is considered a "stopover" for migratory birds that may eventually facilitate the establishment of permanent populations. It is one of the key sites for birds on the South American Pacific migratory route.[8] One of the main contributions of the CFI-LA project in Piura was the support to get the Estuario de Virrilá recognized as a Ramsar Site in 2021. The project also implemented a series of large signs with information about the site, which can help visitors avoid damage to the environment and understand the importance of the site. CFI-LA also supported the ACA's Management Committee, which consists of representatives of the local public sector, private companies and representatives of civil society, and helped in preparing the estuary's management plan.		
Photos			Photo 1: Estuario de Virrilá, landscape recognized as a Ramsar Site.
			Photo 2: Signs displaying information about the Estuario de Virrilá, put in place by CFI-LA.
			Photo 3: Voluntary Park Rangers' Organization at Estuario de Virrilá; the project missed an opportunity to provide financial support to this important and un-funded group

Site Visit #2			
Site Name	National Sanctuary Mangroves of Tumbes	**Date of Site Visit**	12/20/24
Region	Tumbes	**Geo-Coordinates**	03°25'S 80°17'W
GEF FS Project	CFI-LA		
Description of the Intervention	The Tumbes Mangroves National Sanctuary has an area of 2,972 hectares, located in the far north of Peru on the border with Ecuador. It is the only protected natural area in Peru that preserves the mangrove ecosystem (approximately 60% of all mangroves in the country). It is an important area for migratory shorebirds as a feeding and resting site. In addition, the site is a key habitat for economically important crustaceans and mollusks: these play a critical role in the socioeconomic system of the population that lives around the mangrove.[9] CFI-LA had multiple important interventions and results in relation to the mangroves: • Improved monitoring and surveillance of the extraction of crab and black mussels by SERNANP and CONMANOPE • Applied scientific investigation to reproduce black mussels in the Incabiotec lab and repopulation activities in the Sanctuary with involvement from CONMANOPE. • Strengthening of key actors (SERNANP, CONMANOPE, DIREPRO). • Strengthening of governance and multi-actor spaces for dialogue (management committee of the Sanctuary, technical table of benthic resources). • Implementation of a primary processing plant for crab extracted from the Sanctuary and shrimp produced in its buffer zone.		
Photos			Photo 4: *Ucides occidentalis*, crab extracted from the Manglar de Tumbes
			Photo 5: Crab extractor in his boat in the Manglar de Tumbes
			Photo 6: Isla Chalaquera, an island within the Manglar de Tumbes where repopulation efforts with crab and black mussels are made

Photo 7:
Informative sign about COVID-19 protocols

Part 4
Tanzania Country Case Study

Acronyms

CCRO	Certificate of customary right of occupancy
CEO	Chief Executive Officer
CRDB	Cooperative and Rural Development Bank
FAO	Food and Agriculture Organization
FOLUR	Food, Land Use, and Restoration
FSIP	Food Systems Integrated Program
FST	Food Systems Transformation
GALS	Gender Action Learning System
GEB	Global Environmental Benefits
GEF	Global Environment Facility
ICRAF	World Forestry
IEO	Independent Evaluation Office
IFAD	International Fund for Agricultural Development
ILM	Integrated Landscape Management
IUCN	International Union for Conservation of Nature
LAC	Landscape Advisory Committee
LDFS	Land Degradation and Food Security (RFS GEF-6 project)
MSP	Multi-stakeholder platform
NLUPC	National Land Use and Planning Commission
NRM	Natural Resource Management
PIR	Project implementation report
PPP	Public-Private Partnership
ProDoc	Project (Design) Document
RFS	Resilient Food Systems
SAGCOT	Southern Agricultural Growth Corridor of Tanzania
SRI	System of Rice Intensification
TBD	To be done / determined
VLUP	Village Land Use Plan
VPO	Vice President's Office
WWF-US	World Wildlife Fund – United States

1. Introduction

This Tanzania case study is part of the Evaluation of Global Environment Facility (GEF) Food Systems Programs. This evaluation seeks to assess the quality of design and achievement of results of food systems programs in GEF-6, GEF-7, and GEF-8, as well as to evaluate how the GEF has adapted to changing contexts and incorporated lessons learned into the design of later programs. The global evaluation covers three GEF-6 programs (Resilient Food Systems [RFS], Coastal Fisheries Initiative [CFI], and Good Growth Partnership [GGP]), one GEF-7 program (Food, Land Use, and Restoration [FOLUR] Impact Program), and one GEF-8 program (Food Systems Integrated Program [FSIP]). The evaluation scope also includes standalone country and regional projects focused on food systems from GEF-6 through GEF-8 that were identified by the GEF Independent Evaluation Office (IEO) using a keyword search.

Country case studies are a key component of the evaluation, intending to help:

- Gain a deeper understanding of the outcomes resulting from GEF food systems interventions and the explanatory factors for and sustainability of these changes;
- Understand how the GEF integrated programs' approach to food systems has evolved at the country level by assessing the similarities and differences between projects from each replenishment cycle and capturing links and interconnection; and
- Collect the perspectives of local communities affected by GEF interventions.

Tanzania was one of four case study countries selected purposively by the GEF IEO. Case study countries were selected based on their having food systems program child projects from all three GEF replenishment cycles included in the scope of the evaluation. Other factors considered include maturity of projects and variation across regions, GEF Agencies, and sectors targeted.

1.1 Methodology

This Tanzania case study used a systems thinking approach that was guided by the global evaluation's theoretical framework for understanding food systems that integrates GEF concepts with relevant literature to identify the drivers, actors, parts, and outcomes of a given system. The case study sought to answer thirteen overarching evaluation questions pertaining to design, relevance and coherence, performance and results, value addition, and efficiency of GEF food systems programming (Annex 4).

The case study used mixed methods to extract robust and credible findings, including desk reviews of project and program documents, virtual and in-person interviews, and direct observation through site visits. The case study team conducted a stakeholder mapping exercise to develop an initial list of key informants, then used a snowballing approach to identify additional key informants through interviews with representatives of the national and local Government of Tanzania, GEF Agencies, and project staff (see Annex 1 for a full list).

The case study evaluation team visited sites in Tanzania associated with the following projects: RFS Land Degradation and Food Security (LDFS) project and FOLUR project (GEF ID 9132 and GEF ID 10262) (see Annex 2).

Key limitations faced during the study included the limited time available for exploring the relevant sites and organizations involved (especially in the FOLUR project) and the early phase of FOLUR project implementation. For instance, the mission was not able to encounter private sector and civil society actors as few agreements have been signed so far and no major activities have started, and it would have been difficult to identify and make arrangements with the most relevant organizations during the time available

during the field mission. Another limitation was the unavailability of the Terminal Evaluation for the LDFS project which is expected to be ready later in early 2025.

1.2 Scope

Tanzania was selected for a case study due to the existence of child projects from GEF-6, GEF-7, and GEF-8 food systems programs and its geographic location to represent the Eastern and Southern Africa region in the evaluation. Table 1 below shows the three projects in Tanzania included in this case study.

Evolution and status of projects. The RFS GEF-6 Land Degradation and Food Security (LDFS) project concluded in November 2024 after almost 7 years of implementation. Meanwhile, the GEF-7 FOLUR project became effective in July 2024 following nearly seven years of planning, design, and consultations, which began in November 2017, as outlined in the FOLUR Stakeholder Engagement Plan. The FOLUR project Steering Committee approved the Annual Work Plan in 2024, and the project is now finalizing the recruitment of its national and landscape coordinators. The FSIP GEF-8 project on Food Systems Transformation (FST) is expected to submit the first draft of its design report to GEF for CEO endorsement in March 2024.

Project documentation. Apart from interviews and field visits during the evaluation team mission, this report drew on several design and implementation documents of the three projects. For **LDFS** this included the project MTR and the latest Project Implementation Reports (PIR) of 2023 and 2024, the IFAD project design report and information from the RFS early formative, mid-term and terminal evaluations. The LDFS terminal project evaluation is expected to be completed by end-March 2024. The main documents for the **FOLUR** project on 'Food systems, land use and restoration in Tanzania's forest landscapes' were the WWF-GEF Project Document (ProDoc) of July 2021, the Operational Manual of July 2023 and the Stakeholder Engagement Plan (not dated, but likely to be from 2020/21). Basic design information for the **FST** is currently found in the early Concept Note in the FSIP program framework document.

Tanzania mainland and Zanzibar island. All GEF projects cover both the Tanzania mainland and the island of Zanzibar, two separate political entities that are constitutionally joined in one State through their Union. Both entities have separate (and different) systems of political, administrative and customary governance.

The LDFS covered 5 districts, 4 of them in the North-Eastern region of Tanzania, plus 1 in Zanzibar, while FOLUR plans to work in two landscapes. One is the large Kilombero valley in central Tanzania, where FOLUR selected 3 districts for special attention; and one is the North Unguja landscape in Zanzibar where 2 districts are covered. Similarly, the FST decided to expand its work from the initially chosen landscape in the Southern Highlands (Usangu) to include a second landscape in Zanzibar.

Table 1. Overview of projects included in case study

GEF ID	Project Name	GEF Agency	FS Program	Project Status	Target Food System
9132	Food-IAP; Reversing Land Degradation Trends and Increasing Food Security in Degraded Ecosystems of Semi-arid Areas of Central Tanzania	IFAD	FS-IAP / RFS	Completed	Semi-arid drylands, no specific commodity. Mainly maize as the staple crop
10262	Food Systems, Land Use and Restoration in Tanzania's Forest Landscapes	WWF-US	FOLUR	Under implementation since July 2024	Rice
11230	Food Systems Transformation in Usangu Landscape[1]	FAO	FSIP	Under design	Rice, livestock and aquaculture

2. Findings

2.1 Design

2.1.1 Systems Thinking

All three projects applied extensive systems thinking in their design. The **RFS LDFS** project drew on the GEF Project Framework Document for the Resilient Food Systems program, which guided its overall approach and components. It also benefited from being implemented by IFAD, which later became the lead agency of the RFS. However, the LDFS project was, from the outset, less ambitious in terms of value chain development and policy engagement than other RFS child projects, according to the RFS Terminal Evaluation.

The **FOLUR project** underwent a long design process, during which the design notably shifted from an initial focus on forest sustainability to a broader integrated agricultural landscape approach, aligning with the FOLUR global program. Its participatory and well-documented design process resulted in a comprehensive and coherent project document, with detailed attention to the rice value chain—particularly in the Kilombero landscape, a large and rapidly expanding rice production zone in central Tanzania. Recent population growth in the area has contributed to growing environmental pressures and land-use conflicts. The project design covers a wide range of food systems elements, either through direct interventions or through planned partnerships.

The **FST project**, still under design, is drawing on FAO's experience in previous GEF food systems and drylands initiatives. In many respects, it aims to build upon and align with the comprehensive FOLUR approach. The mainland landscape targeted by the FST in southern Tanzania (Usangu) is more densely populated and affected by severe land degradation and persistent water allocation conflicts. This context highlights the need for better integration of livestock and aquaculture into rice-based production systems.

While GEF food systems projects in Tanzania share strong thematic similarities, they also display important differences, particularly in scope and ambition. Table 2, illustrates the intensity of coverage of various food systems dimensions across the three projects, including the most important project activities. All three projects—LDFS (GEF-6), FOLUR (GEF-7), and FST (GEF-8, still at concept stage)—prioritize land use planning, the promotion of environmentally and climate-sensitive agricultural practices, and the protection or restoration of areas with high conservation value (although this last aspect is not yet fully elaborated in the FST concept note). However, the projects differ notably in their commodity focus and corresponding ambitions in value chain development. LDFS did not prioritize value chains or specific commodities. In contrast, FOLUR places strong emphasis on the rice value chain (see for instance the schematic presentation of the Tanzania rice value chain in the Annex), and FST further expands this scope by including livestock and aquaculture as priority commodities.

Policy engagement, multi-stakeholder platforms, and food systems financing feature far more prominently in FOLUR and FST than in LDFS. The FST concept note even dedicates one of its three components to developing improved financing models, products, and services for its priority commodities, consistent with the FSIP program design. While FOLUR focuses on the vertical integration of rice value chains within an Integrated Landscape Management (ILM) framework, FST adopts a broader landscape-level integration across rice, livestock, aquaculture, and forest systems. Both FOLUR and FST also allocate dedicated resources for regional and global engagement. Importantly, land use planning

beyond the village level—such as district or zonal planning—is more prominent in FOLUR and FST, although it had also been envisioned in LDFS but was not successfully implemented. Strengthening landscape governance to support ILM is a key objective in the newer projects.

All three projects face challenges in managing their broad scope across the food systems spectrum relative to available resources. LDFS narrowed its food system focus and geographic coverage. FOLUR, while more ambitious in partnerships and policy influence, limits fieldwork to selected districts and villages. The FST project, even at the concept stage, is already considering reducing the number of villages it covers (from the initially planned 28) or scaling back activities in some locations to ensure feasibility of coverage of multiple value chains.

Projects also differ in their ambitions and co-finance. For instance, the FOLUR project aims to achieve GEB that are far above those of LDFS, especially for land under improved agricultural practices (1.2 million vs. 6,000 hectares), at a similar GEF budget (Table Annex 1), A planned co-financed investment project for FOLUR by Korea operates only in Zanzibar.

Table 2. Coverage of food systems dimensions by GEF projects in Tanzania

Food systems dimension	RFS LDFS (9132)	FOLUR (10262)	FSIP FST (11230)
Value chain			
Production *(ag. services, infrastructure, inputs)*	Ag. extension and inputs, ag. alternative IGA	SRI Public and private ag. infrastructure investments	Sustainable rice, livestock and aquaculture production and related services
Storage *(post-production)*		Yes, as part of FOLUR partnerships /PPP	Tbd
Processing	Honey, rice and sea-weed in selected districts	Investments by farmers / women (rice milling)	tbd
Aggregation Farmer market access Grading, standards (market/consumer demand, eco-criteria)	Dairy/milk aggregation in one district (in the context of the project exit strategy)	Rice grading Yes, as part of FOLUR partnerships /PPP	tbd
Links to food consumption – regional and global value chains		Demand for rice and learning on SRI	Information exchange
Core system			
Natural resources access Land use and landscape planning and management Land tenure	Village land use planning	Village land use and landscape planning and governance Land tenure assessment	Village land use and landscape planning and governance
Policies and regulations	Village land use planning policy : pilot-testing expanded applications	Strengthened policy coherence and regulations	Strengthened policy coherence and regulations
Finance and private investments		Finance for ag. and environm. investments at all levels (as part of FOLUR partnerships/PPP)	Develop financial products and services at all levels (partnerships /PPP)
Knowledge / extension / capacities	Ag. extension, women's and NRM committees' capacities	MSP for information exchange, PS business opportunities and models	tbd
Natural elements			
Land	Soil fertility management	(See above under NR access)	Tbd
Water	Soil, land and water management; Water use for livestock	Multiple-user water management	Integrated water management across producers of rice, livestock, and aquaculture
Forests, wetlands (HCV)	Village HCV areas	Village HCV and landscape conservation ares; governance	tbd

Key: Darker shades of green indicate more intensive coverage, lighter green indicates less intensive coverage, white signifies areas not covered, and grey indicates aspects that remain uncertain at this stage

2.1.2 Learning

GEF food systems projects in Tanzania informed future GEF programs—although active exchange among GEF projects in the country was limited. The main interactions were between the FST and the FOLUR project, and mainly at the level of the FAO country office and external project design teams. The FST project coordinator in the Vice-President's Office (VPO) was aware of the earlier LDFS project—also coordinated by the VPO—but was unfamiliar with the FOLUR project, which is under the Ministry of Natural Resources and Tourism (MNRT). The FAO country office reportedly drew valuable lessons from FOLUR's approach to ILM, and one FAO staff member participated in the FOLUR Global Platform meeting in Hanoi in October 2024, accompanied by a representative from the Tanzania Ministry of Agriculture. This exposure deepened understanding of rice system integration with aquaculture, sustainable rice platforms, and the transition from subsistence to commercially-oriented rice production.

The FOLUR project placed more emphasis on building upon lessons from past interventions in Tanzania's rice sector, notably the introduction of the System of Rice Intensification (SRI),[2] rather than lessons from the LDFS, which did not specialize on rice (FOLUR ProDoc, p. 119). The FOLUR project design recognized that scaling up SRI would require more than technical training alone, highlighting integration and the importance of comprehensive support, including strong technical assistance and bundled financial services—such as access to credit and crop insurance—as critical for successful adoption. The FOLUR project design document also outlines plans to collaborate further with other projects in the future through its Multi-Stakeholder Platforms (MSPs), including the LDFS project, the parallel GEF-7 Drylands Sustainable Landscapes Impact Program project in Tanzania (with which initial discussions had taken place), and two other stand-alone GEF projects.[3]

2.1.3 Gender and Social Inclusion

The LDFS and FOLUR projects both integrated gender considerations in their design but differed significantly in their depth, structure, and focus. While the LDFS project emphasized community-driven tools and household-level empowerment, the FOLUR project adopted a more structured and comprehensive approach, particularly in integrating women into formal decision-making, land use planning, and value chains. The FOLUR project also took a more proactive stance in anticipating and mitigating risks linked to shifting gender dynamics, an area less developed in the LDFS design. As the FAO FST project is still at the concept note stage, many gender considerations have yet to be fully developed. While some aspects are mentioned, they lack the depth and specificity seen in the LDFS and FOLUR projects.

Both the LDFS and FOLUR projects included ***gender and social inclusion analyses*** in their design, although they varied in detail and emphasis. Each identified gender gaps, integrated measures to enhance women's roles in agriculture and resource management, and included strategies to improve women's participation in value chains. The LDFS placed stronger emphasis on community-driven tools like the Gender Action Learning System (GALS) to promote social change and empower women at the household and community levels. In contrast, the FOLUR project prioritized integrating women into formal land use planning processes and improving their financial access.

Women's roles in food systems, spanning production, processing, and marketing, were recognized and supported in both projects. Each provided training to improve women's technical and management skills and promoted income-generating activities. The LDFS project emphasized small-scale, household-focused initiatives such as food crop farming and goat-rearing, while the FOLUR project placed greater focus on women's roles in broader landscape management and value chains.

Both project designs acknowledged the importance of ***consulting women, women's groups, and marginalized communities***, though the extent and structure of these consultations varied. Efforts to align activities with women's needs were evident in both cases, particularly regarding food production and income generation. The FOLUR project adopted a more structured and deliberate approach, emphasizing inclusive planning for landscape management and governance. The LDFS project maintained a stronger focus on household and productive activities.

Efforts to ***target women in project activities***, enhancing their participation in agriculture and improving their socio-economic benefits featured in both projects, with a focus on productive activities, capacity-building, and targeted livelihood support. However, the LDFS project lacked explicit measures to strengthen women's control over natural resources or their participation in household decision-making. By contrast, the FOLUR project adopted a more comprehensive gender approach, promoting women's involvement in decision-making, strengthening their control over resources (e.g., via land use planning), and enhancing their roles in governance structures and value chains.

While both projects integrated gender considerations, the FOLUR project presented a clearer and more comprehensive ***gender mainstreaming strategy***. Its design outlines defined gender objectives linked to project outcomes and emphasizes women's roles in decision-making, resource management, and enterprise development, while also identifying risks linked to gender inequality. The LDFS project, in contrast, relied more on targeted activities than on a structured, overarching gender mainstreaming strategy.

The two projects differed significantly in their attention to ***risks linked to shifting gender dynamics***. The FOLUR project anticipated potential resistance or conflict from increased women's participation in decision-making and resource control and outlined mitigation measures. The LDFS project did not clearly assess how such changes could impact traditional roles or result in unintended gender-related consequences.

2.2 Relevance and Coherence

2.2.1 Policy alignment

GEF food systems projects in Tanzania have demonstrated strong alignment with national development goals and policy priorities in agriculture, environment, and climate change. All projects underwent official vetting by the President's Office – Planning and Investment, which ensures coherence with overarching frameworks like the Tanzania Development Vision 2025, the Third Five-Year Development Plan (2021–2026), and other key sectoral and cross-cutting policies. The Vice President's Office (VPO), as the primary governmental institution responsible for environmental management, plays a central role in coordinating these policies with GEF priorities. The GEF operational focal point, who is part of the VPO, further ensures that projects reflect both national needs and global environmental objectives.

GEF project design documents reference and align with a comprehensive suite of sector-specific policies and strategies. These include the Agricultural Sector Development Programme II (ASDP II, 2017–2028), which guides broader agricultural transformation, and the National Rice Development Strategy III (2019–2030), which is especially relevant to projects focused on rice value chains like FOLUR and FST. On the environmental side, key frameworks include the National Environment Policy (2021) and the National Environmental Master Plan for Strategic Interventions (2022–2032), both of which emphasize integrated landscape management and climate resilience. The projects also link to cross-cutting plans such as the Climate Smart Agriculture Programme (2015–2025) and Tanzania's Nationally Determined Contributions (2021) under the Paris Agreement.

In addition, projects were shaped through extensive stakeholder consultations at national, district, and community levels that support alignment. For example, the FOLUR project's participatory design process was formally documented in its Stakeholder Engagement Plan. Line ministries and government institutions played an active role in project design and implementation, reinforcing alignment with public sector priorities.

2.2.2 Policy coherence between agricultural and environmental objectives

GEF-supported food systems projects operate in a Tanzanian policy context that has evolved since the UN Food Systems Summit 2021, particularly through the development of a National Roadmap for Sustainable Food Systems Transformation and the National Environmental Master Plan for Strategic Interventions (2022–2032). These frameworks signal a growing commitment to environmentally sustainable food systems.

Policy coherence between agricultural production and environmental sustainability remains limited—particularly in policy implementation—while several incentives continue to be misaligned. While environmental sustainability is recognized as a priority, ministries such as the Ministry of Agriculture and Ministry of Livestock tend to dominate the policy and implementation space, with their strong focus on increasing agricultural production, achieving food sovereignty, and promoting exports—notably in rice and livestock sectors. This emphasis often overshadows environmental goals. The FOLUR project document explicitly highlights key challenges (ProDoc p. 26/27). Tanzania lacks a conducive policy and regulatory framework that links agricultural growth with environmental safeguards. For instance, while there are strategies to boost rice production, corresponding environmental standards to ensure sustainable intensification are largely absent. The absence of clear incentives from national or regional markets to pursue sustainability further weakens policy alignment. As a result, agricultural implementation strategies often diverge from natural resource management goals. Overlapping mandates and gaps between central government and local (district) authorities contribute to fragmented planning and implementation. This leads to conflicting interests and undermines coherence in developing sustainable value chains and food systems.

For instance, the current pricing mechanisms for domestic and irrigation water use in the project's target landscapes do not reflect the true environmental costs of managing, conserving, and restoring water catchments (ProDoc p. 26/27). Many users are unregistered and access water at no cost, creating incentives for overuse and mismanagement. Prices are also not aligned across agencies. This misalignment hinders long-term sustainability and landscape-level water governance. In FOLUR's Kilombero landscape, the Rufiji Water Basin Board, mandated to oversee water use and issue permits, face major enforcement challenges due to widespread informal irrigation schemes, inadequate monitoring infrastructure, and illegal withdrawals. The FOLUR project aims to address these gaps by promoting better alignment between land use planning and water management. The FAO FST concept note also acknowledges policy misalignments and includes activities under Component 1 to align the Government's subsidy policies with broader food systems sustainability. This includes a stronger emphasis on supporting mechanization, organic nutrients, and biological pest control, rather than relying on inorganic fertilizers and pesticides. It also involves strengthening and aligning coordination and planning frameworks at the landscape level, along with the development of an integrated environmental management information system. FAO plans to recruit a competent NGO to pursue these objectives.

There is currently no clear institutional lead for coordinating Tanzania's food systems agenda. While the Ministry of Agriculture convenes the national multi-stakeholder platform, concerns have been raised about its ability to address environmental issues impartially due to its production-focused mandate. This has led to calls for a more neutral, cross-cutting coordinating body, potentially under the Prime Minister's

Office. Although plans exist to establish an agricultural transformation office, its future institutional home remains undecided. Two of the three GEF projects (LDFS and FST) are implemented by the Vice President's Office, while FOLUR is led by the Ministry of Natural Resources and Tourism. The selection of the executing government agency was based on its institutional and technical capacity and expertise in relation to the specific objectives of each project and program. Decisions were also informed by the need to ensure a fair distribution of projects among government agencies with comparable competencies. In all cases, it remains uncertain how effectively these institutions can influence the Ministry of Agriculture to help align incentives.

2.2.3 Interaction with government and donor initiatives

All three projects recognize the importance of working with broader initiatives, but FOLUR stands out for its deliberate and structured integration strategy, followed by FST's planned partnerships. Given their relatively limited funding, GEF food systems projects are expected to play a catalytic role by leveraging existing and planned government and donor-funded initiatives. This is essential to scale up interventions and achieve their intended Global Environmental Benefits (GEBs), particularly across entire landscapes. Among the three projects, FOLUR and the FAO FST project clearly reflect this ambition in their design, while the LDFS project had only limited engagement.

FOLUR places significant emphasis on collaboration with past and ongoing initiatives. It explicitly builds on experience from the World Bank-supported *Expanding Rice Production Project* and intends to align with a Korean-funded rice irrigation project in Zanzibar. In its mainland landscape, FOLUR aims to partner with Southern Agricultural Growth Corridor of Tanzania (SAGCOT) initiatives to catalyze socially inclusive and environmentally sustainable value chain investments—particularly from the private sector—and with related efforts such as IUCN's SUSTAIN Africa and the Development Corridors Partnership. The project also plans to work with Tanzania Agricultural Research Institute (TARI), the Agricultural Seed Agency (ASA). These collaborations are particularly important for FOLUR's planned two **Multi-Stakeholder Platforms (MSPs)**—key mechanisms to drive synergy and alignment at landscape level, and to raise funds for public and private investments.

The **FAO FST** project, still at the concept stage, also envisions strong alignment with other government and GEF-supported projects. It plans to link with GEF-7 initiatives such as the *Drylands Impact Program* and the *Integrated Adaptation Program for Dry Miombo and Zanzibar Drylands*. Notably, FST is seen as a pilot to inform a proposed $200 million Green Climate Fund initiative, highlighting FAO's strategic intent to mobilize broader financing for transformative change. Beyond GEF partnerships, FST seeks to engage with regional platforms like the East Africa Grain Council, SAGCOT PPP, the Global Dairy Platform, and Southern Africa Roundtable for Sustainable Beef. In contrast, the **LDFS project** had limited interaction with other initiatives. Its originally planned co-financing did not materialize, narrowing its operational scope. While it collaborated with FAO on technical training through Farmer Field Schools, broader linkages with donor or government programmes remained minimal.

2.2.4 Strengthening Coordination and Coherence Through Multi-Stakeholder Platforms

FOLUR aims to overcome the fragmentation in institutional and planning frameworks by creating multi-stakeholder platforms for sustainable land and water management. The FOLUR project recognizes the persistent fragmentation across institutional and planning frameworks as a key obstacle to sustainable land and water management. To overcome this, it places strong emphasis on establishing structured, inclusive, and well-supported multi-stakeholder platforms (MSPs). These platforms—a first in the Kilombero landscape and subsequently in Zanzibar— are intended to align the diverse interests of actors

across agriculture and environmental sectors, harmonize planning processes, and move from fragmented strategies toward more coherent, actionable implementation.

The Kilombero Valley exemplifies the complexity of the institutional environment for sustainable rice intensification. A multitude of institutions and committees—such as the National Land Use Planning Commission (NLUPC), Rufiji Basin Water Board, SAGCOT Secretariat, and District and Village Land Use Committees—operate across various levels. Several overlapping landscape plans exist, including the draft District Land Use Framework Plan and the Integrated Water Resources Management (IWRM) Plan for the Rufiji Basin. Despite this institutional density, coordination remains limited, interests are not adequately negotiated, and many plans lack implementation due to constrained authority, technical capacity, and financial resources (FOLUR ProDoc p. 27-31). The project identifies this disconnect as a key barrier to achieving integrated land management (ILM) and sustainable value chain development. It further notes that these challenges extend to Zanzibar, where landscape-level coordination is made more difficult by the absence of a comprehensive land and water management strategy.

The MSPs are designed as a cornerstone of FOLUR's strategy to overcome coordination gaps, but their effectiveness will ultimately depend on their ability to move beyond dialogue toward generating the right incentives for public and private stakeholders, enforceable action and accountability. These inclusive, action-oriented platforms aim to improve coordination, facilitate joint planning, and mobilize investments across sectors. In Kilombero, the MSP has already been formed—supported by NLUPC, SAGCOT, and district authorities—and is functioning as a Landscape Advisory Committee (LAC). It brings together a wide range of stakeholders from national and local government agencies, academia, private sector actors, and civil society, including institutions such as WWF, Kilombero Plantations, and local rice processors. The platform is expected to meet quarterly to monitor progress and guide implementation. A similar MSP is now under development in Zanzibar, drawing on lessons from Kilombero. In both regions, the platforms aim to institutionalize commitments through compacts signed by Regional Administrative Secretaries to ensure shared accountability. While these MSPs offer strong potential for fostering integrated governance, several stakeholders have raised concerns about their limited authority. Without formal enforcement powers, there is a risk that these bodies may remain primarily consultative rather than driving implementation. Nonetheless, they are seen as critical vehicles for building cross-sectoral dialogue, aligning fragmented planning efforts, improving public and private investments through better information and the right incentives, and advancing FOLUR's integrated landscape management approach.

2.3 Performance and Results

2.3.1 Performance and results in the GEF-6 LDFS project

The LDFS project faced initial challenges that influenced its overall trajectory and performance, but ultimately achieved GEBs that surpassed initial targets. Originally designed to be part of an IFAD baseline project that did not materialize, the LDFS experienced a delayed start-up, which constrained early progress. Implementation was slow during the initial phase with less than 20 per cent disbursed at mid-term, but performance improved over time as project delivery became more effective. Gradual improvements elevated the project's implementation ratings from moderately unsatisfactory to satisfactory in the end, reflecting enhanced management and strengthened engagement with beneficiaries. Despite these gains, lingering challenges remained, particularly in ensuring consistent support by limitations in technical project staffing, procurement, and monitoring. Climate-related events, including floods and droughts, further affected progress. At completion, overall achievement of development objectives was moderately satisfactory.

Despite these challenges, the project achieved notable GEBs. Preliminary figures show that the project more than doubled its target for protected and managed conservation areas, achieving 9,289 hectares (GEF core indicator 3). It also implemented sustainable agricultural practices across 7,583 hectares of productive landscapes, exceeding its target by over 25 percent (GEF core indicator 4.3). The project nearly doubled its intended greenhouse gas reduction outcome, at 1,099,647 tons of CO_2 equivalent, reflecting the successful adoption of climate-smart practices and improved land management. In addition, the project reached 15,106 beneficiaries, surpassing the target of 12,991, highlighting effective community engagement.

Enhanced soil and planting techniques: improved and non-improved maize fields

Mixed farming (livestock/crops) in Kondoa District

The LDFS contributed meaningfully to environmental management through improved land use planning, sustainable agricultural practices and forest protection and restoration. Village Land Use Plans (VLUPs) legally clarified land tenure in more than 20 villages, particularly for village forest reserves, reducing conflict and enhancing environmental protection. However, these new plans largely mirrored previous land use patterns, reflecting limited incentives for major adjustments in land designation without accompanying infrastructure investments or compensatory measures that would be required if land use were significantly changed. Efforts to establish effective land use committees beyond village level to improve NRM at a broader landscape level faced challenges. Limited community interest and diverging priorities across villages hindered the establishment of these committees, ultimately reducing the project's effectiveness in landscape-level planning.

The project introduced sustainable agricultural practices that improved yields and strengthened environmental sustainability, with farmer field schools playing a key role. Techniques such as ridging, improved soil fertility management, water retention methods, line planting, and intercropping were promoted to address soil degradation and enhance productivity. By project completion, nearly 6,300 farmers—45% women and 43% youth—had adopted these practices. Farmers reported significant production gains, with maize yields tripling or more for those adopting improved practices, and cassava yields doubling when intercropped with legumes. Despite these successes, some farmers faced adoption challenges due to labor intensity and reliance on manure. Overall, 4,000 households reported increased production (PIR 2024). In addition to promoting improved agricultural practices, the project supported the rehabilitation and construction of earth dams, micro-irrigation systems, and dip tanks across several districts. As these interventions were completed late in the project cycle, their outcomes are yet to be reported.

Beyond the immediate project area, improved practices reportedly spread to neighboring communities, contributing to broader environmental and income benefits. This wider adoption reflects effective knowledge-sharing efforts, including expanded extension services, informative briefs and publications, and visits by high-ranking government officials, highlighting the project's potential to promote sustainable practices at scale.

Gully control through gabions and plants in water run-off area

Demarcation stone in village high conservation value (HCV) area

The LDFS prioritized forest protection through improved land demarcation, strengthened community natural resource management, and income-generating activities. Clarifying village forest reserve boundaries reduced encroachment risks and promoted sustainable forest use, while contributing to habitat conservation and biodiversity gains. To support conservation efforts, the project distributed beehives to provide alternative income sources while encouraging forest guardianship. Communities were also empowered to enforce bylaws and patrol forest reserves. Additional measures included gully control and beautification efforts aimed at promoting tourism. However, villagers observed that erosion control structures were already showing signs of being insufficient within a year, due to heavy siltation, highlighting the need for reinforcement, scaling up, and continuous management and oversight.

The project successfully introduced several income-generating initiatives to reduce reliance on forest damaging practices, especially charcoal production. In Kondoa district, the dairy initiative initially provided 24 dairy cows to targeted households, which have since grown into a herd of 80 animals. Despite early challenges with water supply and veterinary services, the initiative has delivered positive results. As dairy farmers primarily sell surplus milk within the village, this limits the full utilization of the new milk collection center's 1,000-liter capacity, prompting efforts by the project to increase milk production and strengthen market linkages through its exit strategy. In another district, the project supported the procurement of 150 goats to diversify incomes and improve household resilience. Goat-rearing, requiring less intensive management, proved particularly valuable for vulnerable households. Additionally, the development of collection and processing facilities for rice, honey, and seaweed (the latter in Zanzibar) enhanced local value chains and improved market access for agricultural products.

Gender was actively mainstreamed throughout the project, with women participating significantly in training on improved agricultural practices, crop production, and business and leadership skills. Women also played a key role in goat-rearing activities, creating new income opportunities. Approximately 40% of project beneficiaries, or around 7,200 women, actively participated in various interventions. While these efforts contributed to strengthening women's roles in productive sectors, available data does not yet provide clear evidence of broader empowerment outcomes, such as increased decision-making roles or improved control over resources. These aspects may be addressed in the upcoming terminal evaluation.

While Village Land Use Planning (VLUP) is a well-established and important tool in Tanzania, GEF projects such as FOLUR and LDFS reveal that its full potential is only realized when extended beyond individual villages to address broader, cross-boundary landscape challenges. Achieving this requires moving from fragmented, community-level planning to more coordinated, resource-backed approaches at district and ecosystem levels. Land use planning plays a central role in GEF food systems projects in Tanzania, especially in promoting ILM and improving environmental governance. It is a well-established government priority, with the National Land Use Planning Commission estimating that around 40 per cent of villages have some form of VLUP. These plans are crucial for clarifying land tenure—often through Certificates of Customary Right of Occupancy (CCROs)—reducing conflicts, and enhancing environmental protection. However, extending planning from village to broader landscape levels remains a major challenge.

A notable contribution of GEF projects, particularly FOLUR and LDFS, has been their support to complete the later stages (V–VI) of VLUPs, which focus on formalizing land rights and land management. These stages are vital for legal tenure security, reducing encroachment, and encouraging investment. While VLUPs offer strong legitimacy and promote community ownership, they are often spatially narrow and fail to account for shared ecosystems and upstream–downstream linkages. This limits their effectiveness in managing forests, rivers, or catchment areas that span multiple communities. They also often fail to adequately reflect the interests—and underlying conflicts with sedentary communities—of migratory pastoralists that have traditionally used large tracts of land in central and southern Tanzania for livestock grazing. Inter-village or zonal planning efforts have seen limited progress due to fragmented interests, low incentives, and weak implementation capacity. Many plans also remain unimplemented due to enforcement and funding gaps.

Experience from LDFS and FOLUR underscores the need to move beyond village-level efforts and pursue integrated land and water management at district or landscape scales. The FAO FST project reinforces this by linking upland degradation to downstream siltation in rice fields and identifying broader land use planning as a strategic priority. Yet such planning is costly, technically complex, and often constrained by institutional fragmentation. Barriers include aligning interests across villages, establishing compensation mechanisms for land use changes, and developing cohesive investment strategies. Ultimately, scaling land use planning for environmental and agricultural goals requires stronger inter-village coordination, integration with sectoral planning, and robust resource mobilization.

2.3.2 Private sector engagement

Private sector engagement has significantly evolved across the GEF food systems projects in Tanzania, moving from relatively limited roles in GEF-6 (LDFS) to an approach in GEF-7 (FOLUR) that aims to engage the private sector as co-investors and governance partners. In LDFS, private sector actors were mainly service providers—input suppliers or contractors—with some emerging support to dairy value chains toward the end of the project. By contrast, the FOLUR project places private sector engagement at the core of its strategy to develop sustainable rice value chains and foster integrated landscape management. FOLUR stands out for its explicit private sector engagement strategy, detailed in its GEF CEO endorsement document. It recognizes that scaling up sustainable rice intensification and achieving long-term environmental goals hinges on the active participation of value chain actors and financial service providers. The private sector is broadly defined—from landowners, traders, millers, and retailers to financial institutions and ecotourism operators—but the emphasis lies on engaging downstream value chain actors and those facilitating investments.

Key mechanisms planned for private sector engagement include:

- Participation of private actors in Multi-Stakeholder Platforms (MSPs) in both Kilombero and Zanzibar for joint planning, dialogue, and investment mobilization.
- Direct collaboration with the Rice Council of Tanzania and SAGCOT Secretariat to identify investment opportunities and design public-private partnership agreements.
- Formal agreements between public, private, and civil society actors to coordinate and support sustainable rice development.
- Development of guidelines, standards, and training packages for public and private value chain actors, drawing on international best practices for sustainable rice production.
- Opportunities analyses to identify viable private sector investments in sustainable rice value chains, backed by clear business cases.
- Engagement in landscape restoration and formulation of fiscal or financial incentive schemes, co-designed with private actors through inclusive consultations.

The Kilombero landscape presents both opportunities and challenges. The rice value chain is fragmented, with weak coordination, poor infrastructure, and limited access to credit, insurance, and reliable input supply systems. While structures like the Tanzania Investment Center and SAGCOT offer platforms for engagement, a coherent framework for private sector collaboration is still being built. FOLUR's strategy aims to close these gaps by demonstrating the economic and environmental viability of more integrated, sustainable production systems.

The FAO FST project, still in its early design stage (GEF-8), plans to build on FOLUR's approach. It seeks to attract investors, particularly through collaboration with institutions like the commercial CRDB Bank, which already handles a US$ 70 million non-sovereign GCF loan, to support smart agricultural mechanization and climate-resilient agriculture. However, specific mechanisms are yet to be defined.

2.4 Value Addition

The programmatic approach was seen as timely, relevant, and beneficial in Tanzania, offering advantages in project scope, knowledge exchange, and technical support for planning. The GEF's food systems programmatic approach was widely viewed in Tanzania as timely and relevant, aligning with broader global trends that emphasize food systems transformation, such as the UN's 2021 Food Systems Summit. Tanzanian officials valued the programmatic approach for its broader focus on environmental sustainability and production systems. They noted its advantage in addressing watershed and landscape-level challenges while also incorporating income-generation elements.[4] Additionally, project members and government officials highlighted the benefits of participating in international knowledge-sharing platforms, such as the 2024 FOLUR global exchange meetings in Hanoi (Vietnam), where insights on rice systems from Asia were found particularly relevant and useful for the FOLUR and FST project that heavily focus on the rice sector.

The programmatic approach also provided a more structured and coherent planning process compared to stand-alone projects. Especially FOLUR and FST benefited from robust technical design support from global teams put together by Implementing Agencies and GEF, ensuring aligned project designs and improved synergy between programme country projects.

FAO's experience highlights both strengths and challenges of the programmatic approach, drawing on lessons from the Tanzania project in the GEF Drylands Impact Program implemented by FAO. While GEF stand-alone projects, such as several livestock projects FAO is working on, can offer a more targeted focus, programmatic approaches add value by adopting a broader landscape and value chain perspective. They

also foster knowledge exchange, enhance technical inputs, and strengthen collaboration between countries. FAO emphasized that insights gained through the FSIP network improved the FST project design and introduced valuable expertise on financial instruments through IFAD, reinforcing the value of the programmatic model.

The three projects demonstrated varying levels of engagement with global platforms and budget allocations, with FOLUR standing out for its detailed and structured approach. All three projects — LDFS, FOLUR, and FST —actively engaged or plan to engage with the global platforms. The FOLUR project stands out for its more detailed and deliberate approach to engaging with the global platform compared to the LDFS project. FOLUR outlines clear strategies for leveraging global and regional knowledge-sharing opportunities in a separate section of the Project Document that is also related to a distinct project output (output 4.1.3, p. 67-69). For example, the project plans to actively participate in the Global FOLUR Community of Practice and contribute to regional commodity platform gatherings, annual meetings, and training workshops. It also intends to share its planned policy reviews on improved land tenure and water governance, as well as on opportunities for sustainable rice value chain investments and landscape financing mechanisms in Tanzania. In contrast, the LDFS project expressed more general intentions to exchange knowledge and lessons with other country projects. The FST project, still at the concept stage, has expressed its intent to establish linkages with the FSIP global platform and other relevant networks once its design advances.

The LDFS project engaged actively in knowledge-sharing activities through the RFS hub-project. This included participating in annual workshops, virtual learning events, and contributing significantly to various RFS knowledge products, such as on sustainable agricultural practices and village land use planning. The project also collaborated with ICRAF, the coordinating agency of the RFS coordination project, to measure land degradation trends using the Land Degradation Surveillance Framework, providing valuable baseline data. However, due to expired funding, no follow-up assessments are currently planned under LDFS. Despite this, the project's participation in the hub project's knowledge-sharing activities definitely contributed to enhanced learning and insights according to project staff.

Budget allocations to participate in programmatic activities varied across the three projects. The LDFS project had no dedicated budget for engagement with the RFS hub-project, while the FOLUR project allocated funding for participation in regional learning events and exchange visits with other countries. The FST project intends to allocate funds to engage with the FSIP global platform once its design progresses.

2.5 Efficiency

Project delays and efficiency challenges were evident across the LDFS and FOLUR projects, influenced by a mix of administrative hurdles and the projects' complex, multi-sectoral and multi-stakeholder nature. While both projects faced delays, the extent to which these delays were directly linked to their ambitious design and integrated approach is difficult to determine.[5] The LDFS project experienced moderate delays in becoming effective, but was delayed more strongly during its early stages of implementation. These delays were partly linked to uncertainties surrounding the IFAD baseline project, which affected implementation arrangements, further delays came from the project's multi-sectoral nature. Negotiating and formalizing agreements (MoUs) with multiple ministries, government agencies, and districts required considerable time, reflecting the complexity of coordinating across diverse stakeholders.

The FOLUR project faced significant delays, requiring nearly five years to finalize its design and an additional two years to become effective and fully operational. Several factors contributed to this:

- The shift in project focus from a primarily forest-related intervention in its early conception (prior to becoming a FOLUR child project) to a broader integrated landscape approach in FOLUR required time and added complexity.
- The project's ambitious, integrated, and multi-stakeholder approach generated extensive discussions among stakeholders and government authorities, particularly regarding its main objectives and focus, implementation arrangements and budget concerns.
- Administrative delays were also significant, including slow communication between ministries, protracted processes for establishing project accounts, and finance transfer delays between the central government and local authorities. Coordination challenges between Tanzanian mainland and Zanzibar Government authorities further complicated matters.

While the programmatic and integrated nature of the projects undoubtedly added complexity and extended timelines, the precise extent of their impact is difficult to isolate from more routine administrative and bureaucratic delays, plus the effects of the COVID-19 pandemic. Project insiders noted that persistent uncertainties about implementation arrangements and repeated demands for clarification further contributed to the slow start. Despite these challenges, the participatory nature of FOLUR's design and the efforts to align multiple stakeholders were seen as crucial for ensuring future buy-in and effective execution.

3. Summary of findings and emerging lessons

Lesson 1 – Aligning agricultural and environmental objectives requires incentives, dialogue, and enforcement

While all three GEF projects align well with Tanzania's national development goals, achieving coherence between agricultural production, food sovereignty and export goals, and environmental sustainability remains an ongoing challenge. Government strategies strongly prioritize expanding food production and exports, while environmental objectives—although being strongly championed by GEF-executing agencies within the Government (VPO and MNRT)—receive less operational support. Addressing this trade-off requires effective negotiation, clear incentives, and robust enforcement mechanisms. The later projects, especially FOLUR, place greater emphasis on multistakeholder platforms (MSPs) as spaces for dialogue, joint planning, and policy alignment. However, success hinges on these platforms being more than consultative forums; they must enable real accountability, attract public and private investment, and generate sustained buy-in from influential actors like the Ministries of Agriculture and Livestock.

Lesson 2 – Clarifying the catalytic role of GEF projects Is crucial for realistic scaling and transformational change

GEF food systems projects are expected to catalyze transformational change, yet their limited budgets and broad ambitions require sharper clarity on how and where this catalytic effect occurs. LDFS, FOLUR, and FST all apply extensive systems thinking, but FOLUR and FST stand out for their more sophisticated programmatic design. Even so, they must better articulate and monitor with clear indicators how high-level plans translate into action at field and results at institutional levels, such as through MSPs. In practice, these projects function as pilots that strongly rely on co-financing, private sector investment, and policy uptake to deliver results at scale. The central question remains: how to bridge the gap between national policy ambitions and community-level adoption, especially given slow and resource-intensive behavior change processes. Moving beyond box-ticking, projects must focus their M&E and KM systems

on tracking real system shifts, including how for instance MSPs contribute, and scalable, self-sustaining models.

Lesson 3 – Village land use planning Is foundational but must be embedded in broader landscape-level strategies

Participatory Village Land Use Planning (VLUP) has proven to be a useful and legitimate tool for clarifying land tenure, reducing local conflicts, and raising awareness of conservation needs. LDFS in particular made notable progress in advancing land use planning to later stages involving CCRO issuance and by-laws for compliance. However, VLUPs are inherently limited in spatial scope and often fail to address inter-village dynamics, shared ecosystems, or landscape-level pressures, for instance from pastoral migrants. Attempts to coordinate across villages have largely stalled due to institutional fragmentation, limited incentives for villagers, and capacity gaps. FOLUR and FST recognize these limitations and now place greater emphasis on landscape governance, integrated land and water planning, and linking VLUPs with higher-level strategies.

Lesson 4 – Regenerative and climate-smart agriculture requires long-term support and market pull

All projects sought or seek to promote regenerative and climate-smart agricultural practices through demonstrations and training. While localized success was reported in the completed LDFS project — especially in maize and cassava yield improvements—broad adoption remains slow and constrained by labor intensity, financial resource needs, and weak extension systems. Integrating such practices into the mandates of Ministries of Agriculture and Livestock, and ensuring they are backed by political will, policy reform, and market demand, is essential. GEF projects can contribute through piloting and learning, but lasting transformation requires coordinated investment in input supply systems, extension services, market development, and incentive structures.

Lesson 5 – Project efficiency is undermined by complex designs and administrative processes

Delays in project effectiveness and implementation have been a recurring issue, especially for LDFS and FOLUR. These stem from a mix of administrative hurdles, lengthy design processes, and the inherent complexity of multi-sectoral, multi-level project structures. In several cases, implementation teams struggled with unclear mandates, overlapping responsibilities, and uncertainties about what was expected on the ground. While programmatic designs offer opportunities for alignment and knowledge exchange, they require clearer prioritization and division of labor—especially when working across ecologies, food systems, and institutional settings. As a senior project manager observed, the challenge lies in identifying critical, value-adding entry points without overextending or losing sight of practical delivery.

Lesson 6 – Private sector engagement has evolved significantly but needs structured implementation support

Private sector roles have evolved from peripheral (as in LDFS) to strategic partners in FOLUR and FST, where they are expected to co-invest and contribute to sustainable value chain development and mobilization of finance. FOLUR has made notable progress, with a dedicated private sector engagement strategy, planned activities such as business opportunity analyses in rice, information exchange and training for all value chain actors, and collaboration with the Rice Council of Tanzania and SAGCOT, as the main promoting organization for the private sector in key FOLUR landscapes. Still, challenges remain in turning these plans into operational partnerships, especially in fragmented value chains and underdeveloped rural financial markets. Future success will depend on aligning commercial incentives with sustainability objectives, and delivering tangible benefits to private actors willing to take risks.

Annex 1: List of Interviewees

Organization	Sample size
Government High Level	
Vice-President's Office (VPO)	2
National Land Use Planning Commission	3
LDFS	
LDFS Project Coordination Unit (VPO)	3
LDFS IFAD Country Office	3
Kondoa District LDFS Execution	5
Kondoa District Beneficiaries and Frontline Workers	18
FOLUR	
Ministry of Natural Resources and Tourism (MNRT)	3
Kilomberi District FOLUR Execution	7
Kilomberi District Beneficiaries and Frontline Workers	5
FOLUR WWF-US Project Focal Point	1
FSIP	
VPO and FAO Country Office	2
Total	29

Annex 2: Project Sites Visited

Below are descriptions of project site visits conducted during a fieldwork mission from Feb. 10 to Feb. 14, 2025.

Site Visit #1			
Site Name	Haubi and Mafai villages	**Date of Site Visit**	Feb. 11, 2025
Region	Kondoa District, Tanzania	**Geo-Coordinates**	-4.834628, 35.985282

RFS LDFS project - Observations from the GEF evaluation team's field visit to Kondoa District

During the first field visit of the mission, the team visited the district headquarters of the RFS LDFS project in Kondoa (Bukulu office) and met with district representatives, followed by meetings with farmers and other project beneficiaries in the two neighbouring villages of Mafai and Haubi that are supported by LDFS in this district. The villages traditionally grow maize, sunflowers and other crops. The site has a sizeable village forest reserve on village lands and is surrounded by national forests (please see maps, Figure Annex 1-3).

The two villages visited face significant environmental and socio-economic challenges. Severe land degradation, compounded by soil erosion from occasional heavy rains, has impacted agricultural productivity. Permanent cultivation practices, combined with inadequate soil conservation measures such as ridging, have further exacerbated erosion risks. The villages comprise approximately 1,400 households, with an average household size of 5 to 6 members, highlighting the need for sustainable agricultural practices and natural resource management to support the community's long-term resilience and food security.

The field visit to Kondoa focused on four key project aspects: enhanced sustainable agricultural productivity, improved livestock production as an alternative income generating activity, village land use planning, and forest protection/restoration. The following summarizes key observations and insights from the visit.

Two improved agricultural technologies were observed: *Mbegu Tisa* and *Jembe la Mzambia* for maize production. Both offered better crop performance than traditional practices, yet each had distinct trade-offs. *Mbegu Tisa* delivered higher yields but required more labor and manure for its elaborate, multi-year soil preparation and planting in pods, limiting its use on larger plots and by families with less access to labor. *Jembe la Mzambia* was less demanding and is mostly used in drier areas. The technique mostly focuses on deeper tillage and mulching for soil and nutrient improvements and water retention as well as planting in rows, but produced lower yields. Both methods relied heavily on manure, underscoring the need for integrated livestock farming to sustain their application. Despite improved productivity, the labor intensity and resource demands restricted widespread adoption. In addition to these methods, the team learnt that many farmers had adopted crop diversification strategies to reduce reliance on maize. Some introduced drought-tolerant crops to mitigate climate risks. Others planted napier and elephant grass in between fields to reduce erosion and improve feed production for their animals.

Dairy production emerged as a viable and new income source with project support, reducing former reliance on unsustainable charcoal production. The initial distribution of 24 cows has grown to a herd of approximately 80 animals, indicating positive adoption rates. The initiative provided families with both milk for home consumption and surplus milk for sale. However, milk production in the village remains insufficient to fully utilize the milk collection center's 1,000-liter capacity, limiting broader market expansion. The project is currently looking for ways to put this project investment to work, among others through linking up with an NGO to facilitate sales outside of the village. Farmers also reported challenges

with feed and water access for cattle and a lack of veterinary services, highlighting the need for improved support structures such as para-veterinary training and additional pasture farms to ensure long-term sustainability. The project supported the installation of boreholes and water tanks to improve the village's water supply. However, the handover to the Rural Water Supply and Sanitation Agency (RUWASA) needs to be expedited to enable the installation of pipelines that will deliver water directly to dairy livestock keepers, reducing the current burden of transporting water over long distances.

The village land use planning process facilitated improved land demarcation and issuance of land titles (CCRO), yet it brought limited change to actual land use practices due to minimal investment in land improvements. The village land use management committee (VLUM) play an important role in enforcing bylaws, establishing penalties for unauthorized trespassers and protecting designated land through patrols and other ways. While some villages successfully adopted new land use planning strategies, others resisted due to concerns over land reallocation during the process. Land demarcation has improved legal clarity, particularly for forest reserves on village lands, but the resulting land use maps show minimal differences from the original plans (Figures Annex 2 and 3). This is largely because, in the absence of significant pending infrastructure projects or compensation for changes in land use, there is limited motivation among villagers and planners to introduce adjustments. The absence of printed maps displaying land use zones – apart from the booklet available at the village center – limited community members' understanding of the designated zones. This lack of visual guidance may affect awareness and compliance with the land use plan. Moreover, the project was unable to establish inter-village land use committees as planned to enhance natural resource management across village boundaries at a broader landscape level. This was due to limited interest among villagers and conflicting views between different communities.

Forest protection efforts included active community involvement through land use planning, by-law enforcement, and alternative income-generating activities such as beekeeping. The beekeeping group effectively leveraged modern hives, resulting in improved honey yields and access to markets in Arusha and beyond. Forest restoration efforts focused on erosion control using gabions; however, some structures and biological measures were observed to be reaching their capacity already after one year, raising concerns about long-term effectiveness and maintenance.

Key Observations and Conclusions

The field visit highlighted several important points:

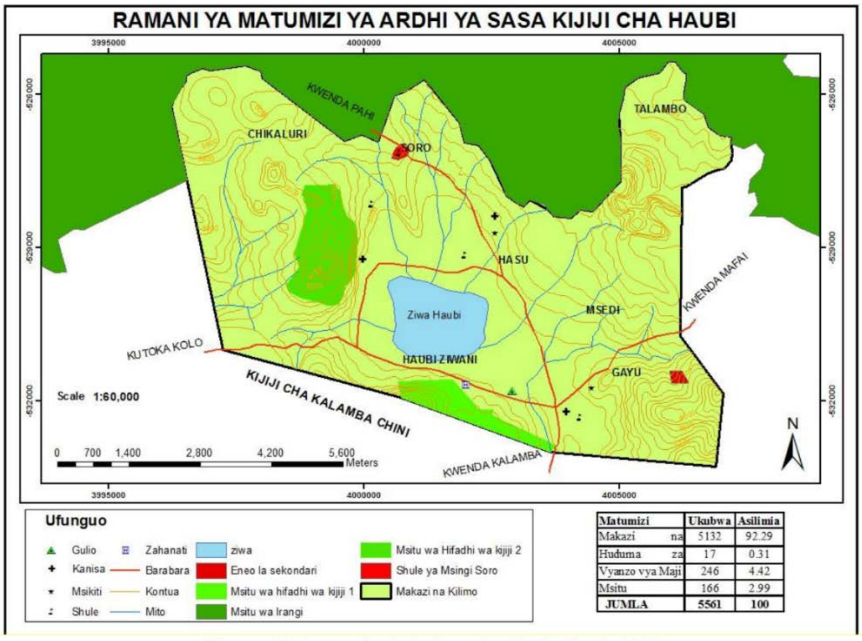
- **Land Use Planning as a Foundation:** While land use planning provided a strong foundation for improved resource management, its impact on driving new land use practices remains limited without additional investments in infrastructure and services.
- **Integration of Livestock and Crop Production:** The interdependence between improved crop methods and manure supply demonstrated the importance of integrating livestock and agriculture for sustainable productivity gains.
- **Dairy Production Potential:** While the dairy initiative showed promising growth, unresolved issues such as water scarcity, limited veterinary services, and underutilized milk collection facilities require attention to unlock its full potential.
- **Forest Protection Through Livelihoods:** The combination of by-law enforcement and alternative livelihoods such as beekeeping proved effective in promoting environmental conservation. However, ongoing maintenance of erosion control measures will require improved funding and oversight.

Figure Annex 1 – Map of Mafai and Haubi villages in Kondoa district

Source: Google maps

Figure Annex 2 – Existing land use prior to Village Land Use Planning Haubi village

Ramani 12: Matumizi ya sasa ya ardhi katika kijiji cha Haubi

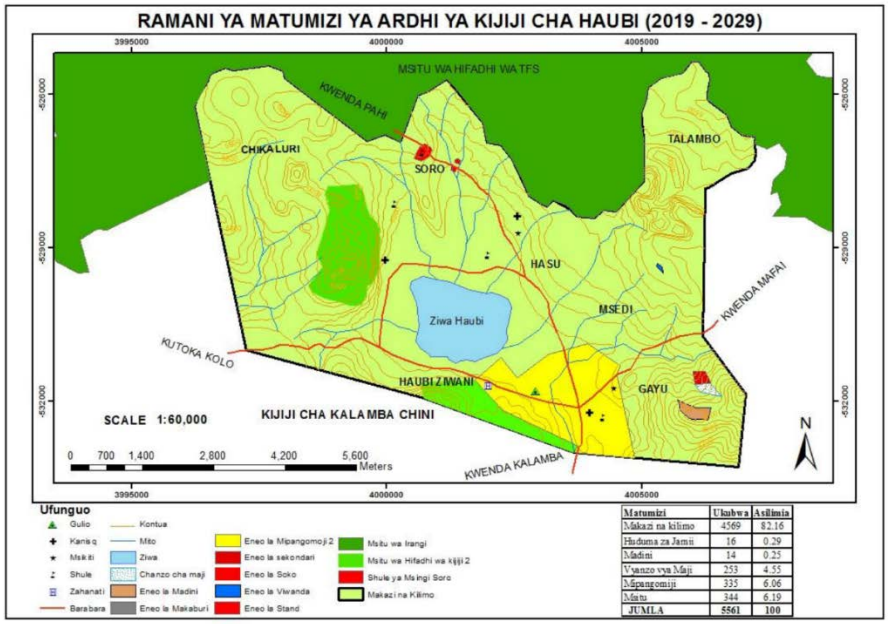


Matumizi		Ukubwa	Asilimia
Makazi	na	5132	92.29
Huduma	za	17	0.31
Vyanzo vya Maji		246	4.42
Msitu		166	2.99
JUMLA		**5561**	**100**

Chanzo: Tathmini shirikishi kijiji cha Haubi Aprili, 2019.

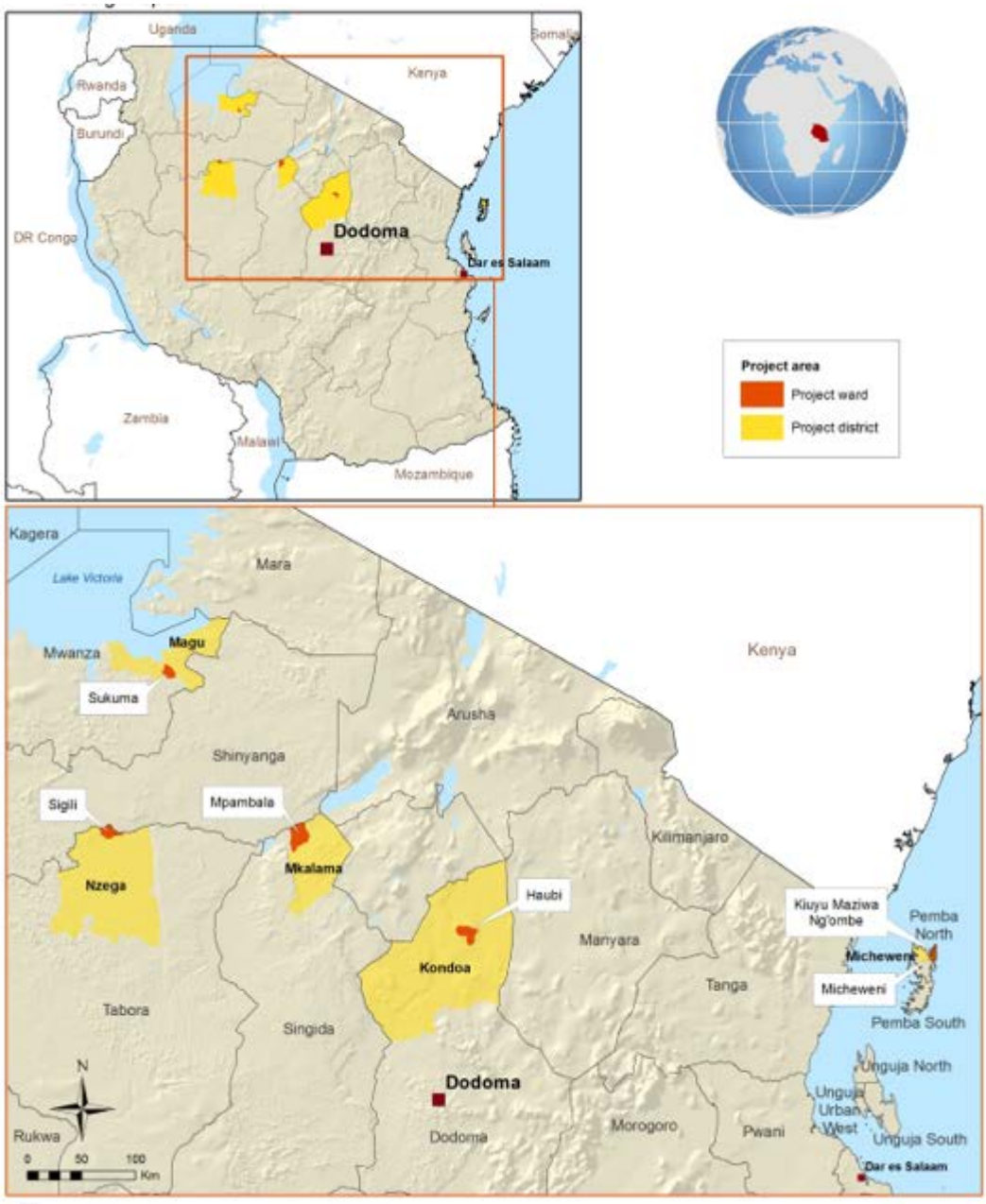
Figure Annex 3 – Land use after Village Land Use Planning Haubi village

Ramani 13: Mpango wa Matumizi bora ya ardhi 2019 – 2029



Chanzo: Taathmini shirikishi Kijiji cha Haubi April, 2019.

Figure Annex 4 – Map of LDFS project districts and project wards



Source: FDFS PDR

Site Visit #2			
Site Name	Ikule village	**Date of Site Visit**	Feb. 13, 2025
Region	Mlimba District, Kilombero	**Geo-Coordinates**	-8.412403, 36.012038

FOLUR project - Observations from the GEF evaluation team's field visit to Mlimba District and Ikule village (Kilombero landscape)

Mlimba District is located within the Kilombero Valley, a fertile area historically used for fishing but increasingly targeted for major investments in rice production and other agricultural activities. The area has seen an influx of settlers over recent years, contributing to rising land pressure. The district is characterized by environmental challenges, including encroachment into forest reserves and disruptions to wildlife movement corridors.

The FOLUR Kilombero landscape project operates in this area, focusing on improving agricultural productivity while promoting environmental sustainability. The project office is still under construction, and project implementation is gradually being rolled out. Key activities are coordinated through the district council, with funds channeled via the council and other implementing stakeholders.

The field visit included discussions at the district headquarters, a visit to a 200-hectare traditional irrigation scheme, and an assessment of a village forest reserve. During the visit, stakeholders described challenges such as limited land use planning across village boundaries and the need for improved environmental protection strategies.

Multi-Stakeholder Platforms and Land Use Planning

The FOLUR project aims to foster collaboration and coordination through Multi-Stakeholder Platforms (MSPs). While an MSP has been formed in Mlimba District, it has yet to convene for its first meeting. Once fully operational, the MSP will provide a platform to align project activities, encourage dialogue, and ensure shared responsibility among stakeholders. Participants will sign a compact to formalize their engagement and accountability within the platform.

The project's land use planning approach is primarily village-based, in accordance with Tanzania's Village Land Act. While this system provides villages with autonomy over land management, it also limits the scope for coordinated planning across multiple villages — a key challenge in managing large landscapes like Kilombero Valley. Organizations such as IUCN and AWF have advocated for broader landscape planning, but implementation has faced difficulties. Limited land evaluation data and weak resource assessment frameworks further constrain evidence-based decision-making, making it difficult to align land management with environmental protection goals.

The MSP is expected to provide a space for dialogue on improving these issues by promoting collaboration among government entities, private sector actors, and civil society organizations. The platform could also address practical issues such as improving communication between villages and district authorities to strengthen local governance structures.

Sustainable Rice Intensification and Environmental Considerations

The field visit highlighted efforts to improve rice productivity through Sustainable Rice Intensification (SRI). Farmers in the area have begun adopting improved practices, including transplanting seedlings at optimal spacing rather than broadcasting seeds, and using improved rice varieties and fertilizers. These changes have resulted in a substantial increase in yields — rising from 5-8 bags per acre to 15-18 bags in well-managed fields. This productivity boost has encouraged more farmers to adopt improved practices. The 200-hectare irrigation scheme visited during the field trip is fully owned and managed by farmers, with no government involvement. While the irrigation system supports productivity, expansion of irrigation infrastructure is seen as essential to improving water control, ensuring resilience against flooding, and sustaining year-round production.

Farmers currently rely heavily on self-financing or informal family support to access essential inputs. Some additional funding is obtained through value chain actors, such as warehouse and mill owners, who may advance resources in exchange for future produce sales. However, access to formal financial services remains limited, posing challenges for sustained investment in improved practices. Environmental concerns linked to rice cultivation include pesticide and herbicide use, with poor disposal practices posing risks to water sources. Soil degradation, particularly rising salinity levels, is also a concern in some areas. Greater awareness of environmentally sustainable farming practices is required to address these risks and ensure long-term productivity.

Beyond rice, stakeholders acknowledged the potential for crop diversification to improve resilience. Crops such as cocoa and bananas are being explored to enhance incomes and reduce dependency on a single commodity. However, supporting farmers to expand into these alternative value chains will require improved market linkages and appropriate extension services.

Forest Protection and Restoration

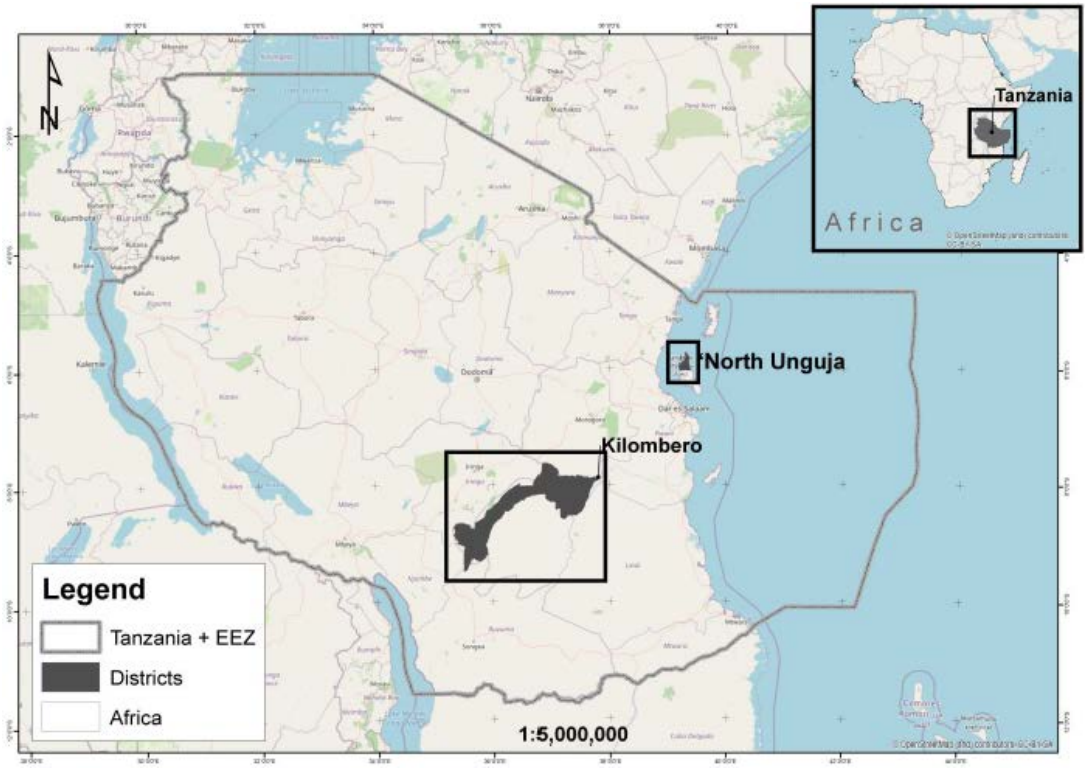
Forest protection and restoration efforts are important in the Kilombero Valley due to the ongoing threat of deforestation and encroachment. The village visited had designated a 783-hectare forest reserve in 2005, with the community believing that preserving forests was critical for attracting rainfall and maintaining environmental stability. The reserve is managed by a Village Natural Resource Management (VNRM) committee, which enforces rules on allowable activities such as beekeeping, collecting fallen firewood, and harvesting traditional medicines. While the forest reserve remains largely intact, the committee faces challenges in preventing encroachment, particularly from settlers seeking land for cultivation. Efforts are underway to demarcate the forest boundaries using beacons to reinforce land protection measures. Beyond this specific village forest reserve, it was reported that over 20 village forest areas have been established across the Kilombero Valley, demonstrating broader community interest in conservation. However, long-term sustainability remains reliant on improved institutional support, enforcement mechanisms, and resources for forest management.

Conclusions

The visit underscored several key findings.

- Multi-Stakeholder Platforms are considered to have strong potential to improve coordination among project actors but require prompt activation which has not happened yet.
- Improved rice productivity through sustainable practices and irrigation investments is promising, though scaling this will require addressing financial constraints and environmental risks.
- Diversification into alternative crops like cocoa and banana could enhance resilience if supported with appropriate services.
- Lastly, strengthening forest protection mechanisms will be crucial for balancing environmental conservation with agricultural expansion in the Kilombero Valley.

Figure Annex 5 –Map of FOLUR project landscapes (Kilombero and North Unguja)



Source: FOLUR ProDoc p. 12

Figure Annex – Map of Ikule village in Mlimba district (Kilombero landscape)

Source: Google maps

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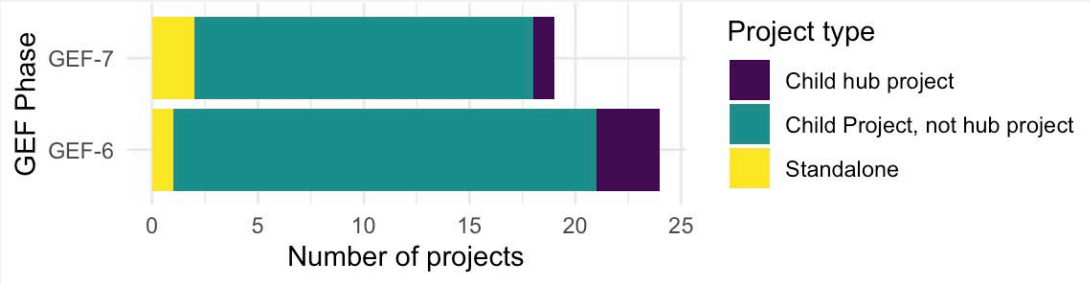
Part 5
Implementation Document Review Analysis

The analysis covered a total of 43 projects, comprising 24 GEF-6 and 19 GEF-7 projects. Of these, 3 were stand-alone projects and 40 were child projects.

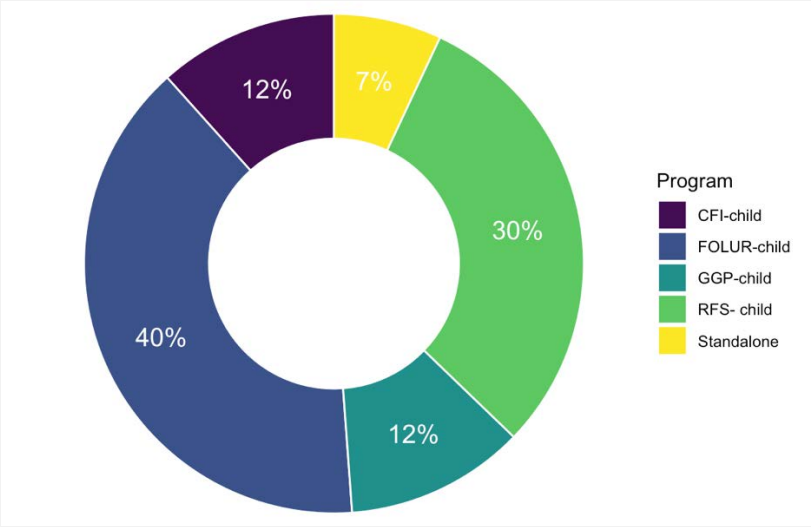
Figure 1 Project types by GEF Phase



Source: IEO analysis

Among the 43 projects analyzed, 17 (about 40 percent) were FOLUR child projects, 13 (30 percent) were RFS child projects, 5 (12 percent) were GGP child projects, 5 (12 percent) were CFI child projects, and 3 (7 percent) were stand-alone projects.

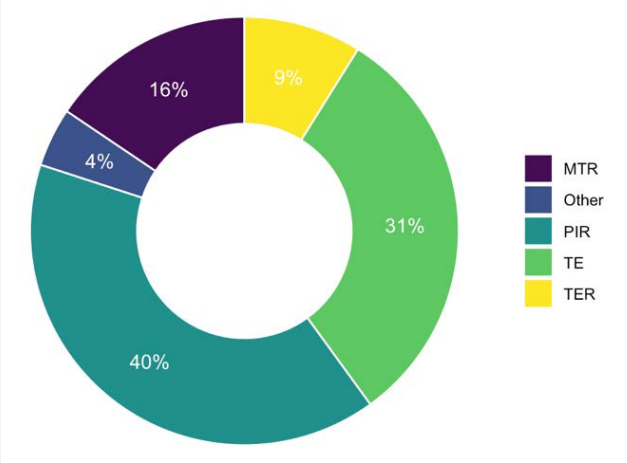
Figure 2 Project types by IP



Source: IEO analysis

Evidence was drawn from multiple sources, notably 18 Project Implementation Reports (PIRs), which represented the most frequently used source. Additional sources included 14 Terminal Evaluation (TE) reports, 7 Midterm Reviews (MTRs), and 4 Terminal Evaluation Reviews (TERs), among others.

Figure 3 Sources of evidence

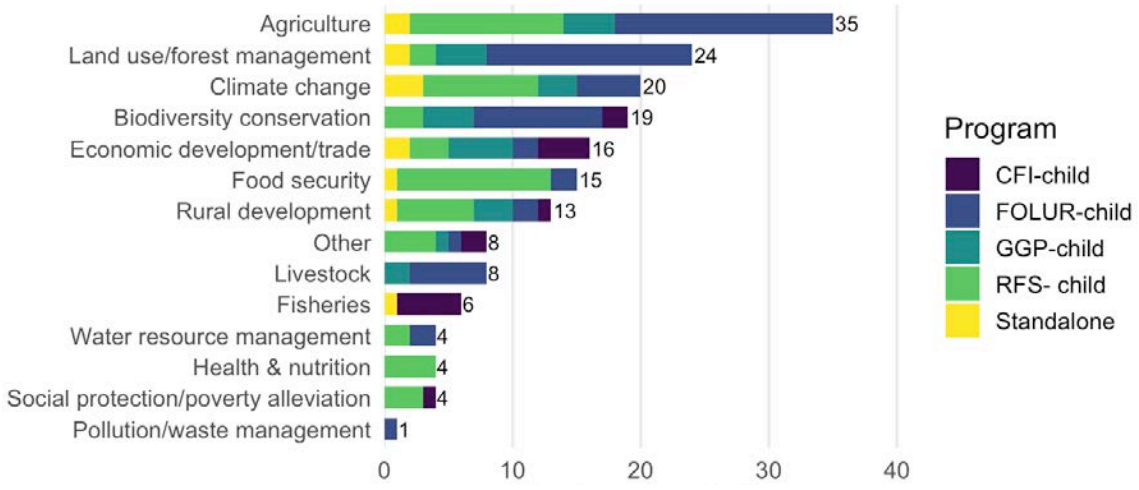


Source: IEO analysis

Relevance to national policy, priorities, and needs

Across the 43 projects analyzed, the sectors most frequently assessed as relevant to countries' policies, programs, priorities, and needs were agriculture (35 projects, or 81 percent), **land use and forest management** (24 projects, or 56 percent), **and climate change** (20 projects, or 47 percent). Other sectors with notable relevance included biodiversity conservation (19 projects, or 44%) and economic development and trade (16 projects, or 37%).

Figure 4 Project relevance to key sectors (# of projects)

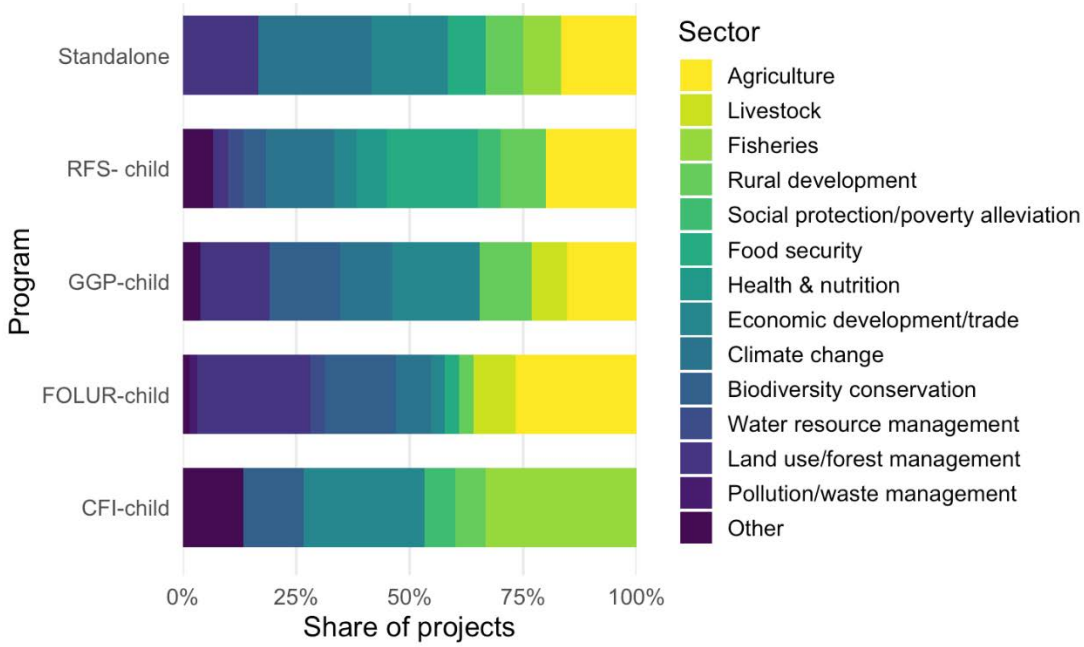


Source: IEO analysis (Q6)

Sectoral relevance also varied by program. For example, FOLUR child projects emphasized agriculture (17 projects) and land use (16 projects). CFI projects mostly highlighted policy

relevance in fisheries (5 projects) and economic development (4 projects). Food security relevance was prominent in RFS child projects, along with agriculture.

Figure 5 Sectoral relevance across programs (% of mentions)



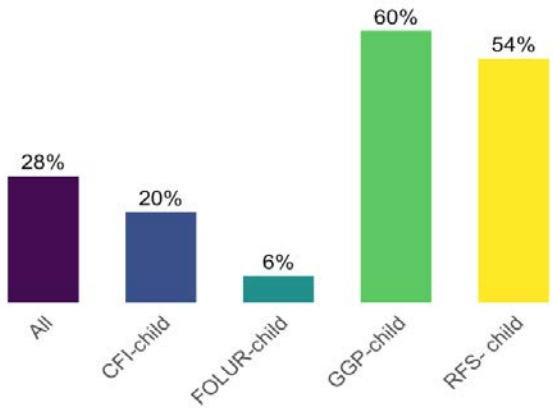
Source: IEO analysis (Q6)

Knowledge sharing

Out of the 43 projects, 12 (about 28 percent) reported knowledge sharing or joint activities related to food systems with other donor-funded projects in the country. RFS child projects and GGP child projects stood out, with 54 percent and 60 percent respectively reporting such activities. In contrast, FOLUR and CFI child projects had very limited reporting, with only one project each (6 percent and 20 percent, respectively). Stand-alone projects reported no such activities. **Among the 12 projects that did report knowledge sharing, all indicated that these efforts occurred at multiple geographic levels** - national, intermediate (state or regional), district or community level, and across levels.

Notably, **none of the 43 projects reported any conflicts or duplications with other donor initiatives in the country**.

Figure 6 FS-related knowledge sharing or joint activities, with other donor funded projects in the country (% of projects)



Source: IEO analysis (Q10, Q11, Q12)

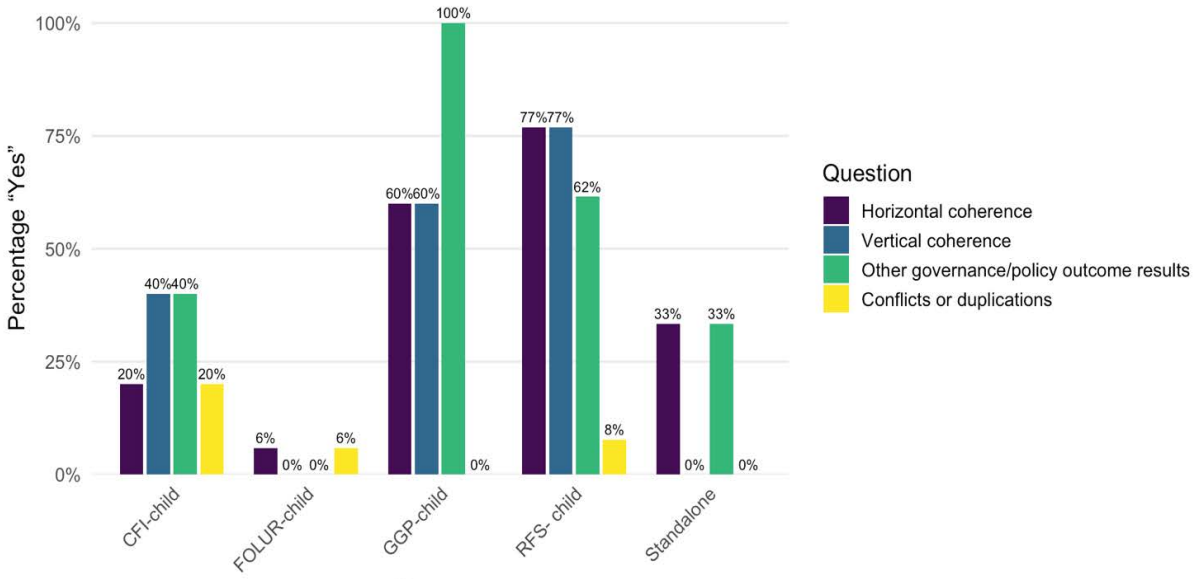
Policy coherence

Out of the 43 projects analyzed, 16 (about 37 percent) reported results related to **horizontal policy coherence,** 15 (35 percent) to **vertical coherence,** and 16 (37 percent) to **other governance or policy outcomes,** such as multi-stakeholder platforms.

Policy coherence outcomes varied across programs. RFS child projects consistently reported the highest levels of coherence, with 77 percent of projects indicating both horizontal and vertical coherence results. GGP child projects also demonstrated strong coherence, with 60 percent reporting both horizontal and vertical coherence, and all (100 percent) noting other policy or governance outcomes. In contrast, FOLUR child projects had low coherence reporting, with only 6% indicating horizontal and none reporting vertical or other governance outcomes. Stand-alone and CFI child projects showed more mixed patterns, with moderate levels of horizontal and other governance coherence, but limited vertical alignment.

Finally, **conflicts or duplications with initiatives supported by other donors** in the country were reported in 3 projects (7 percent of total), one each in CFI, FOLUR and RFS.

Figure 7 Policy coherence results

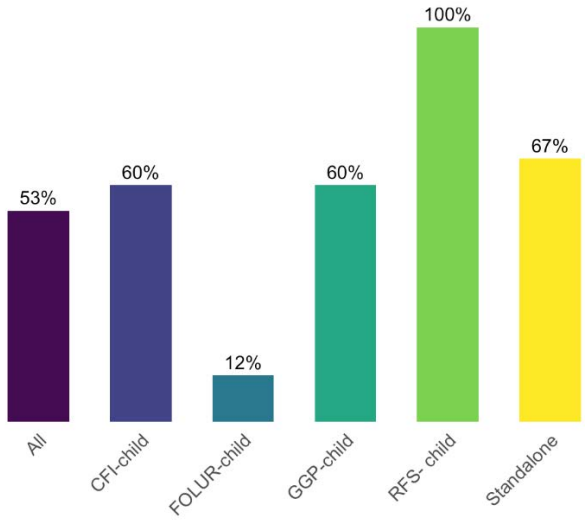


Source: IEO analysis (Q15, Q17, Q19, Q21)

Gender

Out of the 43 projects analyzed, 23 projects (53 percent) reported at least one **outcome related to gender**. RFS child projects performed particularly well, with all 13 projects (100 percent) reporting gender outcomes. High rates were also observed in GGP and CFI child projects (60 percent each). In contrast, only 12 percent of reviewed FOLUR child projects reported gender outcomes.

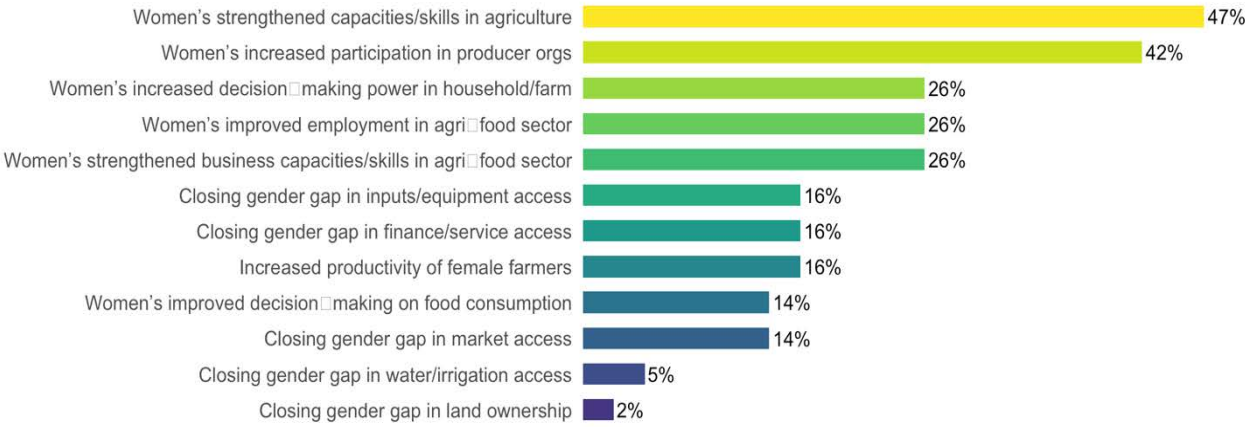
Figure 8 Gender outcomes (% of projects)



Source: IEO analysis (Q40)

The most commonly reported gender-related outcomes were **women's strengthened capacities and skills in agriculture** (47 percent) and **increased participation in producer organizations** (42 percent). Other frequently cited outcomes included **enhanced decision-making power within the household or on the farm**, **improved employment in the agrifood sector**, and **strengthened business skills or capacities in agrifood value chains**, each reported by 26% of projects.

Figure 9 Commonly reported gender outcomes (% of projects)

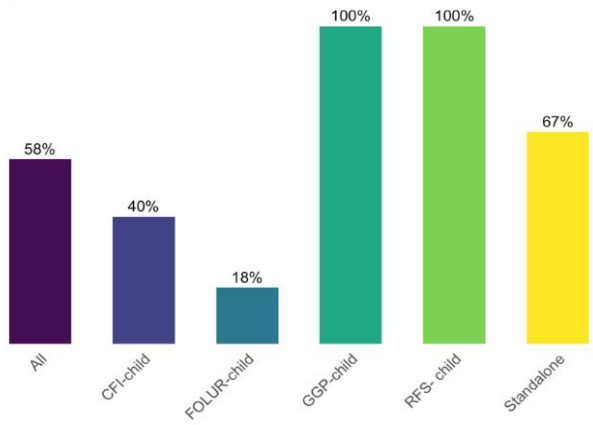


Source: IEO analysis (Q40)

Inclusion

Out of the 43 projects analyzed, 25 (58 percent) reported at least one **outcome related to inclusion**. RFS and GGP child projects performed particularly well, with all of their projects (100 percent) reporting inclusion outcomes. In contrast, only 40 percent of reviewed CFI child projects and 18 percent of reviewed FOLUR child projects reported inclusion outcomes.

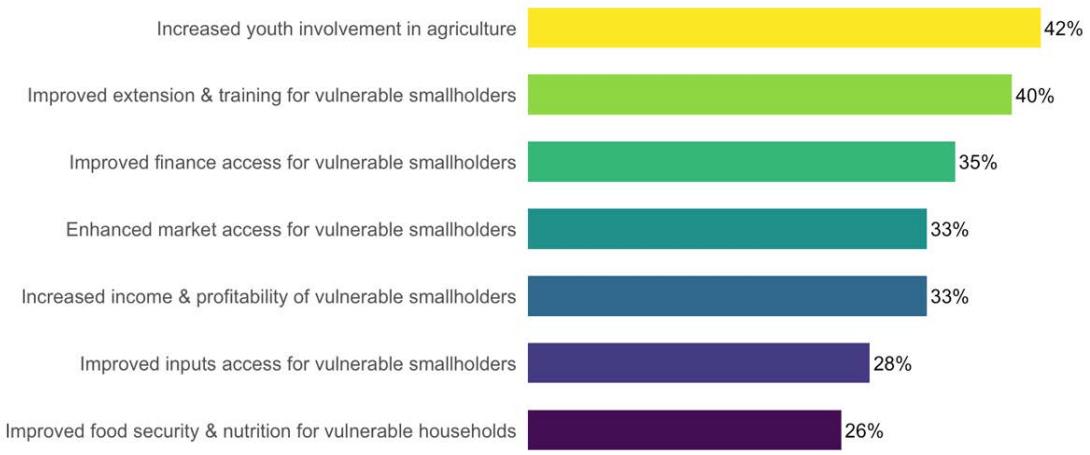
Figure 10 Inclusion outcomes (% of projects)



Source: IEO analysis (Q39)

The most commonly reported inclusion-related outcomes were **increased youth involvement in agriculture** (42 percent) and **improved extension and training for vulnerable** smallholders (40 percent). Other frequently cited inclusion outcomes for vulnerable smallholders included improved finance access (35 percent), enhanced market access (33 percent), and increased income and profitability (33 percent).

Figure 11 Commonly reported inclusion outcomes (% of projects)



Source: IEO analysis (Q39)

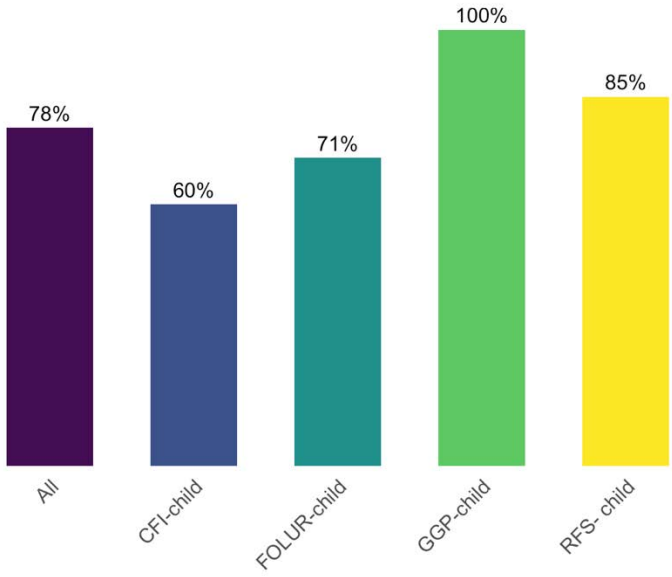
Use of traditional knowledge

Out of the 43 projects, 4 (9 percent) reported using traditional knowledge (TK). Of the 4 projects, 3 were RFS and 1 was FOLUR.

Alignment of child projects result framework with the global program

Among the child projects, about 78 percent reportedly aligned their project-level results framework with the global program. The percentage is the highest among GGP child projects (100 percent) and RFS child projects (85 percent).

Figure 12 Alignment of CP results framework with their global program (% of CPs)

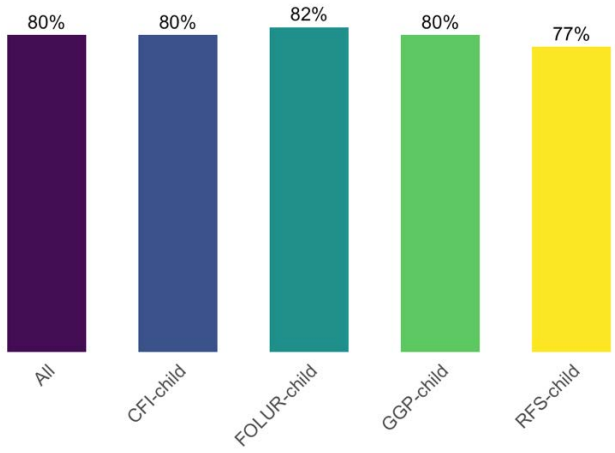


Source: IEO analysis (Q36)

Engagement with the hub project

Among the child projects, about 80 percent reportedly engaged with their hub project. The percentage is slightly higher among FOLUR child projects (82 percent). About 80 percent of CFI and GGP child projects reported some type of engagement with their hub project.

Figure 13 Engagement with the hub project by program (% of CPs)

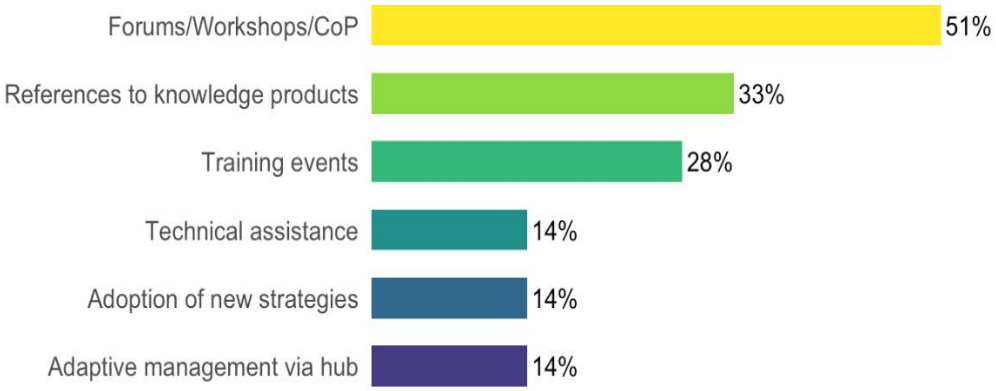


Source: IEO analysis (Q50)

Across the child projects, engagement with the project hub most often took the form of participation in global or regional forums, meetings, or related events. Over half (about 51 percent) of sampled CPs sent staff to global program-related forums, meetings, or workshops to share results and bring back lessons. These include Conference of Parties (CoP) meetings (ID 9133), the Global Landscape Forum, FOLUR African Dialogues (ID 10232), and the Mining Indaba conference (ID 10348).

Knowledge exchange was the next most common modality (33 percent). CPs drew on dashboards, white papers, toolkits and media libraries developed by hub partners. **Training events** also featured in about 28 percent of CPs. These range from formal workshops to sector-specific webinars, and from the roll-outs of monitoring tools to grassroots radio trainings. In Indonesia, FOLUR was actively involved in the CP representation at a global gender webinar (ID 10238).

Figure 14 Types of CP engagement with the hub project (% of CPs)

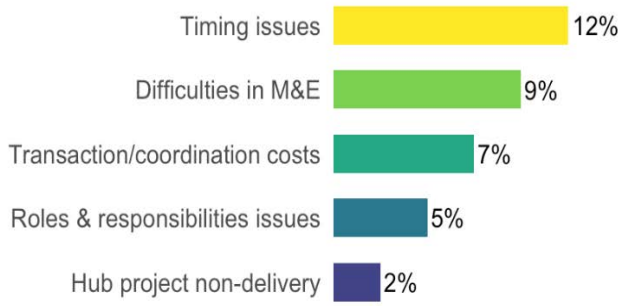


Source: IEO analysis (Q50, Q51)

Challenges in engagement with hub projects

The review highlights several challenges in CPs' engagement with hub projects, though evidence is limited. Commonly reported issues relate to timing, monitoring and evaluation (M&E) difficulties, and transaction and coordination costs. However, many of the source documents are early-stage Project Implementation Reports (PIR), where such challenges may not yet be fully visible or documented. **Delays in implementation were the most frequently cited challenge** (12 percent of sampled CPs)**.** Several child projects experienced significant delays due to slow team mobilization, postponed baseline surveys, or adjustments due to COVID-19, often resulting in project extensions. **M&E challenges also featured** in 9 percent of sampled CPs. In some cases, indicators were poorly defined or misaligned with the Theory of Change. **Transaction and coordination costs** further complicated implementation in some cases (7 percent of reviewed CPs). Multiple implementing agencies, reliance on global hub inputs, and complex governance structures often slowed decision-making and led to coordination fatigue.

Figure 15 Common challenges in engaging with the hub project (% of CPs)

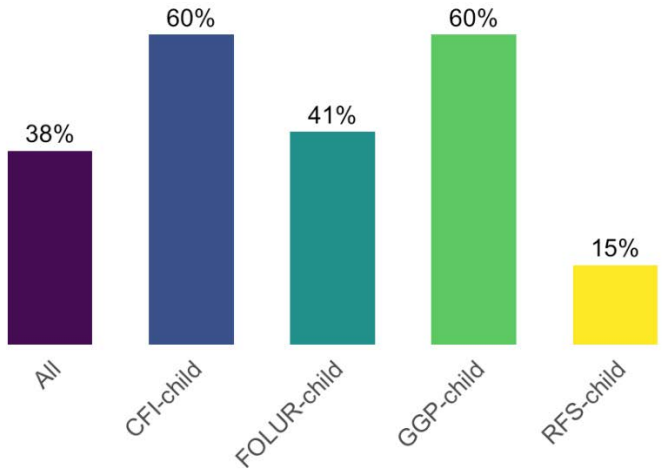


Source: IEO analysis (Q54, Q55)

Interaction between child projects

Among the child projects, about 38 percent reported engagement with other country CPs that are part of the same integrated program or impact program. The figure is the highest for CFI child projects and GGP child projects (about 60 percent in each).

Figure 16 Engagement with other country child projects (% of CPs)



Source: IEO analysis (Q52, Q53)

Where CP-to-CP engagement happened, it typically took the form of international meetings and dialogues, South-South exchanges and peer visits, or knowledge-sharing repositories. FOLUR CPs joined the Global Landscape Forum and FOLUR African Regional Dialogue in Nairobi (ID 10232), while Paraguay's FOLUR CP attended annual "Global Platform" meetings each year (ID 10464). Within the Food Security IAP, some CPs organized in-region exchanges (Kenya with Uganda, Ghana with Nigeria) and passed on their own small follow-up grants (ID 9140). Some

CPs built national exchange networks integrated with the global program platform (ID 10265), or shared gender data via a central "dashboard" under the umbrella project (ID 9143).

Lessons learned

Mid-term reviews (MTR) amd terminal evaluations (TE) offer useful lessons for designing or implementing future food systems interventions. Common themes include strong governance and coordination systems and stakeholder engagement practices. Other insights relate to the value of dedicated KM strategies, private sector partnerships, and tailored design.

Based on the evidence, food-systems interventions succeed when they pair strong governance with locally grounded practices. They include clearly defined roles, formal partnership protocols (MoUs), and dedicated program management units (PMU) to align hubs and child projects (ID 9140). In Eswatini, the CSARL project demonstrated how investing early in robust baseline data and gender-sensitive indicators can foster accountability (ID 9133). On the technical side, the Neer Tamba project in Burkina Faso highlights how securing land tenure and the provision of bundled "investment kits" (irrigation, storage, training) should be considered in future interventions (ID 9141). Project 9696 used blended finance incentives to lock in private-sector co-funding for sustainable soy and beef value chains.

Table 1 Selected lessons from

Theme	# of projects	Key insights
Coordination and governance	16	• **Early alignment** between hubs and child projects (define roles, set up MoUs, dedicate a full-time PMU, ID 9140) • **Clear intervention scope** (narrowly defined areas, ID 9140) • **Formal partnership mechanisms** (shared protocols, data-sharing frameworks) to avoid duplication and fragmentation (ID 9128)
Stakeholder engagement and ownership	12	• **Participatory processes** (chiefdom plans, community mapping, multi-actor workshops) for local buy-in (ID 9128) • Trust-building takes time - **leverage local champions** and "safe spaces" for dialogue (ID 9180)
Knowledge management	10	• **Robust KM strategies** – dedicated KM staff, periodic reviews, executive summaries (ID 9133) • **Lessons must feed back into new tools**/products (ID 9129)
Private sector role	7	• **Targeted incentives** (concessional/blended finance, co-funding) for corporate buy-in (ID 9696) • **Long-term funding readiness** and clear co-finance tracking for market linkages (ID 9126)
Design and implementation	6	• Land tenure security, integrated spatial planning, and **packaged "investment kits"** (sheds + irrigation + training) (ID 9141) • **Small design details** (biodegradable sandbags, invasive species control protocols)(ID 9143)
M&E	6	• Early investment in baseline data and gender-sensitive indicators (ID 9133) • **Separate "learning frameworks" (theory of change)** from **routine reporting metrics** to keep M&E agile (ID 9126)

Source: IEO analysis

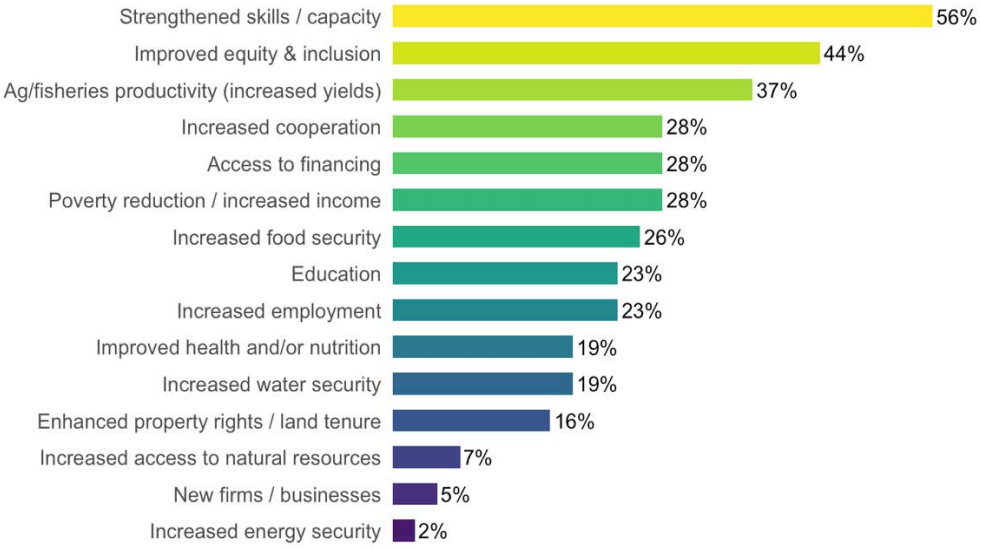
Socio-economic results

Among the projects reviewed, about 84 percent reported one or more positive socio-economic results. The most frequently cited benefits include strengthened skills and capacity, improved equity and inclusion, and increased agricultural or fisheries productivity.

More than half of projects (about 56 percent) leveraged training - whether in Good Agricultural Practices, extension services, or technical workshops - to set the stage for income, productivity, or resilience gains. In Thailand, the Inclusive Sustainable Rice Landscapes project trained more than 7,000 farmers in good agricultural practices (ID 10268). The ProDAF project in Niger built capacity for more than 13,000 producers through farmer field schools (ID 9136).

Projects that set explicit gender quotas in training or governance bodies also reported co-benefits for equity and inclusion (about 44 percent). In Burkina Faso, literacy classes under the project reached 90 percent of participating women (ID 9141). **Yield increases and other productivity gains** were reported in about 37 percent of sampled porjects. In Eswatini, the CSARL project saw tomato yields rise from 5.4 to 9.8 t/ha (ID 9133), the global Enabling Transactions project delivered a 45 percent boost in cattle productivity (ID 9696). Other notable gains included enhanced cooperation and expanded access to finance.

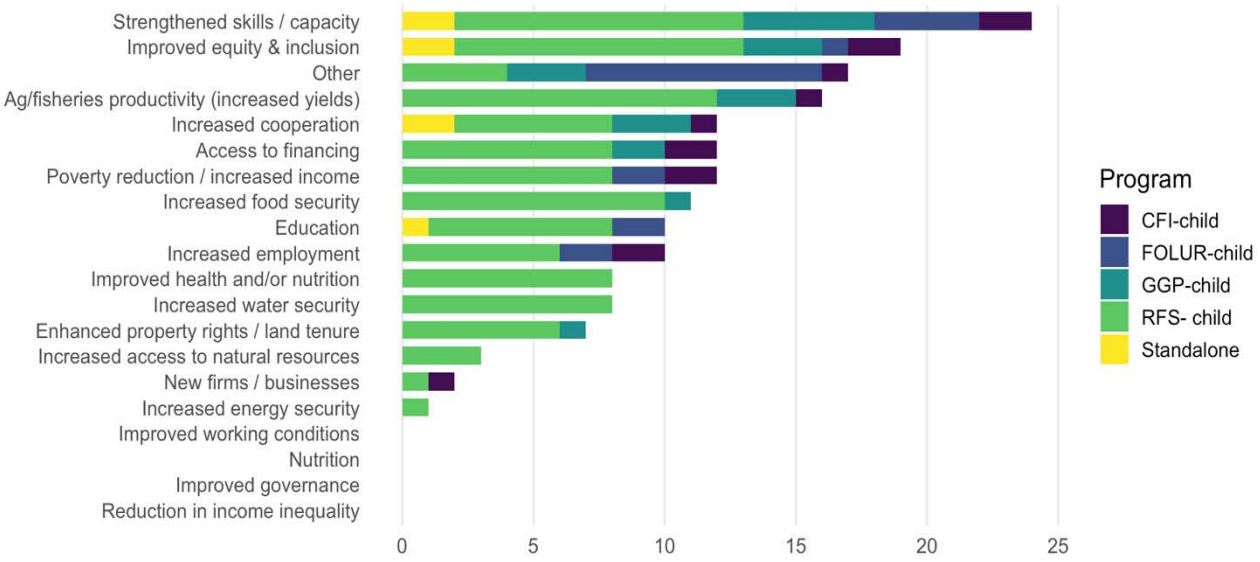
Figure 17 Positive socio-economic results (% of projects)



Source: IEO analysis

Socio-economic results varied across programs. Improved equity and inclusion, which is the second most common result, is especially prominent in RFS child and FOLUR child projects. RFS child projects consistently reported the highest number of positive socio-economic results overall, often leading across most results. In contrast, CFI child and stand-alone projects reported fewer results.

Figure 18 Positive socio-economic results (# of projects)



Source: IEO analysis

Other intermediate results

In addition to socio-economic results, about 77 percent of the reviewed projects reported intermediate results that are relevant for advancing sustainable food systems. The most frequently cited results include: the establishment of linkages between science, research, and technology; improvements in agricultural extension practices; and the adoption of sustainable land and water management practices.

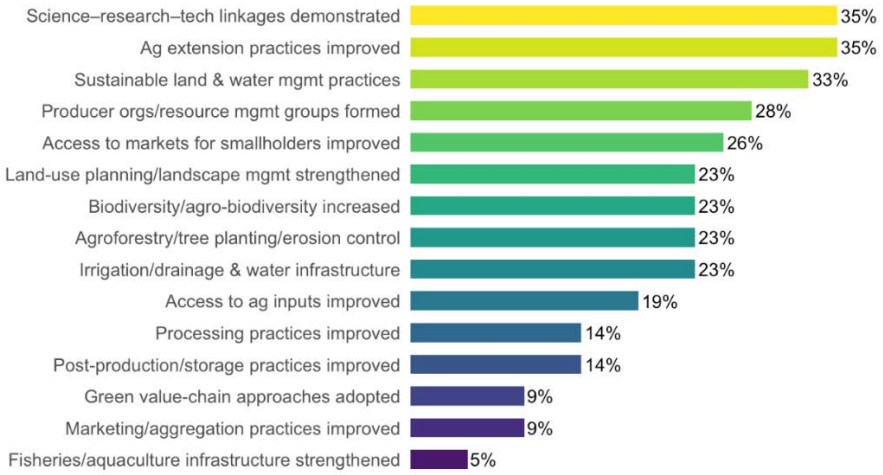
Around 35 percent of projects helped bridge the gap between research institutions and field implementation. In the Gambia, a partnership was being developed with the local technology university to support knowledge management activities (ID 9194). In Brazil, under the Commodities IAP, the child project co-developed an online map for sustainable land use in collaboration with the Smithsonian Institution (ID 9167).

Improved agricultural practices are also prominent, with about one-third of projects (33 percent) invested heavily in capacity building. In Eswatini, Training of Trainers (ToT) for Ministry of Agriculture extension officers supported smallholder farmers (ID 9133). Similar initiatives were implemented in Tanzania (ID 9132) and Burundi (ID 9178), where facilitators of farmer field schools (FFS) were trained.

Sustainable land and water management practices were adopted in approximately one-third of the projects (33 percent). In Burundi, micro-watershed management plans were developed and implemented using Sustainable Land Management (SLM) and Integrated Natural Resource Management (INRM) approaches (ID 9178). In Ghana, nearly 16,000 hectares were brought under SLM practices, with adoption rates in target communities reaching up to 97 percent (ID 9340). In Niger, more than 31,000 hectares of degraded land were rehabilitated through

combined mechanical and biological treatments, including erosion control structures and native vegetation planting (ID 9136).

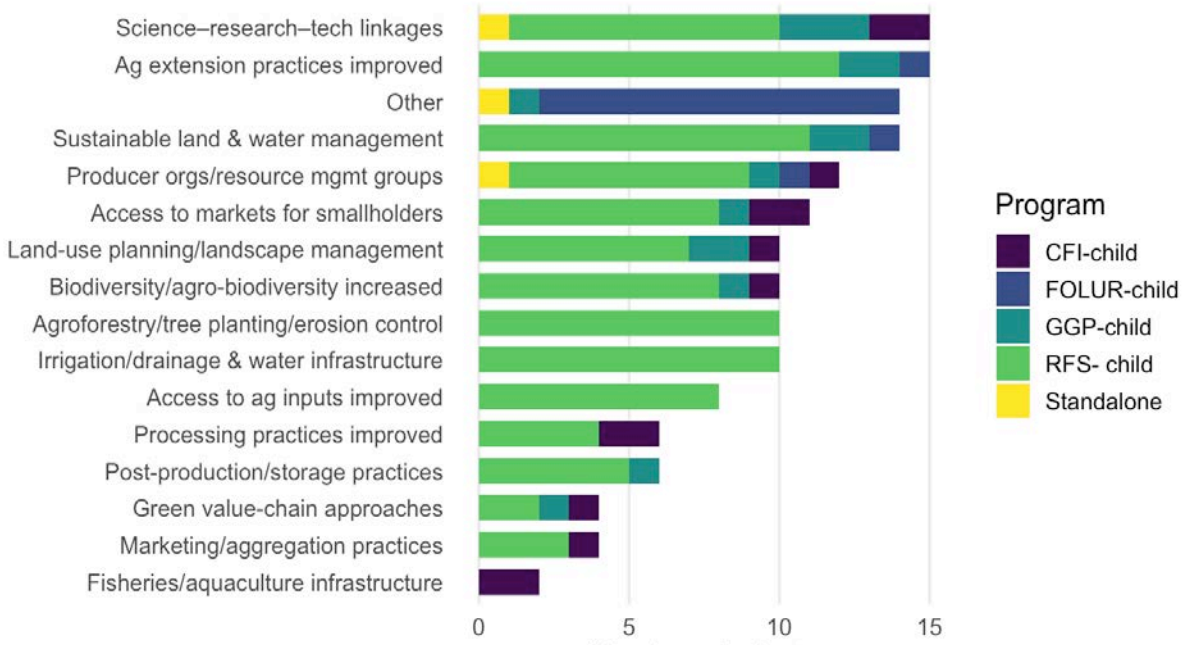
Figure 19 Other FS-relevant intermediate results reported (% of projects



Source: IEO analysis

Results varied across programs. **Science-research-technology linkages** and **improved agricultural extension practices** were particularly reported in **RFS child projects**. As with previous findings, **RFS child projects** consistently demonstrated the broadest range of intermediate results, while **CFI and stand-alone projects** reported fewer and more narrowly focused results.

Figure 20 Other FS-relevant intermediate results reported (# of projects)



Source: IEO analysis

Synergies between GEB and socio-economic results

About one in four projects (23 percent) discussed strategies that created synergies between global environmental benefits (GEB) and socio-economic results. Three broad patterns emerge: integrated multi-pillar packages, community-driven partnerships, and market/value chain linkages.

Several CPs combined technical, financial and social supports into cohesive interventions. In Burundi, a "resilience fund approach" linked watershed protection techniques with village savings and loan associations and community listening clubs to strengthen inclusion and social cohesion (ID 9178). In Ghana, the project bundled land-use planning, seedling distribution, payments for ecosystem services, and post-harvest marketing assistance into a single sustainable land-and-water management (SLWM) package (ID 9340).

A second pattern focus on empowering local institutions to co-own interventions. In Niger, a "concerted action" framework created community rooted structures to manage assisted natural regeneration sites as sources of timber and non-timber products, while aiming for benefits to remain within the communities (ID 9136).

Another approach explicitly connected environmental practices to market access and income opportunities. In Kenya, farmers involved in avocado and coffee value chains who adopted soil-and-water conservation measures were connected to new private-sector partnerships and commercial networks, transforming subsistence farms into commercially viable enterprises (ID 9139). In Nigeria, the CP addressed the interdependence between food security and ecosystem health, helping stakeholders see reduced land degradation through sustainable farming as integral to economic growth (ID 9143).

Innovative approaches/technologies

Nearly all of the projects (about 95 percent) reported the use of innovative approaches or technologies to support implementation and produce results. The most frequently cited innovations include digital platforms, geographic information system (GIS) and spatial information, spatial planning, and improved seed varieties.

About one quarter of projects reported using digital platforms (26 percent). Under the Food IAP, the Cross Cutting Capacity Building, Knowledge Services and Coordination project launched the RFS knowledge-management website with dashboards tracking user engagement, newsletters, monthly bulletins, technical reports, and field stories (ID 9140). The Commodities IAP supported the Trase platform, an online tool that promotes supply-chain transparency for forest-risk commodities (ID 9182). In the Caribbean, the CSIDS-SOILCARE project developed the Caribbean Soil Information System (CARSIS) to support the creation and use of digital soil maps (ID 10195).

Projects applied GIS tools for monitoring, evaluation, and land-use planning (23 percent). In Paraguay, under the FOLUR IP, a GIS course was created for municipal staff alongside an integrated information system combining geospatial tools, an M&E platform, and decision-support functions (ID 10464). In the Reducing Deforestation project**,** 35 frontline conservationists were trained to operate a GIS-based monitoring system covering 5,000 ha of high-conservation-

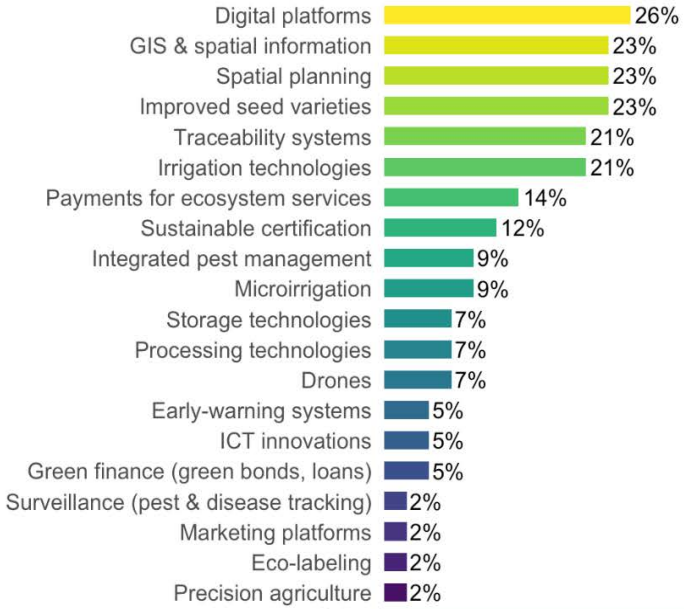
value forest (ID 9180). In Ghana, baseline geospatial data was collected to support integrated land-use planning (ILUP) in pilot communities, working with the State Geocadastre (ID 9340).

Spatial planning was used in 23 percent of projects to guide sustainable land and resource use. In Indonesia, stakeholders mainstreamed integrated landscape management (ILM) into district spatial plans, while developing a national traceability dashboard in coordination with the national government (ID 10238). In Ukraine, an "ILUP integrated methodology" was developed using GIS for landscape planning with a focus on biodiversity and environmental protection.

About 23 percent of projects reported the adoption of improved seed varieties. In Uganda's Karamoja region, the FOOD IAP's CP introduced Introduced high-yield, drought-resistant sorghum, cassava and sweet potato varieties, and set up demonstration gardens (e.g. irrigated vegetables via drip) to showcase agronomic best practices (ID 9137). In Burundi, the FOOD IAP's CP distributed seed potatoes, wheat seed and market-garden seeds, and established community seed banks with adapted varieties. In Burkina Faso, seedlings of local species (baobab, moringa, Ziziphus) were provided along with training on nursery creation to boost replanting efforts (ID 9141).

Other commonly cited innovative approaches or technologies include traceability systems (shell web-app and fisheries e-logging in CFI-LA, ID 9124), small-scale irrigation technologies (treadle pumps in Nigeria, ID 9143) and payments for ecosystem services (conditional tree-planting payouts in Ghana, ID 9340).

Figure 21 Innovative approaches or technologies used (% of projects)



Source: IEO analysis

Results reported at higher scales

About 23 percent of the projects reported results achieved at higher scales, beyond the household, farmer, or community level, including impacts at the sector level or along entire value chains. These results speak to the projects' contributions to policy formulation, industry standards, and scalable innovations, and can be broadly grouped into several patterns.

Several projects contributed directly to national policy frameworks or planning instruments. In Burkina Faso, the CP informed the National Economic and Social Development Plan (PNDES 2021–2025), supported the revision of the country's Nationally Determined Contribution (NDC), and helped shape the National Strategic Plan for Agro-Sylvo-Pastoral Investment (ID 9141). In Uganda, CP results were incorporated into the country's third National Development Plan (NDPIII) and influenced the passage of the 2021 Climate Change Act (ID 9137). In Kenya, the CP contributed to the formulation of four national and county-level policies covering wetlands, invasive species management, mining and quarry regulation, and rural road development (ID 9139).

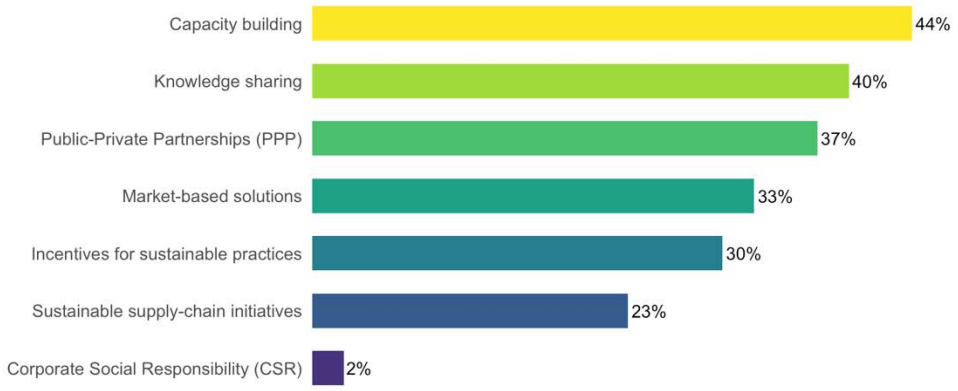
Some projects helped develop or mainstream standards to be adopted across sectors. The Soy Toolkit developed under the Commodities IAP has been used by companies to guide zero-deforestation commitments in agricultural supply chains (ID 9182). Under the CFI-LA program, rod-caught tuna from artisanal fisheries has been integrated into international markets through Fair Trade certification (ID 9124).

Innovations piloted under GEF-funded initiatives have been scaled up or replicated through complementary projects. In Senegal, soil phosphate application, wet sowing techniques, and integrated market gardens developed under the PARFA project were scaled through IFAD/GEF and World Bank-supported programs (ID 9134). National and sub-national commodity platforms established under the Reducing Deforestation from Commodity Production project have been adapted for use in other value chains, including soy (ID 9180).

Private sector engagement

About 63 percent of reviewed projects have reportedly engaged the private sector. The review reveals a diverse range of private sector engagement approaches across the projects. Among the reported strategies, the most commonly cited are capacity building (44 percent), knowledge sharing (40 percent), and public-private partnerships (37 percent).

Figure 22 Strategies used to engage the private sector (% of projects)



Source: IEO analysis

Engagement commonly took the form of **capacity-building and training** (44 percent). In Papua New Guinea, the project partnered with the Cocoa Board and milling companies to co-deliver smallholder training (ID 10239).

Public–private partnerships (PPPs) emerged as another frequent modality (37 percent). Under the RFS IAP, more than half CPs were already designed with a market orientation, which encouraged durable market linkages. Child projects like eSwatini and Niger collaborated with input suppliers, processors, and financial institutions to facilitate market access and credit (ID 9140). Projects also focused on value chain partnerships, brokering agreements and supporting contract farming models, such as in Uganda (ID 9137) and Nigeria (ID 9143).

Knowledge sharing activities were employed in 40 percent of the reviewed projects. Under the Commodities IAP, there are instances of multinational companies contributing to case studies on jurisdictional approaches (ID 9179, ID 9182). Sometimes, knowledge sharing activities were performed in tandem with with PPPs. For example, in Indonesia, a private sector engagement study was followed by multi-level PPPs dialogues to scope future co-investments (ID 10238).

Several projects mobilized **market-based solutions**. In Thailand, a revolving fund was combined with green loan programs and private sector incentives to promote sustainable rice production (ID 10268). In some cases, the private sector provided technical support and demonstration services. In China's Jiangxi province, private sector partners supported on-farm demonstrations (ID 10246).

In a few cases (7 percent), private sector stakeholders have been included in the projects' **steering committees**. Similarly, a small minority of reviewed projects (about 9 percent) reported **private-sector-related GEB outcomes.** In Ethiopia, a dedicated outcome tracked the increase in investment flows to integrate natural resources management (ID 9135). In Nigeria, the project tracked partnerships with private sector entities to develop interstate food commodity value chains under public-private partnerships (ID 9143).

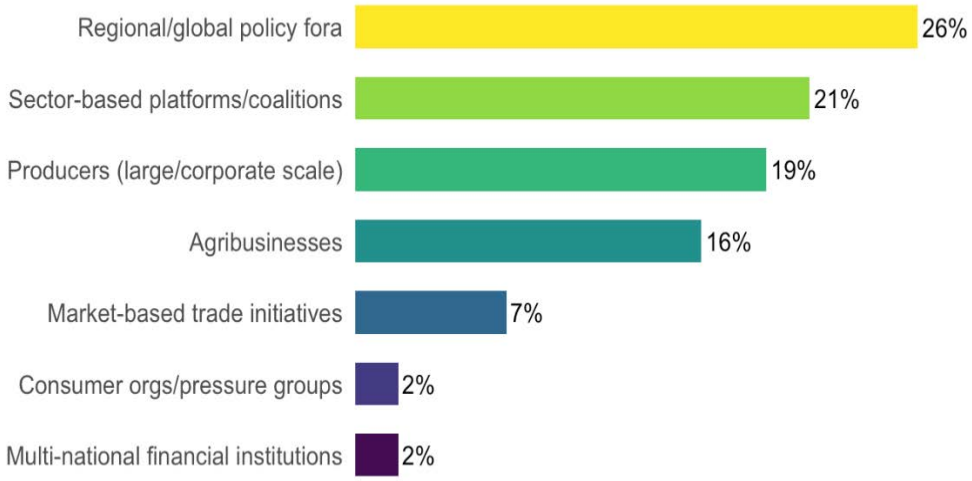
Vertical engagement with value chain actors

The review highlighted a variety of vertical engagement activities, predominantly through global and sectoral policy fora, as well as sector-based platforms and supply-chain partnerships.

About 26 percent of reviewed projects referenced participation in high-level dialogues. These include COP-26 webinars (ID 9140) and UN Food Systems Summit sessions (ID 9179), as well as Good Growth Partnership events (ID 9617) and regional water-fund forums (ID 9139). **Sector-based platforms & roundtables were mentioned by 21 percent of projects.** Multi-stakeholder roundtables (e.g. Paraguay's Mesa de Carne Sostenible, ID 9696), global consultations for fisheries (ID 9128), and competitions that unite coalitions and investors (9125) have been cited.

In 19 percent of cases, projects worked directly with large producers or cooperatives (e.g. Paraguay, ID 9696; seed-producer networks, ID 9134) or with traders and processors (e.g.–10264; ID 9180).

Figure 23 Common types of vertical engagement (% of projects)



Source: IEO analysis

Summary tables

Table 6 Policy coherence (Q15, Q17, Q19)

		CFI-child	FOLUR-child	GGP-child	RFS- child	Stand-alone
Horizontal coherence	*Count*	1	1	3	10	1
	Pct	20%	6%	60%	77%	33%
Vertical coherence	*Count*	2	0	3	10	0
	Pct	40%	0%	60%	77%	0%
Other governance/ policy outcomes	*Count*	2	0	5	8	1
	Pct	40%	0%	100%	62%	33%
Total	*Count*	**5**	**17**	**5**	**13**	**3**
	Pct	**100%**	**100%**	**100%**	**100%**	**100%**

Table 7 Types of gender outcomes reported

Outcome	Count	Pct of All
Women's improved decision-making on food consumption	6	14%
Women's increased participation in producer orgs	18	42%
Women's strengthened capacities/skills in agriculture	20	47%
Women's increased decision-making power in household/farm	11	26%
Women's improved employment in agri-food sector	11	26%
Women's strengthened business capacities/skills in agri-food sector	11	26%
Closing gender gap in land ownership	1	2%
Closing gender gap in livestock ownership	0	0%
Closing gender gap in inputs/equipment access	7	16%
Closing gender gap in water/irrigation access	2	5%
Closing gender gap in market access	6	14%
Closing gender gap in finance/service access	7	16%
Reduction in gender-based violence	0	0%
Increased productivity of female farmers	7	16%

Table 8 Gender outcomes reported

Program	Count	Total	Percent
All	23	43	53%
CFI-child	3	5	60%
FOLUR-child	2	17	12%
GGP-child	3	5	60%
RFS- child	13	13	100%
Stand-alone	2	3	67%

Table 9 Inclusion outcomes reported

Program	Count	Total	Percent
All	25	43	58%
CFI-child	2	5	40%
FOLUR-child	3	17	18%
GGP-child	5	5	100%
RFS- child	13	13	100%
Stand-alone	2	3	67%

Table 10 Types of inclusion outcomes reported

Outcome	Count	Pct of All
Increased income & profitability of vulnerable smallholders	14	33%
Enhanced market access for vulnerable smallholders	14	33%
Improved inputs access for vulnerable smallholders	12	28%
Improved finance access for vulnerable smallholders	15	35%
Improved extension & training for vulnerable smallholders	17	40%
Improved food security & nutrition for vulnerable households	11	26%
Increased youth involvement in agriculture	18	42%

Table 11 Reported Indigenous knowledge

Program	yes_count	total	pct_yes
All	4	43	9%
CFI-child	0	5	0
FOLUR-child	1	17	6%
GGP-child	0	5	0
RFS- child	3	13	23%
Stand-alone	0	3	0

Table 12 Reported engagement with hub project

Program	Count	Total	Percent
All	32	40	80%
CFI-child	4	5	80%
FOLUR-child	14	17	82%
GGP-child	4	5	80%
RFS- child	10	13	77%

Table 13 Types of CP engagement with the hub project

Engagement	Count	Pct of All
Forums/Workshops/CoP	22	51%
References to knowledge products	14	33%
Training events	12	28%
Adaptive management via hub	6	14%
Adoption of new strategies	6	14%
Technical assistance	6	14%

Table 14 Common challenges in engaging with the hub project

Challenge	Count	Pct of All
Timing issues	5	12%
Difficulties in M&E	4	9%
Transaction/coordination costs	3	7%
Roles & responsibilities issues	2	5%
Hub project non-delivery	1	2%
Insufficient budget to participate	0	0%

Table 15 Engagement with other country CP

Program	yes_count	total	pct_yes
All	15	40	38%
CFI-child	3	5	60%
FOLUR-child	7	17	41%
GGP-child	3	5	60%
RFS- child	2	13	15%

Table 16 Positive socio-economic results

Result	Count	Pct of All
Strengthened skills / capacity	24	56%
Improved equity & inclusion	19	44%
Ag/fisheries productivity (increased yields)	16	37%
Poverty reduction / increased income	12	28%
Access to financing	12	28%
Increased cooperation	12	28%
Increased food security	11	26%
Increased employment	10	23%
Education	10	23%
Increased water security	8	19%
Improved health and/or nutrition	8	19%
Enhanced property rights / land tenure	7	16%
Increased access to natural resources	3	7%
New firms / businesses	2	5%
Increased energy security	1	2%

Table 17 Other FS-relevant intermediate results reported

Intermediate Result	Count	Pct of All
Ag extension practices improved	15	35%
Science–research–tech linkages demonstrated	15	35%
Sustainable land & water mgmt practices	14	33%
Producer orgs/resource mgmt groups formed	12	28%
Access to markets for smallholders improved	11	26%
Irrigation/drainage & water infrastructure	10	23%
Agroforestry/tree planting/erosion control	10	23%
Biodiversity/agro-biodiversity increased	10	23%
Land-use planning/landscape mgmt strengthened	10	23%
Access to ag inputs improved	8	19%
Post-production/storage practices improved	6	14%
Processing practices improved	6	14%
Marketing/aggregation practices improved	4	9%
Green value-chain approaches adopted	4	9%
Fisheries/aquaculture infrastructure strengthened	2	5%

Table 18 Innovative approaches or technologies used

Approach / Technology	Count	Pct of All
Digital platforms	11	26%
Improved seed varieties	10	23%
Spatial planning	10	23%
GIS & spatial information	10	23%
Irrigation technologies	9	21%
Traceability systems	9	21%
Payments for ecosystem services	6	14%
Sustainable certification	5	12%
Microirrigation	4	9%
Integrated pest management	4	9%
Drones	3	7%
Processing technologies	3	7%
Storage technologies	3	7%
Green finance (green bonds, loans)	2	5%
ICT innovations	2	5%
Early-warning systems	2	5%
Precision agriculture	1	2%
Eco-labeling	1	2%
Marketing platforms	1	2%
Surveillance (pest & disease tracking)	1	2%

Table 19 Strategies used to engage the private sector

Category	Count	Pct of All
Capacity building	19	44%
Knowledge sharing	17	40%
Public-Private Partnerships (PPP)	16	37%
Market-based solutions	14	33%
Incentives for sustainable practices	13	30%
Sustainable supply-chain initiatives	10	23%
Corporate Social Responsibility (CSR)	1	2%

Table 20 Common types of vertical engagement

Engagement Type	Count	Pct of All
Regional/global policy fora	11	26%
Sector-based platforms/coalitions	9	21%
Producers (large/corporate scale)	8	19%
Agribusinesses	7	16%
Market-based trade initiatives	3	7%
Multi-national financial institutions	1	2%
Consumer orgs/pressure groups	1	2%

Part 6
Additional Supporting Data and Analysis

Table 1 – GEBs - Core Indicators (CI) : Achievements and targets by GEF food systems program and project

Program/ Project	CI 3 – Land restored	CI 4.1 – Improved mngmt. for bio-diversity	CI 4.2 – Landscapes with bio-diversity considerations	CI 4.3 – Sust. mngmt. in production systems	CI 4.4 – HCV/HCS area (CI 1.2 Terrestrial protected area for the RFS and FOLUR)	CI 5 – Area of marine habitat under impr. practices for bio-diversity	CI 8 – Over-exploited fisheries moved to sust. level	GHG (dir. and indir.)	Beneficiaries
GGP Production *(achieved; source TE, Annex 11)*	-	**27,505,238 ha** (24m ha in Paraguay, 3.2m ha in Indonesia, remainder in Liberia) Close to 5 times (468%) of 2015 CEO endorsed target	**117 ha** (Indonesia) No target	**427,432 ha** (98.6% in Indonesia, and 6k ha in Paraguay) No target	**846,672 ha** (824,424 ha in Indonesia [Annex 19, p.211 updated]; 17, 248 ha in Paraguay; and 5,000 ha in Liberia) 89% of target of 925,000 ha	-	-	**129 million mtCO2** (110m mt in Indonesia, 13.6m in Liberia, and 5.4m mt in Paraguay) 217% of target	**10,496** **(37% women)** (4,915 in Paraguay, 2,752 in Indonesia, 2,829 in Liberia) 175% of target; 5% points below gender target
GGP Demand *(no targets, nor achievements)*	-	-	-	-	-	-	-	-	-
GGP Transactions	The GGP transactions ProDoc was unclear how the project was meant to contribute to GEBs (see TE GGP IFC, para. 285-290, and para. 355 – 360). The CEO endorsement document *for the total GGP IAP program* **targeted 23 million ha of improved management of landscapes/for biodiversity**, **150,000 ha under SLM in production systems**), and **80 mtCO2 mitigated** (p. 8). The IFC GGP TE did not see these targets as relevant for the GGP Transactions CP. The TE rather reported a GEB contribution for GGP Transactions CP of **USD 488.9 million of (additional) commercial transactions compared with USD 400 million planned *over 4 years***.								

Program/ Project	CI 3 – Land restored	CI 4.1 – Improved mngmt. for bio-diversity	CI 4.2 – Landscapes with bio-diversity considerations	CI 4.3 – Sust. mngmt. in production systems	CI 4.4 – HCV/HCS area (CI 1.2 Terrestrial protected area for the RFS and FOLUR)	CI 5 – Area of marine habitat under impr. practices for bio-diversity	CI 8 – Over-exploited fisheries moved to sust. level	GHG (dir. and indir.)	Beneficiaries
(targets not seen as relevant by Transactions TE)									
GGP Brazil Mitopiba *(achieved; source GGP Brazil TE)*	**6,878 ha** (reforested)	**8,485 ha** (terrestrial areas under improved practices)	-	**-**	**81,099 ha**	-	-	**39.3 million** **mtCO2**	**22,526** 66.3% of target Women are 17.8% of beneficiaries, compared to 50% planned
RFS *(achieved; source RFS TE, p. 61)*	**350,421 ha** 77% of target	**613,688 ha** 144% of target	-	**476,027 ha** 78~~144~~% of target	**56,707 ha** 100% of target	-	-	**88.4 million** **mtCO2** 137% of target	**4.7 million** **(47% women)** 111% of target; above gender target(10% points)
CFI *(planned – source CFI PFD 2016; no achievements in avail. TE (LA) and Activ. Compl. Summ. (Challenge Fund)*	-	-	-	-	-	(Latin America CP only:) **973,000 ha** (coastal marine surface) **119,902 ha** (coastal protected area)	**Achievements not reported** Target: "At least 8 percent of fisheries, by volume, moved to more		

Program/ Project	CI 3 – Land restored	CI 4.1 – Improved mngmt. for bio-diversity	CI 4.2 – Landscapes with bio-diversity considerations	CI 4.3 – Sust. mngmt. in production systems	CI 4.4 – HCV/HCS area (CI 1.2 Terrestrial protected area for the RFS and FOLUR)	CI 5 – Area of marine habitat under impr. practices for bio-diversity	CI 8 – Over-exploited fisheries moved to sust. level	GHG (dir. and indir.)	Beneficiaries
						Target: "At least 3 million ha of coastal marine areas with EEZs under sustainable fisheries mngmt."	sustainable levels"		
FOLUR *(achieved; source FOLUR Annual Report 2024)* *(planned targets (T); ProDoc 2020)*	**6,400 ha** (T) 2,387,402 ha*	- (incl. under CI 4.3)	-	**420,000 ha** (T) 46,507,174 ha*	**26,000 ha** (T) 664,908 ha	-	-	**6.2 million mtCO2** (T) 304 million mtCO2*	7.3 million* (49.6% women)
FSIP *(planned targets- PFD 2023)*	870,434 ha	8,142,528 ha	-	5,417,194 ha	284,644 ha	4,220 ha	-	174 million mtCO2	3.4 million (49.1% women)

* Includes some results from the Global Coordination Project (<10% for different core indicators)

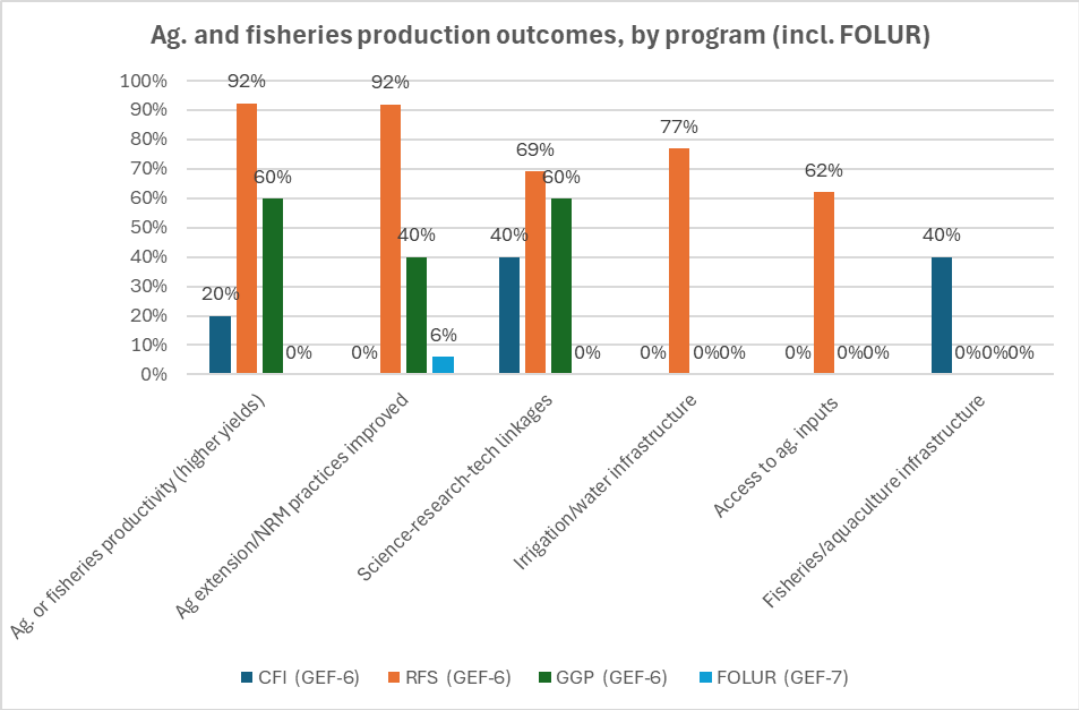
Table 2 – IDR results by policy coherence dimension and program

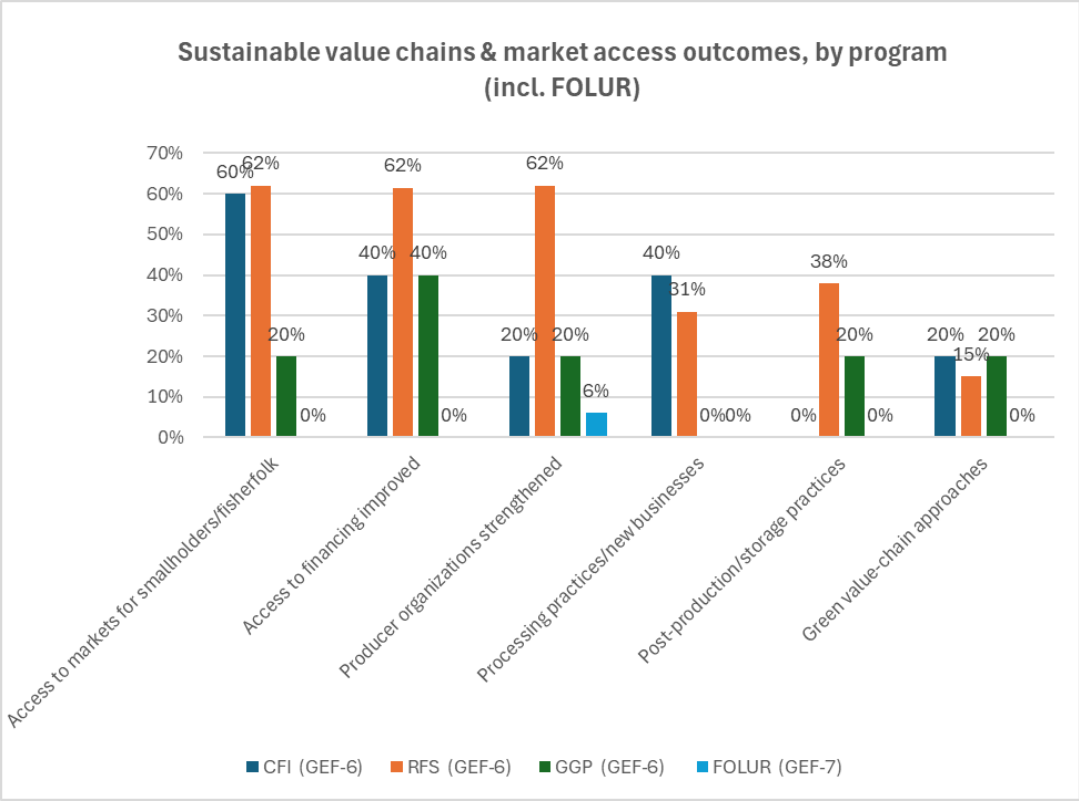
`	No. of cases (CP)	Horizontal coherence	Vertical coherence	Other / governance	Policy in-coherence and outcomes	Issues around engagement of multiple government ministries	Pos./neg. (related to previous column)	
							pos.	neg.
CFI	5							
yes		1	2	2	1*	3	2	1
no		2	1		4	1		
unable to assess		2	2	3		1		
RFS	13							
yes		10	10	8	1*	9	3	6
no		1			12	4		
unable to assess		2	3	5				
GGP	5							
yes		3	3	5		5	1	4
no					5			
unable to assess		2	2					

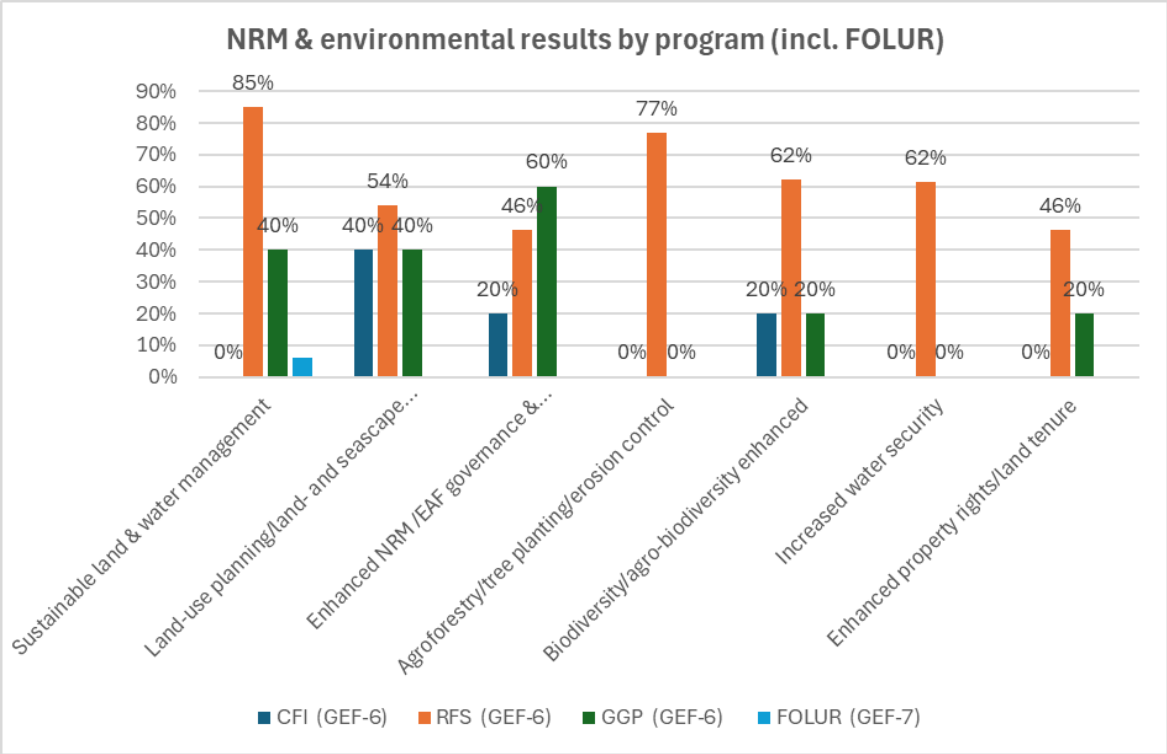
FOLUR	17							
Yes						6	2	3**
No						6		
unable to assess		17	17	17	17	5		
Stand-alone projects	3							
yes		1		1		1		**
no					3	2		
unable to assess		2	3	2				

***** Explanation indicated that response was not based on true policy in-coherence
****** (plus) 1 neutral response
Source: IDR – analyzed by DP

Figure 1 (a-d) – IDR analysis of outputs and outcomes by program and food systems dimension
(percent of CPs for each program with indicator results)






NRM & environmental results by program (incl. FOLUR)
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
85%
40%
0%
54%
40%
40%
46%
20%
60%
77%
0%
0%
62%
20%
20%
62%
0%
0%
46%
0%
20%
Sustainable land & water management
Land-use planning/land- and seascape...
Enhanced NRM/EAF governance &...
Agroforestry/tree planting/erosion control
Biodiversity/agro-biodiversity enhanced
Increased water security
Enhanced property rights/land tenure
CFI (GEF-6)
RFS (GEF-6)
GGP (GEF-6)
FOLUR (GEF-7)

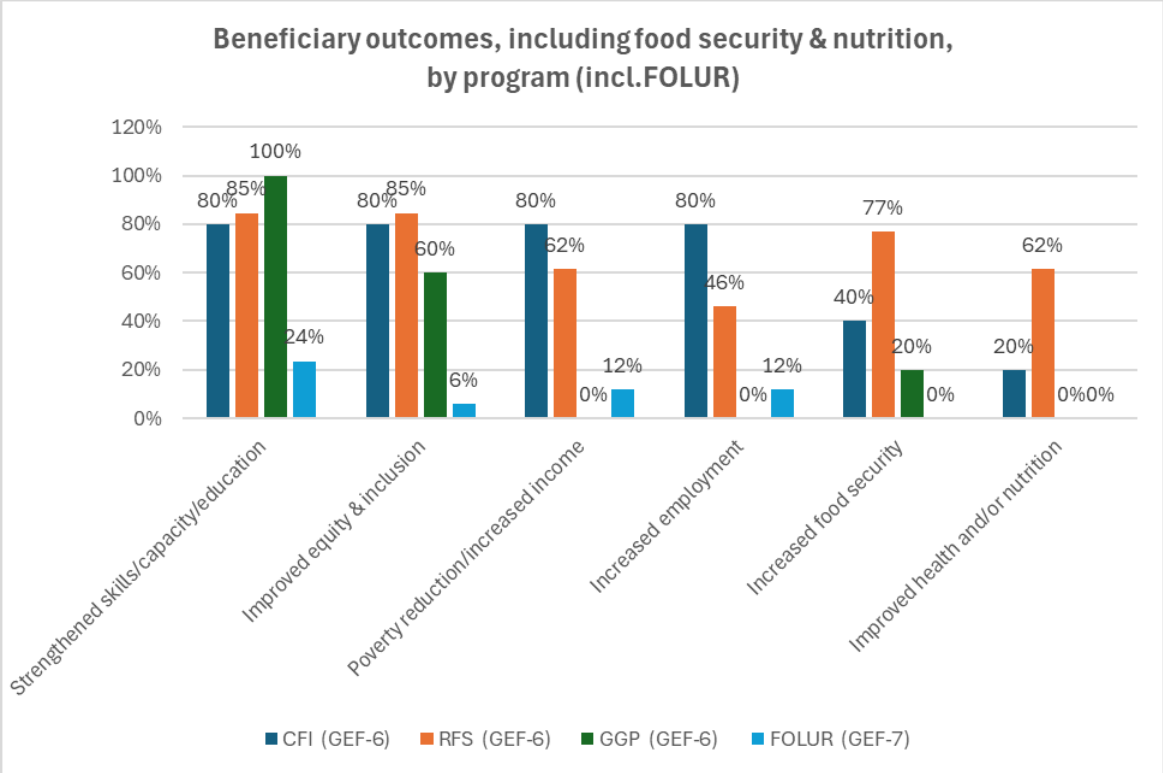
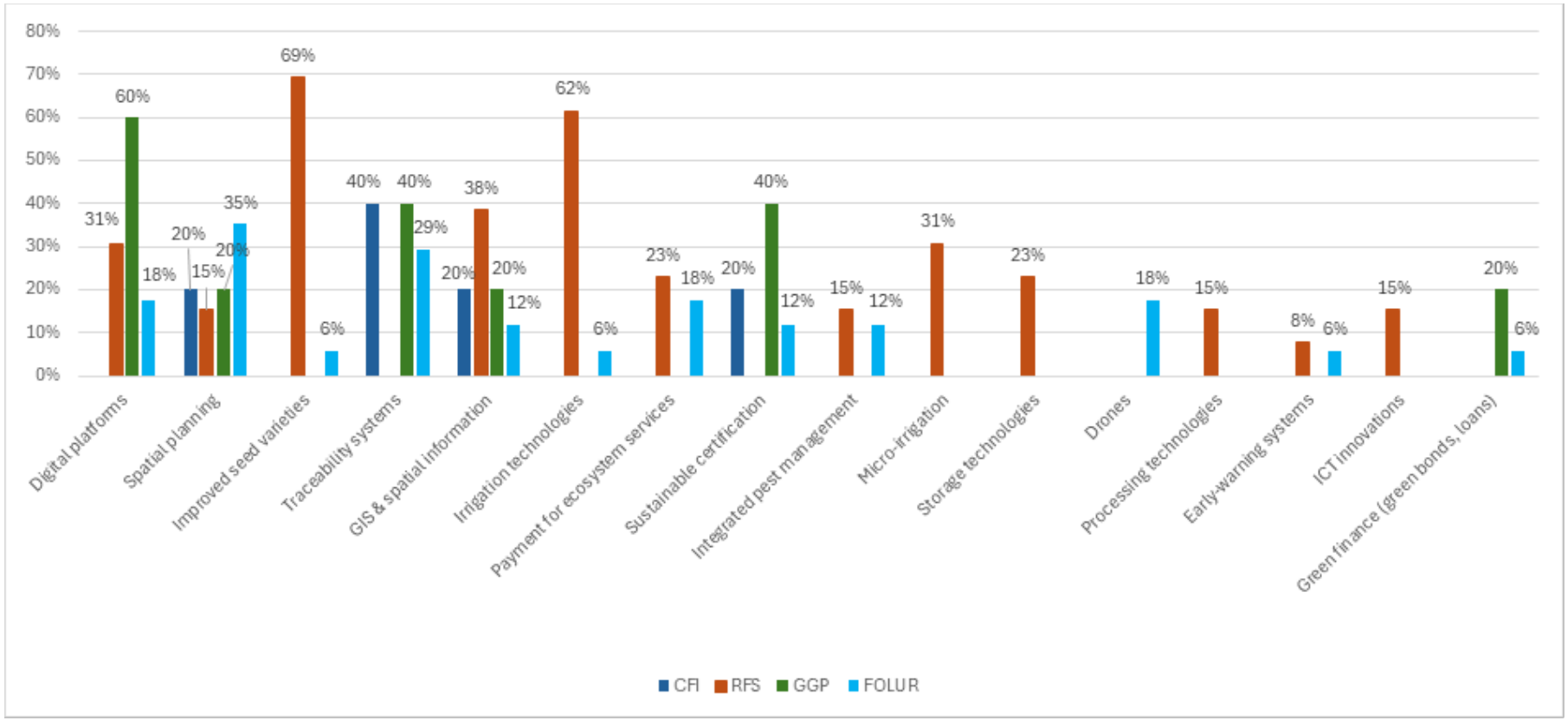

Beneficiary outcomes, including food security & nutrition, by program (incl.FOLUR)
120%
100%
80%
60%
40%
20%
0%
80%
85%
100%
24%
80%
85%
60%
6%
80%
62%
0%
12%
80%
46%
0%
12%
40%
77%
20%
0%
20%
62%
0%0%
Strengthened skills/capacity/education
Improved equity & inclusion
Poverty reduction/increased income
Increased employment
Increased food security
Improved health and/or nutrition
CFI (GEF-6)
RFS (GEF-6)
GGP (GEF-6)
FOLUR (GEF-7)

Figure 2 – Innovations by program



Private sector results by program

GGP Transactions project (ICF)

The IFC-led GGP Transactions project demonstrated how targeted private sector engagement and strong sustainability tools advanced deforestation-free supply chains, especially in Latin America, while also exposing structural, financial, and institutional limitations to broader engagement and transformation. The project aimed to engage private firms and financial institutions in sustainable soy, palm oil, and beef production, combining investment facilitation, advisory services, and tool development across Brazil, Paraguay, Indonesia, and Liberia—though implementation focused largely on Latin America.

In **Paraguay**, IFC partnered with Minerva Foods to develop a sustainability certification, the "Raised on Fertile Land" seal, and tools like SAGAS and Asist-Chaco for traceability and investment planning. Work with local producer organizations promoted deforestation-free intensification, but lacked strong public incentives to scale. The project also contributed to a biodiversity mapping tool used by banks in the Sustainable Finance Roundtable. In **Brazil**, achievements centered on the soy sector where IFC collaborated with COFCO and other companies to strengthen traceability, created degraded land suitability maps, and piloted a trade finance facility (GTSF). Yet incentives to clear land remained stronger than those for restoration, and zero-deforestation policies lacked political backing. Efforts in **Indonesia** and **Liberia** were less successful and neither country yielded investable clients. In Indonesia, expectations of working with large-scale certified palm oil firms proved unrealistic due to the dominance of smallholders and weak ESG capacity in local banks. Liberia's fragile financial sector and absence of bankable agribusinesses stalled engagement altogether. **Globally**, the project supported investment readiness through tools like SIMFaz and platforms like the Sustainable Beef Vision Summit. IFC's dual role as investor and advisor, along with strong partnerships (e.g., COFCO, Minerva), contributed to firm-level success. However, internal restructuring, limited coordination with UNEP-FI, and pandemic-related delays reduced overall effectiveness.

Lessons from the IFC GGP Transactions Project highlight the challenges of scaling sustainable finance in complex commodity markets. IFC's dual role as advisor and investor proved effective, especially in Brazil, but also exposed limits where prospective investments were lacking. The project underscored the importance of strong internal coordination, targeted collaboration, and long lead times to align financing with environmental outcomes. IFC often does not have the necessary prospective PS investments in place to allow it to fully engage through advisory services and tools. Blended finance showed clear potential, but its success depended on early structuring, appropriate incentives, and the ability to compete with more flexible, conventional credit. Market transformation in deforestation-linked commodities requires patient, multi-year engagement, and realistic expectations around uptake and measurable outcomes. Impact was strongest where IFC co-developed high-quality tools—like soy suitability maps and ESG scorecards—with credible partners, helping foster ownership and replication. However, limited coordination with global platforms such as UNEP-FI reduced synergies, and mismatched M&E systems between IFC and GEF created reporting inefficiencies. Ultimately, outcomes hinged on

the presence of capable and motivated private sector partners—a reminder that sustainable finance only works where there is real client readiness and demand.

GGP Demand project (WWF-US)

The GGP Demand Project sought to transform market demand for sustainable commodities by partnering with private sector actors, investors, and multi-stakeholder platforms—but while it achieved technical progress in transparency and tools, its influence on actual procurement behavior and investor commitments remained limited.

Implemented by WWF-US, the Demand Project positioned itself as a key complement to production efforts under GGP. It invested heavily in building partnerships with companies, industry platforms, and investors to promote reduced-deforestation sourcing of soy, palm oil, and beef. Through initiatives such as the **Soy Toolkit**, **RESPOND ESG benchmarking**, **Trase** supply chain transparency platform, and the **African Palm Oil Initiative (APOI)**, the project created widely used knowledge products and contributed to regional dialogues on sustainability. It also engaged corporate and investor communities in West Africa, Latin America, and Asia and launched a branded RSPO-certified cooking oil for domestic consumers in Indonesia.

Despite this extensive engagement, the project fell short in catalyzing widespread shifts in private sector sourcing and investor behavior. **In Brazil**, while it supported soy traceability and corporate platforms like the Soft Commodities Forum, national political resistance and low buyer incentives limited broader uptake. **In Paraguay**, engagement with the beef sector led to the formulation of national sustainability guidelines, but no consensus emerged on what "sustainable beef" actually means. **In West Africa**, private sector participation through APOI varied widely, with limited participation in national action plans. **In Indonesia**, partnerships with retailers and the IBCSD were noteworthy, but GGP Demand engagement remained tied more to government priorities than private sourcing reforms.

The project benefited from WWF's global credibility and the ability to convene diverse actors. Strategic partnerships with platforms like RSPO, IBCSD, and UNEP-FI ensured influence. However, results were constrained by a fragmented and often hesitant private sector and the absence of strong commercial incentives. Efforts to engage major global buyers and traders particularly in the EU, US, and China, did not lead to tangible shifts in sourcing strategies. Time horizons were too short for what are long-term market transformations.

In summary, the GGP Demand Project laid important groundwork through tools, platforms, and early-stage partnerships with the private sector and others. It helped build awareness and institutional pathways for sustainable sourcing. Yet, it struggled to convert this into deeper market or investment reform.

GGP Production and Brazil project (UNDP/UNEP-FI)

The GGP Production and Brazil projects showed that PS engagement in deforestation-free supply chains is feasible through a multi-level approach combining tools, platforms, and

partnerships. However, persistent market, governance, and incentive failures limited broader adoption and transformation. Both projects complemented GGP Transformation and Demand efforts and pursued PS engagement through five approaches: multi-stakeholder platforms (MSPs), tool development, strategic partnerships, capacity building, and enabling environment support.

GGP used existing and new **MSPs** to engage companies across supply chains. In Indonesia, firms like Wilmar, Musim Mas, and Unilever participated in national (FoKSBI) and district platforms in West Kalimantan (Sintang), advancing land-use planning and smallholder sustainability. Brazil's MATOPIBA Coalition involved soy actors in regional dialogues, while Paraguay's platforms aligned stakeholders around sustainable beef. **Tools and guidelines** supported sustainability adoption: Value Beyond Value Chains (on public-private collaboration), Responsible Beef Guidelines (WWF–Paraguay), and the Palm Oil Buyers Scorecard which rates corporate traceability commitments (WWF Global). The Soy Toolkit enabled risk assessments and supplier management, while Brazil piloted traceability and monitoring systems for soy.

Public–private partnerships (PPP) and **training and capacity development** reinforced these efforts. In Indonesia, a Musim Mas MoU enabled farmer training; in Liberia, a partnership with MANCO supported palm oil outgrowers. Paraguay's work with the Rural Association informed public debate via deforestation data. Brazil's CP partnered with agribusinesses to support zero-deforestation compliance. Training targeted producers and financial institutions alike. The Brazil Matopiba project enhanced soy producer practices, while collaboration with ADM Capital and PT ANJ in Indonesia helped test financially viable farmer support models. WWF and UNDP's long-standing presence helped build trust. Efforts also **targeted policy alignment**. In Brazil and Indonesia, GGP supported subnational strategies and jurisdictional compacts. Indonesia's regional district palmoil platform in West-Kalimantan (Sintang) became a model for decentralized coordination. Yet, weak regulatory enforcement and limited public incentives often hindered voluntary standards' uptake.

Several constraints curbed broader impact. Short project durations reduced the ability to embed and scale successful models. Inadequate incentives, limited demand for certified commodities, and institutional challenges—such as corruption and fragmented supply chains—complicated PS transformation. In Brazil, the lack of a regulatory push stalled traceability uptake. Economic concerns often outweighed environmental goals.

FOLUR program

Building on the GGP, the GEF FOLUR program is also advancing private sector engagement through approaches including co-developing sustainability strategies, mobilizing investments, and piloting incentives. To date, several FOLUR Child Projects have aligned with companies and farmer groups to co-develop sustainability strategies across key supply chains such as palm oil, soy, cocoa, coffee, and livestock. FOLUR CPs made some progress in investment mobilization, with countries securing private co-financing through blended finance and de-risking mechanisms. In parallel, CPs are designing incentives—such as access to credit, pricing premiums, and insurance schemes—to support sustainable production, especially in soy and palm oil.

Nonetheless, linking upstream producers with downstream buyers and ensuring long-term financing for smallholders remain significant hurdles. Challenges include limited investor confidence, regulatory uncertainty, and pressures from emerging requirements like the EU deforestation regulation (EUDR). In response, initiatives such as the IFC-led case study on soy supply chain risks in Brazil are helping to identify mitigation strategies (based largely on FOLUR Annual Report 2024).

CFI Challenge Fund project (World Bank)

The CFI Challenge Fund advanced private sector engagement in sustainable fisheries by preparing investment-ready projects across six countries—but weak value chain integration and lack of follow-through on financing limited its broader impact. The Fund significantly outperformed its targets in developing 26 investment cases in countries like Indonesia, Peru, Ecuador, and Cabo Verde. It engaged over 70 financial stakeholders and supported the creation of risk mitigation plans and investment criteria, helping shape a shared understanding of investable fisheries. Country-level successes included policy briefs and business cases in Indonesia, support for rights-based fisheries in Peru, and contributions to Ecuador's Galápagos 2030 Plan.

However, actual investment mobilization remained out of reach. Technical assistance could not support downstream financing, and structural issues—such as informality, poor infrastructure, and investor hesitancy—persisted. Governance weaknesses and climate-related risks further discouraged capital flow. Coordination challenges also emerged, with fragmented implementation and limited linkage to global seafood markets. In sum, the CFI-CF laid useful groundwork for sustainable fisheries finance but lacked the mechanisms and incentives to catalyze investment at scale. Its accomplishments highlight the importance of coupling readiness and real PS capital flows.

Country case studies

Private sector engagement across the Evaluation's case study countries varies by country, reflecting different program approaches, interests and readiness and institutional capacities. Indonesia and Tanzania have adopted the most structured and proactive approaches. As noted earlier, Indonesia's GGP and FOLUR projects have engaged with the PS through multi-stakeholder policy platforms and action plans, including national and multinational companies on the production and demand sides. In Tanzania, the RFS had very limited PS engagement, but the FOLUR CP is expected to promote co-investments and institutional collaboration, while engaging banks like CRDB and exploring partnerships with agro-processors. In contrast, Peru's engagement in FOLUR is more fragmented, constrained by weak inter-ministerial coordination (notably between MINAM and MIDAGRI), regulatory uncertainty, and the absence of strong financial partners. Nevertheless, promising partnerships with agritech funds like Yield Lab Latam and research entities like Incabiotec are emerging. CFI has been developing some niche models. Beyond some early discussions with cocoa industry actors, Ghana remains at an aspirational stage, constrained by limited policy alignment, weak collective structures, and the absence of clear business cases to attract serious private investment.

Progress in FOLUR projects across the four case study countries

FOLUR CPs in the evaluation's case study countries are currently still laying the groundwork on translating ambitious multi-commodity sustainability frameworks into tangible ground-level impact, while facing complex policy, value chain and private sector engagement situations. Across the four FOLUR country projects, early implementation has largely focused on groundwork and coordination, with varying degrees of progress in policy engagement, landscape planning, and multi-stakeholder collaboration. While all projects remain in relatively early phases, Indonesia and Peru appear more advanced in policy and institutional engagement, whereas Ghana and Tanzania are still in formative stages of implementation, particularly at the community level.

Progress. Indonesia has made the most visible headway, leveraging strong national ownership and coordination led by the Coordinating Ministry for Economic Affairs. The project builds on prior GGP experience in sustainable palm oil and has expanded to include coffee, cocoa, and rice. It has achieved early successes in multi-stakeholder coordination, policy reviews, and preparation of co-investment mechanisms—particularly with national actors such as the BPDP. The project is also preparing targeted scenario analyses to support implementation starting in 2025. Peru has similarly advanced policy engagement through close collaboration with the Ministry of Environment (MINAM) and sub-national actors. Building on established territorial development frameworks, the project has initiated groundwork through consultations and preparatory work in palm oil and coffee-growing areas. In Tanzania, the most notable achievement is the establishment of a multi-stakeholder platform (MSP) in the Kilombero Valley. This platform has started stakeholder mapping, awareness-building, and early planning for sustainable rice intensification (SRI). A second MSP is being launched in Zanzibar. Ghana's project has made modest progress, capitalizing on earlier cocoa sustainability efforts and existing partnerships in the Juaboso-Bia landscape. Initial steps have included land-use planning, investment plan development, and stakeholder consultations, supported by alignment with the Cocoa & Forests Initiative.

Constraints. A key constraint across all four countries lies in the complexity of aligning national policies with sub-national implementation structures—particularly pronounced in Indonesia and Peru, where decentralized governance creates additional layers of coordination. In Peru, these dynamics have slowed consensus-building and delayed the start of field activities. Ghana and Tanzania, while making progress in setting up multi-stakeholder platforms and initial planning processes, have yet to move meaningfully into implementation on the ground. Ghana faces difficulties in sustaining the engagement of value chain actors beyond policy dialogue, and Tanzania is still refining its operational roadmap to connect planning with farmer-level interventions.

Private sector engagement is another cross-cutting challenge. Although all four country projects aim to attract co-investment and partnerships with commodity actors, tangible results have yet

to emerge. Indonesia appears most advanced in laying the foundation, particularly through its engagement with national institutions such as the Palm Oil Plantation Fund (BPDP) and its links with parallel initiatives by Unilever and others. Peru and Tanzania have also initiated outreach to commodity stakeholders, but formalized partnerships remain pending. More broadly, the inherently ambitious design of the FOLUR program—spanning multiple commodities, sectors, and levels of governance—has contributed to implementation complexity in all four countries. Successfully managing this complexity requires strong institutional coordination, clear priorities and well-sequenced planning; without it, the transition from preparatory work to concrete results in the field may be slow and uneven.

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