

FMO

Entrepreneurial
Development
Bank

Agribusiness

Sector evaluation

2018

Greenland Fedha Limited, a Kenyan microfinance institution, exemplifies an investment that fostered the reduction of inequalities through the provision of micro-loans to tea farmers, enabling them to access scarce financial services to address their needs from working capital to education, and emergencies. Since FMO's investment, Greenland Fedha has doubled the size of its loan portfolio and nearly doubled the number of farmers it serves – from approximately 70,000 in 2014 to over 130,000 in 2017.



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Our mission
is to **empower**
entrepreneurs
to build a
better world.

.....

FMO's mission is to empower entrepreneurs to build a better world. To achieve this mission, FMO has set out on a strategy to achieve higher impact, deepen relationships and attain higher productivity in order to become the preferred partner to invest in local prosperity.

Evaluations are essential to measure, demonstrate and improve the impact and effectiveness of FMO's investments. Within FMO, responsibility for implementing and managing evaluation activities lies with the Development Impact and Sustainability team, which forms part of the Strategy and Corporate Affairs Department. The department is mandated to assess and enhance the socio-economic and sustainability impact of FMO's investments, through monitoring and evaluation activities and policy development.



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MANAGEMENT BOARD RESPONSE

We welcome this review by FMO's internal Evaluation Team of the development effectiveness and impact of FMO's agribusiness investments made between 2012-2017. We are pleased to note the generally positive results of FMO's investments in the Agriculture, Food and Water sector. The findings that the vast majority of clients assessed in the sample are financially sustainable and that the portfolio is largely financially healthy is critical, since financial viability is a prerequisite to reaching development results. The review highlighted other positive aspects including FMO's ability to catalyze other investors to co-finance projects in agribusiness, FMO's additionality - both financial and non-financial - to the market, and FMO's adherence to its sustainability policy with respect to its agribusiness investments. The report also shows the complexity of driving impact in various agribusiness sub-sectors and measuring impact in a consistent way. The three case studies are particularly insightful and provide valuable lessons learned for the future.

FMO has, in the context of its strategy towards 2025, recently restated its impact ambitions in terms of the Sustainable Development Goals (SDGs), of which, SDG 8, Economic Growth and Decent Jobs, SDG 10, Reducing Inequalities, and SDG 13, Climate Action, are the impact goals for FMO as a whole. Agribusiness also contributes to SDG 2, Zero Hunger, through investments that improve food security in low-income food-deficient countries. The report finds that many of our agribusiness investments, several contracted before the SDGs were introduced, are relevant to FMO's 3 headline SDGs.

The report's main recommendations call for (i) **better project selection** to further align FMO's agribusiness portfolio to FMO's impact ambitions, (ii) **better articulation and measurement of impact (both ex-ante and ex-post)** and (iii) **increased support for clients to enhance their impact**. Please find below our comments per category.

The report points out ways in which project selection can help increase SDG relevance of the agribusiness portfolio. Specifically, the evaluation identified various opportunities to support impactful transactions in the various agribusiness subsectors which would enable FMO to increase our contributions to our 3 headline SDGs and SDG 2, Zero Hunger. **Investments that are gender-positive or benefit smallholder farmers can help reduce inequalities and support jobs and rural livelihoods.** But investments in large-scale agribusiness may also be needed to support food security. Various types of investments have been identified that support

climate change adaptation and mitigation as well as GHG footprint reductions. Forestry investments make strong contributions to SDG 13, but given the relatively high-risk profile of such investments, state funds or other sources of blended finance may be essential. Given the range of impact objectives, it is critical to steer impact on a portfolio basis rather than on an individual deal basis.

The need to improve impact measurement and monitoring, and to strengthen impact management throughout the project cycle is not only brought out by this sector review but has also been a recurrent theme in external evaluations of FMO and of the FMO-managed state funds, most recently in the evaluation of the Infrastructure Development Fund. This sector review calls for: 1) improved analysis of the ex-ante impact case at acceptance (early review), 2) quality ex-post monitoring of relevant development results data, and 3) an application of lessons learned. By implementing these measures throughout the project cycle, FMO will be further equipped to articulate the development results achieved through its portfolio. Improving impact measurement does not only apply to our investments in agribusiness, and we have therefore taken a number of FMO-wide initiatives in support of this.

Lastly, **we welcome the recommendation to increase the use of capacity development grants to enhance client development impact**, for example to scale up training on good agricultural practices for smallholder suppliers. To achieve a higher impact portfolio and to deepen client relationships, we will endeavor to increase the availability of such funding.

REVIEW OF AGRIBUSINESS,

FOOD, AND WATER INVESTMENTS

EXECUTIVE SUMMARY

In 2011, FMO selected Agribusiness as one of its focus sectors. We conducted a performance review – especially in terms of development effectiveness – of FMO's investments in the sector. The sector is referred to as Agribusiness, Food and Water, or AFW, and is served by a dedicated investment department (with equity investments in the sector managed by the Private Equity Department). The review covers 70 AFW clients financed in the last six years, totalling EUR 1.2 billion; actual development results were assessed for 31 clients whose investments had reached operational maturity and were contracted between 2012 and 2014.

Over the past six years, FMO has built up a highly diverse and financially healthy portfolio in AFW. From a base mainly in Latin America and Eastern Europe, FMO expanded its AFW portfolio into Asia and sub-Saharan Africa. The portfolio is spread over subsectors including agro-processing, commodity trading (often with links to smallholder production), primary production, the production of agricultural inputs and equipment and (agro-) forestry. Financial sustainability enabled clients (93%) to realize many of the development results that were expected of them ex-ante and only 2 AFW investments (7%) that were evaluated led to unsatisfactory development results.

We established that it is highly plausible that FMO's investments in the sector were financially additional to what the market would have been able to provide. FMO was seen to have been successful in mobilizing funding from other financiers for AFW projects, fulfilling its catalyst role. FMO also ensured that AFW investments were compliant with FMO's sustainability policy, and that clients were increasingly operating in accordance with applicable environmental, social and governance (ESG) standards.

Over the past years, FMO has mainly steered its impact to reduce inequalities (inclusive businesses, geography), and green projects; and estimated ex-ante impact in terms of jobs supported and GHG emissions avoided. To optimize impact, (sub-)sector specific approaches can be further scrutinized with regard to the effects on jobs supported and GHG

emissions avoided. AFW investments (2012-2017) were estimated to have supported 250,000 jobs, mainly indirectly. Employment effects would be helped by making more AFW investments in smallholder-based agribusiness, especially in Africa and Asia. Contributions to climate change mitigation / GHG avoidance were made by a few forestry projects; a strategy was recently developed to prudently expand such forestry investments.

FMO drives development through the projects, sectors, and countries in which we invest, partnering with entrepreneurs to foster innovation and economic growth. In order to further articulate our impact, FMO recently framed our impact ambitions in terms of the Sustainable Development Goals (SDGs), seeking impacts on SDG 8, Decent Work and Economic Growth, SDG 10, Reducing Inequalities, SDG 13, Climate Action and, for AFW, SDG 2, Zero Hunger. For the sample of investments reviewed, we found evidence of contributions to these SDGs. A more detailed ex-ante analysis of the expected development results within the impact rationales would enable better monitoring of results as they relate to SDG contributions. To achieve this, we recommend that AFW strengthen impact management throughout the project cycle including the early review, due diligence, financing proposal, monitoring, and feedback loop stages.

We conclude that, in AFW, FMO has the potential to substantially strengthen its development impact. While the AFW Department, in its current sector strategy, makes references to SDG-related impact objectives, for which steering metrics have been introduced, we recommend that AFW develop concrete plans and allocate resources to proactively source more deals that:

- **contribute to fighting hunger** (through the local provision of affordable and nutritious food),
- **support employment** (invest more in labor-intensive subsectors, and in Africa and Asia),
- **help reduce inequalities** (gender positive, smallholder based), and / or
- **support climate action** (through projects that mitigate or adapt to climate change and/or reduce our carbon footprint, such as investments in forestry).



1 INTRODUCTION

1.1 Objectives

Annually, FMO conducts a review of its investments in one of its focus investment sectors. After reviewing FMO's investments in Financial Institutions (2014), Energy (2015) and Infrastructure, Manufacturing and Services (2016), this report reviews FMO's investments in Agribusiness, Food, and Water (AFW). The main objectives of the sector reviews are:

- **Accountability:** to communicate to what extent investments in FMO's priority sectors 1) fit with FMO's mandate to be additional to the market, 2) foster development results, 3) catalyze commercial investors and 4) work with clients towards compliance with international standards.
- **Learning:** to provide lessons and recommendations to support decision-making about investment selection, processes, policies, and strategies to continually improve FMO's development results.

1.2 SDGs & 2025 Strategy

In 2017, FMO adopted a strategy that aligns its impact goals with the Sustainable Development Goals (SDGs), and particularly with three headline SDGs to which FMO mainly seeks to contribute: Decent Work & Economic Growth (SDG 8), Reduced Inequalities (SDG 10), and Climate Action (SDG 13). Given that most AFW investments support the production and/or processing of food products, the report also analyzes AFW's contribution to Zero Hunger (SDG 2) and references AFW contribution to Gender Equality (SDG 5) as part of the analysis of AFW's contribution to Reducing Inequalities (SDG 10). In this review, we use FMO's SDG wheel as an analytical framework: the inner wheel signals how we avoid harm, while the outer wheel captures our positive contributions. Avoiding harm is achieved through ESG risk management (further details in section 4).

It is important to note that FMO framed impact objectives in SDG terms in 2017, and that the majority of projects reviewed here were approved in earlier years and, as such, were not approved to contribute specifically to an SDG goal but rather to the AFW strategy of the time. Nonetheless, FMO's development goals (doubling jobs supported and doubling the avoidance of GHG emissions by 2020, inclusiveness, etc.) can also largely be framed in SDG terms. As the SDGs now constitute a globally accepted framework to talk about sustainable development, we have chosen to articulate and analyze the development results of these earlier investments in SDG terms.

1.3 Approach

The focus of this review is on three sets of questions:

- **Ex-ante relevance:** how relevant are FMO's investments in AFW from an SDG perspective, i.e. can investments be expected to make important contributions to the SDGs and, if so, to which SDGs?
- **Ex-post performance:** how have the investments performed in terms of actual contributions to the relevant SDGs?
- **FMO Role:** To what extent have FMO's investments been financially additional, has FMO mobilized further investments, and has FMO enhanced our clients' Environmental and Social Governance (ESG), Corporate Governance performance and development outcomes, through Capacity Development or otherwise?

This review takes a three-pronged approach to answer the above questions:

- To answer the first question, we conducted a high-level scan of the expected development effects of all investments in the AFW sector in FMO's portfolio. This high-level scan was based primarily on a desk review of the investment appraisal documents.
- To answer the second and third questions, we made a deeper assessment of investments approved between 2012-2014. At the time of this review, these investments had reached early operating maturity, when realized results should become visible. For these investments, we also analyzed internally available investment monitoring information, complemented by interviews with FMO investment staff and, in some cases, phone interviews with clients.
- To gain a deeper understanding of how particular FMO investments contribute to sustainable development, we conducted field visits with two clients. During these field visits, interviews with local stakeholders were conducted to obtain supplemental information on achieved impacts.

1.4 Report Structure

Section 2 provides an overview of the AFW portfolio and describes how the portfolio has developed over two time periods: 2012-2014 and 2015-2017, with the first time period demarcating those investments that have reached operational maturity. **Section 3** describes the methodologies and evaluation criteria employed in this review and maps the AFW portfolio in terms of its relevance to the SDGs considered. In **Section 4**, we look at the actual performance and development results of a sample of **operationally mature AFW investments contracted between 2012 to 2014**. Lastly, **Section 5** presents our main findings, draws conclusions, and makes recommendations on how to improve the development effectiveness of FMO's investments in the sector.



2 AFW INVESTMENTS

2.1 AFW Department History

Though agribusiness investments played a significant role since FMO's inception, these investments were often greenfield, large-scale, and in primary production and resulted in unsustainable non-performing loans (NPLs). As such, toward the end of the 1980s, it was decided to stay away from primary agriculture altogether. This investment strategy persisted when FMO decided not to select agribusiness as a priority sector when it adopted a sector-focused strategy in 2009, largely because FMO lacked sector-specific expertise. Instead, the sector was supported by joining partner institutions that had such expertise (DEG, IFC). In 2011, FMO's strategy evolved and agribusiness became a priority area which aligned with the Dutch development policy objectives. An Agribusiness team was established and adopted a holistic impact management approach called AGRIOL referring to

its focus on: Additional Food Outputs, Good Agricultural Practices, Resource Efficiency, Inclusion of farmers, Optimizing Value Chains, and addressing Local food production deficits. The AGRIOL strategy was a qualitative tool used to establish a development impact rational and select projects based on their potential contribution to an AGRIOL component. If at any point the portfolio had insufficient projects in one AGRIOL area, deal teams could actively balance their portfolio and channel resources to a credit-worthy project that fulfilled the AGRIOL deficiency. The AGRIOL strategy was used from 2012-2016 until the team grew into the current Agribusiness, Food and Water department in 2016. Its mandate now also includes forestry investments, which were, until recently, managed by the Energy Department.

2.2 Portfolio overview

The AFW portfolio analyzed in this review consists of investments managed today by the AFW Department and the Private Equity (PE) Department including forestry projects originated by the Energy department, but now managed by AFW or PE. Apart from investments funded by FMO's own account (FMO-A), we have included investments funded from FMO-managed government funds (MASSIF and IDF). Facilities from the (discontinued) guarantee Facility for Emerging Markets (FOM) were excluded. In addition, for all facilities, we used volumes approved at contracting. Lastly, for purposes of this report, we define project as the term is typically used by DFIs: an investment plan or program for which FMO provides finance.

Investment / transaction overview

The portfolio for this review consists of deals in AFW sector contracted between 2012 and 2017. A total of 106 facilities were contracted valued at €1.23 billion for 70 clients. Of the total amounts contracted, 86% consisted of loans; the remaining were equity investments. In 63% of the facilities, FMO was the lead party or parallel party in the financing offered to clients. While 85% of the investments were provided directly to clients in the AFW sector, 15% were provided indirectly through financial institutions and (sector-focused) PE funds.

The majority of investments, 86% of total EUR invested, were made from FMO-A, with 12% from IDF, and 2% from MASSIF. The MASSIF fund makes smaller investments (average 4.4 mln deal size, compared to an overall average of 11.6 mln), so while it only represents 2% of capital invested, it represents 6% of transactions made.

In the four years from 2014 through 2017 (the years for which pertinent data are available), FMO mobilized (against own investments of EUR 899 mln) a further EUR 339 mln by catalyzing other, commercial financiers, especially for a few select and longer-standing clients in South America. While the leverage factor (catalyzed funding) for AFW was 43% over these years, it was 57% for FMO as a whole. For AFW, that was still building its client base and developing its expertise in FMO's youngest focus sector, this can be considered a remarkable achievement.

The investments in AFW over the period 2012-2017 have resulted in a healthy portfolio. Of the 70 investments contracted in this period, only six ended up at Special Operations, and one of these is now back under normal management. Only four of these 70 investments (a fruit grower, two waste-to-energy investments, and an agro-forestry project) ever became non-performing loans.

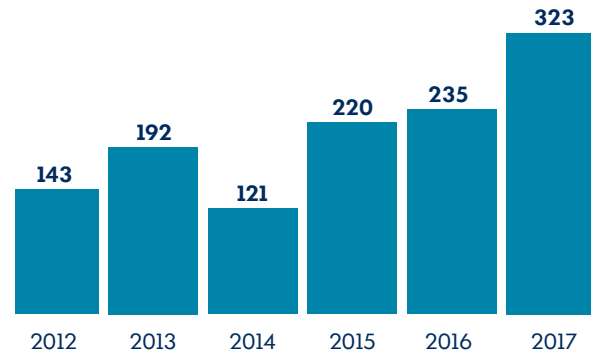


Figure 1: AFW investments (EUR mln) per year

2009	2011	2012-2016	2016
FMO adopts strategy focusing on sectors: selects Financial Institutions, Energy and Housing, Global Partners (GP)	FMO modifies strategy to align with the Ministry of Foreign Affairs food security objective. FMO selects agribusiness as a priority.	GP changes its name to Diverse Sectors and later to IMS, Agribusiness starts as a separate team (AFW) within Diverse Sectors (A&DS). Adopts AGRIOL strategy.	Agribusiness, Food, and Water Department formed. Develops new sector strategy. Includes forestry investments, formerly in Energy

Period	Total Amount in €	Number of Transactions	Average deal size
2012 - 2014	456,009,213	41	11,122,176
2015 - 2017	777,414,618	65	11,960,225
growth between the two periods	70%	59%	8%

Tabel 1: Shift / trend over times

Shifts / trends over time

Investments made in 2012-2014 reached operational maturity, having benefitted from FMO funding for at least 3 years as opposed to those investments contracted from 2015-2017. As such, we sought to evaluate results achieved for investments in the first three-year period and study any changes in the compositions of investments thereafter. Rapid growth of AFW is illustrated by comparing the period 2012-2014 with 2015-2017. The number of transactions increased by 59% and the amount invested by 70%. The deal size remained relatively static, with a small increase of 8%.

Regions

These investments were made in FMO’s target countries in Africa, Asia, Latin America & the Caribbean (LAC) and Europe & Central Asia (ECA). The chart on the opposite page shows the geographical spread of FMO’s 2012-2017 investments in AFW analyzing the amount invested in euro across FMO’s priority regions. Latin America took the largest share of FMO’s AFW investments, followed by Africa and Europe and Central Asia. By country, the largest exposure was taken in Argentina (24%), followed by Nigeria (6%), and India (5%). The largest shifts in invested capital occurred in LAC with the region receiving 31% (€141 mln) in 2012-2014 and 40.5% (€315 mln) in 2015-2017.

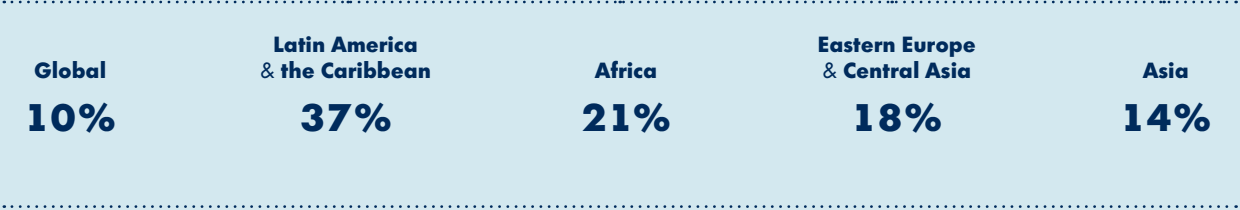
Sectors

The table on the opposite page shows the percent of total amounts invested by subsector, compared across the two time periods. AFW clients were classified in sectors based on the main activity of the company. If operations were equally spread across multiple sectors (e.g. production, processing, and trading), the client was classified under the “multiple” sector. If the client had operations across multiple sectors, but a significant portion of its operations fell within one sector, the client was classified under the predominant sector. Primary production includes the production of food, for example, fruit, vegetables or beef. Forestry consists of timber and agro-forestry, the latter of which includes investments incorporating intercropping where, for example, banana or timber trees provide 1) the necessary shade to grow coffee and cacao trees and 2) serve as an alternative source of income for farmers.¹ The “Other” classification includes projects focused on power and financial institutions among others. We find that a significant percentage (45% and 35% of the invested volume in the two time periods) of AFW’s investments were channeled to clients that combined operations in production, processing and/or trading and thus classified under the multiple category. The biggest shift in portfolio composition stemmed from an increased share of agro-processing, at the cost of the share of commodity traders and companies with operations in multiple sectors. Nevertheless, clients with operations in multiple sectors represented approximately one-third of the volume invested in time period 2.

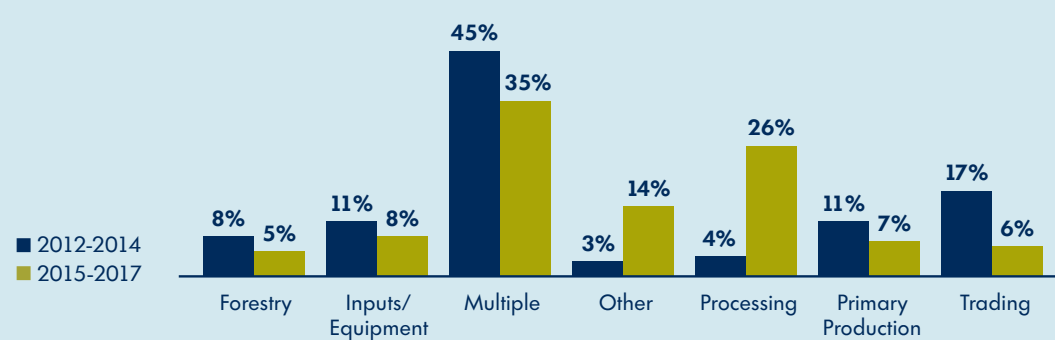
1. We observe intercropping in the Althelia Climate Fund investment whereby local smallholder farmers interspersed banana trees to provide coffee and cacao trees with the shade they need to grow.



Percent of Total Amount Invested (Eur) by region 2012-2017



Percent of Total Amount Invested (EUR) per sub-sector, 2012-2017



3 IMPACT STEERING

SDG CRITERIA & EX-ANTE PORTFOLIO MAPPING OF 70 PROJECTS

FMO believes in a world in which, in 2050, more than 9 billion people live well and within the means of the planet's resources. To achieve this vision, many challenges, highlighted by the Sustainable Development Goals (SDGs), need to be addressed. We discuss the three most relevant challenges to sustainable agriculture below and use FMO's outer SDG wheel as a framework to evaluate how AFW contributes to FMO's vision. Ultimately, we seek to assess how AFW empowers client entrepreneurs to foster decent work and economic growth (SDG 8), reduce inequalities (SDG 10), take necessary climate action (SDG 13), and support local food security (SDG 2).

3.1 SDGs and Sustainable Agriculture

Feed 9 billion people.

The United Nations estimates that the world's population will reach 9.8 billion by 2050. Increasingly, the effects of climate change, including extreme weather events of drought and flooding, make it more difficult to produce enough food for the planet's growing population. As such, one challenge within agriculture is how to close the gap between the amount of food available today and the amount required in 2050. Tackling food waste will be a critical element as FAO estimates that one third of the food produced for human consumption, approximately 1.3 billion tons, is lost or wasted every year. These figures signal that limiting food waste could offset large parts of what would otherwise be needed in terms of production. Increased productivity through innovation will also be a crucial component needed to address potential food gaps. By actively supporting in-country and in-region food production and availability where food security has been identified as an issue, FMO seeks to contribute to SDG 2.

Support equitable growth and development; provide rural livelihoods and improve the position of women.

Agribusiness is key to foster the reduction of inequalities as it employs approximately 27% of world's population directly or indirectly and provides employment and incomes in rural areas.² AFW promotes inclusive business (SDG 10) by working with smallholder farmers, sharing innovations in good agricultural practices to help meet the world's demand for food. Across the globe, smallholder farmers cannot maximize their yields due to a lack of access to capital, a constraint even more prevalent among women. According to the FAO, "On average, women comprise 43% of the agricultural labor force in developing countries, ranging from 20% in Latin America to 50% in Eastern Asia and sub-Saharan Africa. If they had the

same access to productive resources as men, they could increase yields on their farms by 20–30%".³ By supporting agricultural projects that include smallholder farmers, FMO aims to i) contribute to the world's food production, ii) promote rural development, and iii) enable people living at the base-of-the-pyramid⁴ to improve their lives.

Increase production in a sustainable manner through improved resource efficiency; help mitigate, adapt to climate change.

To meet global demand sustainably, agricultural food producers will need to produce more while using fewer inputs like land, water, energy, fertilizer, pesticides, among others. At present, agricultural practices that lead to soil erosion and water waste are quite common. By incorporating innovations and good agricultural practices (GAP) into AFW investments, FMO seeks to contribute to sustainable agriculture that produces more food outputs with fewer inputs.

3.2 Approach to Assessing Ex-ante Estimates of AFW Portfolio Contributions to SDGs

This section presents the criteria used to assess the expected SDG contributions of AFW's investments – focusing on FMO's headline SDGs 8, 10 and 13 – as well as SDG 2 as an AFW-specific development goal. FMO actively drives impact through the implementation of steering metrics for SDGs 10 (in operation since 2018) and 13 (2015), called "Labels". Although not in place for most of the period 2012–2017, they represent FMO's now-established way to assess potential SDG contributions at the point of investment. The label criteria have also been used to establish the relevance and contributions of older investments to SDGs 10 and 13. For SDGs 8 and 2, this review proposes its own criteria. To assess a project's contribution to an SDG, the team used available information based mostly on internal reporting as

prepared by the front office. However, in some cases, clear information as to SDG relevance was not available, as the majority of projects in this review were contracted prior to the adoption of the SDG framed strategy and approved to contribute to the AFW strategy of the time. In those cases, the evaluations team has applied its own judgment. For example, if an AFW client worked with cooperatives or traders to secure primary production, and it was likely that the cooperative or trader sourced a substantial fraction of its inputs from smallholder farmers and provided them with significant support such as training or working capital, we assessed the project as contributing to SDG 10.



3.3 SDG 8 – Decent Work and Economic Growth

Central targets under SDG 8 are increased economic growth and decent work for all. These goals are at the core of FMO's mandate as a development bank and FMO investments in all sectors are expected to make meaningful contributions to these goals.⁵ FMO ensures that projects adhere to IFC Performance Standards⁶, including IFC PS 2, which states that employees receive fair treatment, and jobs comply with national labor laws, promote health and safety, and avoid child labor.

Since 2014, FMO has been using an input/output impact model⁷ to make an ex-ante estimate of direct and indirect employment supported through its investments. Using this instrument, FMO's portfolio investments in 70 AFW projects contracted in 2012 through 2017 are estimated to support approximately 250,000 jobs, with the largest contribution expected from indirect employment (65% of the total). Specifically, expected impact per million EUR invested is about 250 jobs supported (85 direct and 165 indirect). Though the model allows FMO to estimate direct and indirect jobs supported at a portfolio level, the input/output model is based on macro-economic averages and is therefore not precise enough to allow for an ex-post comparison of the total economic and employment effects of individual investments.

In addition to the above, contributions to SDG 8 were also looked at in this review in a much narrower sense, using available evidence at the deal level to identify direct jobs supported by investments where employment was central to the development rationale of the investment and the client was expected to make a strong contribution to employment. 13.5% of the portfolio, equivalent to 17 projects valued at €167 mln, were

identified in this way as having significantly contributed to direct jobs supported, one dimension of SDG 8.

Other projects in the AFW portfolio make significant contributions to indirect employment, or to improved labor conditions and economic growth, which are further elements of SDG 8. One such case is that of Mohammed Enterprises Tanzania Limited (METL), where the client used FMO funding to help revive the depressed sisal sector in Tanzania, the world's second largest producer of sisal plants, while providing quality jobs to over 5,000 employees (see section 4.4.1 for further details in case study).

Although the impact model is not suitable for comprehensive analysis of jobs performance of individual deals, we looked within the sample at the drivers of jobs supported. Among sub-sectors and geographies in which AFW invested, forestry is estimated to make the largest contribution to jobs supported per million EUR invested (678 jobs) largely based on the effect of two outlier forestry funds in Asia and Africa⁸. Processing facilities, generic funds ("other") and inputs & equipment make a large contribution to employment, mostly through indirect employment. Investments in soft commodities trading⁹ was estimated to the support the least amount of direct jobs. Jobs supported through primary production was lighter than expected because, even though smallholder production of many crops can be very labor intensive, half of AFW's investments in primary production financed large-scale mechanized grain production in LAC and ECA, (which does not support large numbers of jobs). As such, going forward, if AFW pro-actively sought to source more deals in Africa and Asia, where primary production is more labor intensive, we would expect jobs supported per EUR million invested to increase, thus reflecting a less mechanized means of production. By doing so, AFW would then demonstrate stronger contributions to SDG 8 in terms of jobs supported.

Across regions, the highest contributions to jobs supported per million of EUR invested are estimated to occur from AFW investments in Africa and Asia (see figure on the next page), as the AFW sector in these two regions is more labor-intensive and faces higher capital constraints than in LAC and ECA. However, in the past, AFW has been investing more in LAC where the number of jobs supported is not as high. This creates an opportunity for AFW to increase its contributions to jobs by channeling more investments to Asia and Africa.

2. International Labor Organization, ILOSTAT database. November, 2017.

3. <https://www.globalagriculture.org/report-topics/women-in-agriculture.html>, FAO 2012.

4. The base-of-the-pyramid (BoP) is defined as the portion of the global population that lives on less than US\$8 per day in purchasing power parity (PPP) terms or lacks access to basic goods, services, and income.

5. Supporting decent jobs (SDG 8) is at the core of FMO's development goals. FMO adheres to IFC Performance Standard 2 on Labor and Working Conditions to safeguard the basic decency of jobs. Additionally, EDFI commissioned Ergon Associates to conduct a study on decent work, coordinated by FMO, which will result in an external note on practices and an internal note with recommendations, to be published in 2018.

6. <https://bit.ly/2M2S4v2>

7. For full methodology, see <https://bit.ly/2NRo2ud>

8. Estimates of jobs supported through the Africa Sustainable Forestry Fund Limited II (PE) and Tropical Asia Forest Fund were largely driven by region, local capital scarcity, and by the investment type: Private Equity (2X).

9. Soft commodities are bulk-traded agricultural products or livestock such as corn, wheat, coffee, sugar, soybeans and pork.

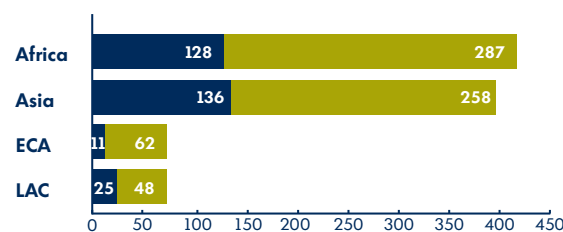


Figure 2: Forecast jobs supported per mln EUR invested by region

The above estimates of jobs supported per million Euros invested, by sub-sector or region, have been arrived at by using FMO's input-output model. The sub-sectoral and regional patterns emerging are therefore also influenced by the fact that investments in certain sub-sectors are concentrated in specific regions, and vice versa. The patterns may therefore provide some guidance for investments that are desirable from an SDG 8 perspective but cannot replace a detailed impact assessment of proposed individual transactions.



3.4 SDG 10 – Reducing Inequalities

In 2017, FMO developed a Reducing Inequalities label to assess the SDG 10 relevance of its investments and, since 2018, all new investments are screened against the label criteria. Two tracks underlie the Reducing Inequalities label: **investment in the least developed countries** (to reduce inequalities between countries) and **investment in inclusive business** (to reduce inequality within countries). The "least developed countries" (LDCs)¹⁰ are explicitly referenced under SDG 10, while an inclusive business, in line with the IFC and G20 definition, expands access to goods, services and livelihood opportunities on a commercially viable basis, either at scale or scalable, to people at the base-of-the-pyramid (BoP).

For AFW, the most relevant category of inclusive businesses are those that support smallholder farmers – either by directly financing smallholders or by integrating smallholders in wider company value chains. For an agribusiness to qualify as an inclusive business, the company must source a substantial fraction of its inputs from smallholders and provide significant support to its smallholder suppliers – e.g. by providing training, input financing, etc.

Using these criteria, we find that 28% (€351) of the investments in the portfolio (in terms of committed amounts) is expected to make a substantial contribution to SDG 10. Investment in LDCs accounts for 10% (€125) of the invested volume while investment in inclusive businesses accounts for

21% (€261).¹¹ The fact that LDC investment volume is relatively low is unsurprising given that only a small number of countries are considered LDCs and that identifying financially viable projects in these countries is typically difficult. The most important LDC countries in FMO's AFW portfolio are in East Africa (Tanzania and Rwanda).

AFW Inclusive Business investments fall into two categories: (1) "farmer finance" investments (4 investments), where *FMO's financing is earmarked to be on-lent to smallholder farmers* and (2) investments in agribusinesses and commodity traders that source from and provide support to smallholders but where *FMO's financing is not earmarked to be on-lent to farmers* (12 investments). An example of a farmer finance investment is an investment in a greenfield microfinance institution in the Philippines (Agronomika) that provides loans to farmers to establish cacao farms. Another example is an investment in the Fairtrade Access Fund, a fund that provides working capital loans to coffee and cacao cooperatives in Latin America and Africa. When FMO finances businesses that source from - and support - smallholders, it may be expected that growth of these companies will also benefit the smallholders that are (to be) integrated into their value chain. Greenland Fedha Limited (GFL), a Kenyan microfinance institution, exemplifies an investment that fostered the reduction of inequalities through the provision of micro-loans to tea farmers, enabling them to access scarce financial services to address their needs from working capital to education, and emergencies. Since 2014, GFL has doubled the size of its loan portfolio and nearly doubled the number of farmers it serves – from approximately 70,000 in 2014 to over 130,000 in 2017, while maintaining low percentage of non-performing loans. (see section 4.4.2)

SDG 5 (gender equality) is of strategic importance to FMO and project impact contributions are captured under the umbrella of SDG 10 (Reduced Inequalities) within FMO's inclusive business framework, where more than two thirds of the end-beneficiaries are female. We screened AFW investments under review using this criterion but encountered no such gender-positive investments in AFW during the period under consideration. As noted previously, a more detailed development impact rationale would enable better project monitoring including capturing data where women account for a significant portion of the end-beneficiaries. As more projects reach operational maturity and as deal teams further leverage Capacity Development funding (see section 4.2.3) to enhance the development impact associated with AFW projects, it is expected that we will identify projects that meet this criterion.

Of all the SDGs identified to which AFW contributed, we observe that the department made the strongest contributions to SDG 10 when comparing 2012-2014 investments with those of 2015-2017. However, AFW decreased its SDG 10-relevant investments as a percentage of invested volume in the latter time period from 30% to 28%. In absolute numbers, SDG 10 relevant investments increased from €135 mln to €216 mln, when reviewing the two time periods. AFW's contributions to LDC investments increased somewhat (from 7% to 12%) and inclusive business investments decreased (from 23% to 20%). As, over the years to come, an increase in SDG 10 investments is targeted, AFW should explore how it can source more viable transactions in LDCs, investments that benefit smallholder farmers, and gender-positive investments.



3.5 SDG 13 – Climate Action

Green investments

SDG 13 is related to the mitigation of and adaptation to climate change. Since 2015, FMO has been steering on SDG 13 through its Green Label, classifying investments as "Green" if they contribute to i) *climate change mitigation*, ii) *climate change adaptation* or iii) *other types of footprint reduction*. A precise set of criteria underlies the Green Label supporting green investments, including renewable energy, energy efficiency, certified agricultural production and forestry. We have retrospectively applied the same criteria to deals made in 2012-2014 to understand the total number of green investments and any changes over time. Using these criteria, 14% of the investments, valued at €174 mln, are expected to contribute to SDG 13. Comparing 2012-2014 with 2015-2017, green investments as a percentage of total volume invested slightly increased from 11% to 16%, while in absolute terms, the change was more pronounced with the volume of green investments doubling during the second time period as reflected in the graph below. AFW's green investments contracted from 2012 to 2017 are estimated to avoid 170,000 tons of GHG emissions, with 100,000 tons avoided by its 2015-2017 investments.¹²

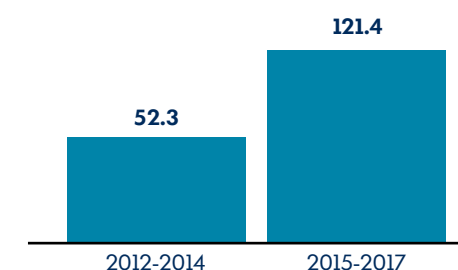


Figure 3: Green Investments: 2012-2014 vs 2015-2017 (€ mln)

As shown below, the spread of sectors among green investments made by AFW is varied, with forestry accounting for 46% of the green investment volume (€80 of €174 mln) made from 2012-2017. As a natural reservoir of carbon, forests play a significant role in climate change mitigation. On the SDG 13 relevance of AFW's investments, the share of green investments has, from 2012-2017, remained relatively modest. The sector's potential to contribute to net emission reductions will largely depend on the extent to which AFW succeeds in identifying relevant (agro-)forestry projects and investments that result in 1) mitigation (carbon sequestration, carbon storage¹³ through the implementation of improved farming practices that stem soil emissions such as zero tillage, land coverage, crop rotation, and fallow periods), 2) adaptation (drought tolerant seeds/plants or drip irrigation) or 3) result in a footprint reduction through the efficient use of resources (land, waste, water, biodiversity).

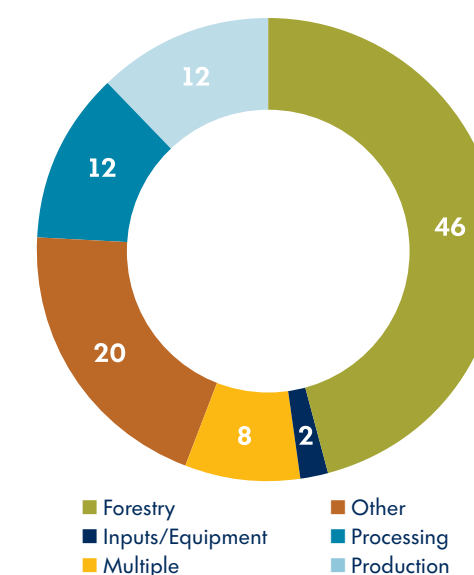


Figure 4: Green Investments by Sector as a Percent of Total Volume Invested in Green (Eur) (2012-2017)

10. <https://www.un.org/development/desa/dpad/least-developed-country-category/ldcs-at-a-glance.html>

11. Note that the percentages do not add up to 30% because of some overlap between the two categories.

12. FMO attributes its estimated avoidance based on the proportion of the project cost it funds.

13. Using a high carbon stock approach, many agricultural activities can have a positive impact on SDG 13, Climate Action, by fostering

FMO, AGRIBUSINESS AND THE 1.5-DEGREE PATHWAY:

The Green Label incentivizes investments in projects that contribute to the fight against climate change but does not give a portfolio-wide view on the GHG footprint of FMO's investments. At present, FMO tracks its impact on climate change by evaluating the GHG emissions avoided from the subset of its portfolio labelled "green" with targets for emissions avoided by 2020. The avoidance approach serves as an important proxy for FMO's investment in climate mitigation, demonstrating how it is facilitating a transition to a low-carbon economy. In its 2017 Sustainability Policy, FMO committed to align its financing to support projects that would help the planet stay within a 2 degree rise in global temperature and

to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. In line with this commitment, FMO is considering adopting a **Net Emissions Approach** which would evaluate GHG net emissions from FMO's entire portfolio, from FMO's "green" and "brown" deals.¹⁴ The approach would inform our strategy on whether we are on track to support investments which will help prevent the global temperature from rising above 1.5 degrees. Based on a sample of investments contracted in 2015 & 2016, AFW net emissions estimates indicate that the sector is on course to adhere to the 1.5 degree pathway and may even serve to offset other departments that may surpass their limits.



3.6 SDG 2 – Zero Hunger

SDG 2 is considered here because of its specific relevance to the AFW sector. Central targets under SDG 2 are putting an end to hunger and reducing malnutrition. Hunger and malnutrition are complex and multi-faceted phenomena and may be caused by supply, demand, or institutional factors. Key demand factors (employment, smallholder income) to which AFW investments contribute are captured under previously mentioned SDGs (SDG 8: jobs; SDG 10: smallholder development). To assess SDG 2 relevance, we thus focus on the supply side and label an investment SDG 2-relevant if it is expected to lead to increased availability of food in countries or regions where food insecurity is a major issue.

Using this criterion, our assessment found that 13% of the invested volume (10 clients with projects valued at €161) contributes to SDG 2 through improved local food supplies. The relatively low percentage correlates to the fact that most of AFW's investments in agribusinesses process or trade export crops. FMO has traditionally focused on exporting businesses as their hard currency earnings provide a natural hedge to the foreign exchange (FX) risk posed by the hard currency loans that FMO provides.

Examples of SDG 2 investments include an investment in a palm oil plantation in the Democratic Republic of Congo (DRC) catering to the local market and an investment in a fertilizer plant in Nigeria where a substantial fraction of the output goes to the Nigerian market and other countries in the region, improving the affordability of and access to inputs for local food crops. All SDG 2 investments in the portfolio under review are in hard currency. The (unhedged) FX risk makes these transactions relatively risky and explains why government funds (MASSIF, IDF) are typically used. When comparing the first half of the review period (2012-2014) to the second half (2015-2017), we observe that the percentage of SDG 2-relevant investment volume has increased somewhat (from 7% to 16%). In terms of number of transactions, SDG 2-relevant investment has risen from three to seven investments.

3.7 Summary of SDG Contributions

From the chart on the opposite page, it can be noted that a large percentage of FMO's AFW investment volumes is relevant to Reducing Inequalities (SDG 10) and Climate Action (SDG 13). However, relatively few projects articulated, in the investment appraisal documentation, the contribution they sought to make to jobs supported (direct, indirect), to the quality of the jobs (in relation to IFC PS 2, for example), and to economic growth. This is likely due to a combination of factors, principally, because jobs are calculated regularly at portfolio level rather than being used to inform individual deal selection, as part of the Doubling Impact Halving Footprint ambition; and because FMO's contribution to economic growth is informed by country and (sub-)sector selection, most recently evidenced in a decision to focus on specific regions (Africa, Asia) as well as sectors (discontinuing Infrastructure, Manufacturing and Services department) in FMO's new 2025 strategy. The 2014-2020 ambition, the period largely coinciding with this sample review of investments, was mainly based on a strategy that

by doubling production, FMO could double jobs supported, assuming that production was appropriately targeted in certain regions and sectors pre-defined as part of the 2020 ambition. Lastly, few of FMO's AFW investments are seen to make a significant contribution to food security by improving local food supplies and affordability (SDG 2), although the trend appears to be positive when comparing the two investment periods.

The recent introduction by FMO of steering metrics for SDG 10 and SDG 13 investments is expected to increase the share of investments that reduce inequalities or are green, subject to qualifying investments. A stated departmental focus on SDG 2 (since 2017) should also lead to a growing share of such investments. Improved impact assessment (and better documentation of the ex-ante impact case) during the investment approval process – appropriately facilitated – could also help FMO to better account for its ex-post impacts on key SDGs.

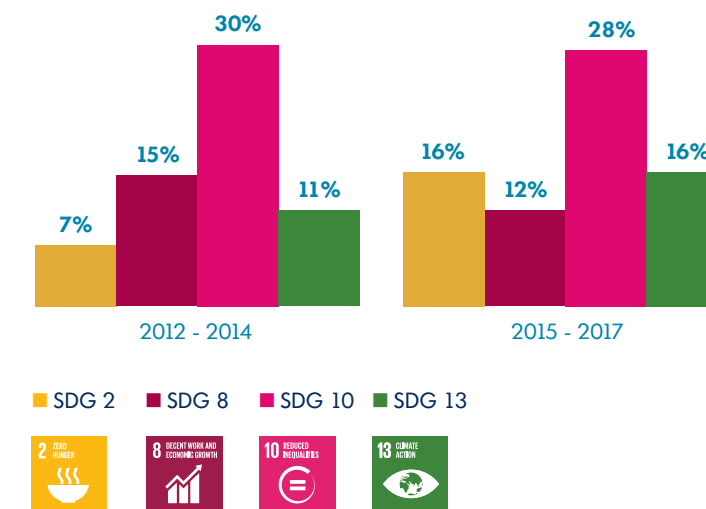


Figure 5: Contribution per SDG as a percentage of the total EUR invested in AFW: 2012-2014 vs 2015-2017

14. Projects which have received a "Green" label mitigate or adapt to climate change or result in footprint reduction (land use, waste, water, energy, biodiversity) of at least 20% than the business as usual. "Brown" deals are those projects which have not received the green designation because they do not focus on mitigation or adaptation or because efficiency measures within the projects do not exceed 20%. Nonetheless, these deals impact FMO's net emissions and are thus relevant to determine whether FMO is on the 1.5 degree pathway.

4 IMPACT MANAGEMENT: EX-POST ANALYSIS OF 31 PROJECTS THAT REACHED OPERATIONAL MATURITY

Following the analysis of AFW portfolio's relevance to the SDGs, this section presents the development results of AFW's investments that have reached operational maturity: a subset of 31 projects contracted between 2012-2014. We also assessed the role FMO played in supporting them, by providing financial additionality and non-financial additionality (supporting better ESG risk management and performance, partly with capacity development funding) and by catalyzing other financiers.

4.1 Financial additionality

Assessing financial additionality entails assessing whether the project would have been able to secure adequate commercial financing in the absence of FMO (or another DFI) financing and is a function of country risk, project risk and the level of sophistication of local financial markets. FMO provides financial additionality from the long tenors and/or the large volume of its financing. Such long tenors are needed since the supported investments are generally CAPEX investments that generate returns over long horizons. Long-term financing carries relatively high risks and is often difficult or impossible to obtain from the commercial market.

In most cases, the long-term financing provided by FMO would be hard to obtain in the commercial market and we encountered no cases of FMO financing displacing commercially available financing. In our desk review of AFW project documentation, we did not identify any case where financial additionality was deemed implausible. This is primarily a reflection of the high risks inherent in agribusiness investments. Financial additionality was rated as highly plausible when, for instance, an FMO client could only secure short-term financing or when FMO's presence served as a catalyst to mobilize additional resources. Using this standard, financial additionality was judged to have been highly plausible for 75% of transactions, and evident for 25% of transactions, where the transactions had a particularly high financial risk profile. Whereas approximately 10% of FMO-A investments were considered to have evident financial additionality, the percentage stood at 61% for the government fund investments – evidencing the higher risk appetite of these funds.

4.2 Non-Financial Additionality

FMO supports its clients' business performance and development results not only by offering and mobilizing scarce financing, but also by helping clients improve their operational and E&S performance and their Corporate Governance. Often, capacity development funding is provided for this, for example for improving E&S risk management, or for Corporate Governance Assessments.

4.2.1 Environmental & Social Risk Management and Performance

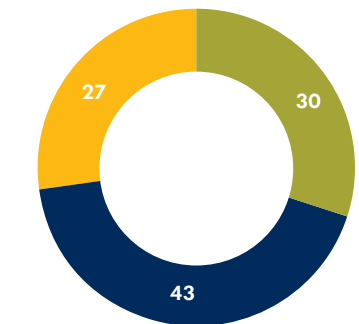
Environmental and Social (E&S) risk is the potential adverse impact of our investments on people and the environment or, in the case of poor corporate governance, on business performance and continuity. Our clients operate in difficult markets, where regulation on environmental and social aspects are less institutionalized. FMO manages impact and adds value as a development bank by working with our clients to identify risks and formulate plans to mitigate these risks to ensure that projects comply with IFC Performance Standards. A sample of the environmental and social issues addressed include: land acquisition, pesticide usage, indigenous people's rights, living wage, biodiversity conservation, E&S management systems, cultural heritage, resource efficiency, local communities, livelihood, and health, among others.¹⁵

Environmental & Social Risk Management in Agribusiness:

FMO seeks to work with clients that operate in an environmentally and socially sustainable manner. This is not only sound business practice, but also a condition for sustainable development and therefore a cornerstone for achieving FMO's goals. AFW projects maintain relatively high E&S risk profiles with 30% of projects (by number) assessed as category A (high risk), 43% category B+ (elevated medium risk), only 27% category B (medium) and 0% C, low risk. For clients deemed Category B+ or higher¹⁶, FMO worked with the client to develop an Environmental and Social Action Plan (ESAP) to improve performance and/or manage risk. For 78% of the clients in this portfolio, an ESAP was put in place and FMO took the lead on the development, implementation, and monitoring on 54% of these.

In 2016, FMO set a goal of implementing 90% of the E&S actions due in 2017 across FMO. The following year, AFW surpassed this corporate goal reaching a 90.7% implementation rate, meaning that AFW clients had addressed 90.7% of the ESAP actions required in 2017. In addition, our desk review looked at client E&S performance over time to further analyze if FMO had been effective in managing client E&S risks year to year. The Environmental & Social (E&S) performance of the client is judged on the project's compliance with applicable E&S standards and on progress made towards full compliance. A client is considered to have achieved good E&S performance if 1) the agreed upon management system and people are in place, 2) the client has delivered agreed upon E&S reporting, 3) their operations perform in line with FMO expectations as evidenced by the completion of an Environmental & Social Action Plan (ESAP, where relevant), and 4) the absence of further E&S issues. Clients receive a partly satisfactory rating if the client is not in material

compliance with FMO's current or at-approval requirements; any planned actions contained in an E&S action plan are addressed, but behind schedule. Using the above criteria, 77% of clients (24) across the sample of 31 had achieved a good E&S performance rating at the time of this review which examined their E&S performance over the analysis period, 2012-2017. Most others were rated partly satisfactory (experiencing delays in action plan implementation, but still heading for material compliance). Only one project was deemed to have performed poorly. This was the case for a forestry client that experienced cash-flow issues and halted its ESAP implementation program.



Risk Profile	E&S Categorization
High	A
Medium High	B+
Medium	B
Low	C

Figure 6: overview of the ESG risk profile of the AFW portfolio:

15. <https://www.fmo.nl/policies-and-position-statements>

16. On occasion, clients with E&S risk profiles categorized as B will have an ESAP developed to enable them to mitigate specific associated E&S risks

Below is an overview of the IFC Performance Standards¹⁷ triggered by the projects in our review sample. Using available data, we identified the E&S risks of the client, against each of the IFC Performance Standards. Using professional judgement and the analysis in the Environmental & Social Review Summary (ESRS), we categorized the risks in each IFC Performance Standard as NA, low, medium, or high and are reflected in the chart below. The most prevalent risks in the portfolio that were rated medium or high were PS1, 2 and 3. These risks are to be expected in the AFW sector where production and processing can be labor intensive with often high-risk manual procedures; and operations can rely on large supply chains making risk management challenging. Given that few investments were in greenfield sites, there were fewer investments that triggered Land Resettlement and Biodiversity.

4.2.2 Corporate Governance

Our approach to Corporate Governance (CG) mirrors that of E&S; we optimize impact by actively working with clients to improve performance by addressing risks associated with corporate operations. In terms of Corporate Governance, 4% of projects are perceived as high risk, 75% as medium risk and 21% as low risk. Among a variety of interventions, CG officers have helped large family-run businesses mitigate risks associated with succession plans, board make-up, and family governance policies. The caselet on the opposite page details the successful intervention with Vicentin, a soybean crushing company in Argentina.

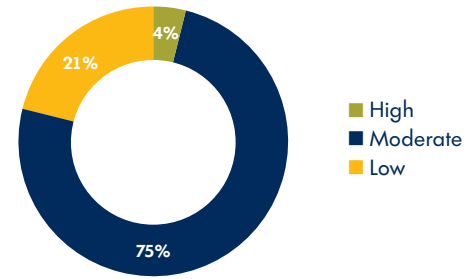
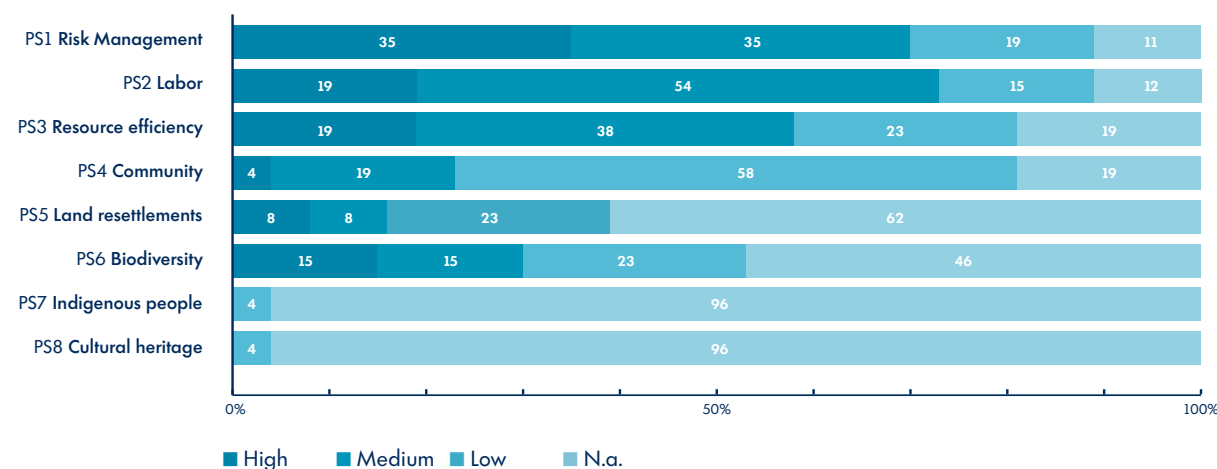


Figure 8: Corporate Governance Risk Categorization of AFW Investments

4.2.3 Capacity Development

Established in 2014, FMO's Capacity Development (CD) program helps AFW mitigate project risks, optimize impact by increasing project productivity, and improve development outcomes. CD programs for AFW are tailored to each project with programs ranging from training cacao and coffee farmers on Good Agricultural Practices (GAP) to produce higher yields and improve incomes, to working with farmers to obtain land titles as a prerequisite for Fair Trade and Organic certifications. At present, six of the 31 AFW projects that have reached operational maturity have (or had) a Capacity Development program¹⁸ with half of the programs supporting forestry projects. The caselet below highlights the Capacity Development work with a sugar manufacturer/soybean processor to identify innovative ways to make more efficient use of resources thereby protecting the client from its heavy reliance on water, energy and gas, all while decreasing its business costs.

Figure 7: IFC Performance Standards Triggered - AFW Sample



17. https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards

18. 12 out of AFW's portfolio of 70 projects have a Capacity Development program.

Creating Value: FMO's Non-Financial Additionality

Corporate Governance Vicentin

FMO conducted a Corporate Governance (CG) Review of Vicentin, a successful third generation family-owned soybean crushing company whose crushing operations are based in the outskirts of Buenos Aires, Argentina. Good corporate governance practices support effective and efficient decision-making at board level and align the interests of shareholders and stakeholders inside and outside the company. For family-owned companies, good governance is especially important because it helps them establish processes that allow to better separate business from family matters. Well-governed companies have better access to finance and at more competitive terms.

FMO's Corporate Governance review of Vicentin focused on analyzing the structure and functioning of governance bodies and processes within the company. FMO concluded that Vicentin's family and corporate governance structure needed to be further enhanced to help it continue its successful business trajectory and tap additional funding sources in a scarce market like Argentina. A widely cited statistic is that only 3-5% of family-owned companies in the world remain financially viable into the 4th generation.¹⁹ Vicentin's appreciation of the challenges, and the awareness raised by the FMO CG assessment led them to hire a consultant to help facilitate the speedy implementation of several key recommendations, including revising a policy which established criteria for employment of family members at Vicentin. The policy sent the important signal that employment and promotions were based on merit rather than family connection. In addition, FMO worked with Vicentin to establish a formal succession plan for key management positions, Board membership, and ensured that current members had the right profile to make strategic business decisions that would benefit the company. In 2015, the International Finance Corporation (IFC) invested in Vicentin and specifically alluded to the company's efforts to implement better governance as an improvement made by the company in recent years.

Capacity Development Astarta

Agricultural Waste Water Management Reduces Risk and Leads to Cost Savings

Astarta Kiev is the largest sugar manufacturer and soybean processor in Ukraine and is one of the largest agricultural land operators in the country. Large amounts of water are required for sugar processing, which in turn produces a large amount of effluent. The client realized that its dependence on water in the context of future water scarcity would limit its growth. The Capacity Development team worked with Astarta to study the feasibility of a sewage purification system for a bioenergy production plant (BPP) taking into account Astarta's wastewater from the sugar plant (SP) and the soybean processing plant (SPP). Implementing recommendations from the study, Astarta reduced its production costs by 6% through: 25% decrease in water consumption²⁰, 20% energy savings, and 15% natural gas savings. The project improved the client's water efficiency and water effluent, thereby aligning it with FMO's Green Strategy and the Agribusiness Strategy.

19. Aronoff, Craig. Family Business Survival: Understanding the Statistics. The Family Business Consulting Group, Article Library.
20. GRI Report 2017

4.3 Operational performance

As indicated in the introduction, very few AFW projects contracted between 2012-2017 were transferred to Special Operations. With the AFW investments generally performing well financially, our review shows that the projects have developed into a relatively healthy portfolio. Of the 70 projects originated in the 2012-2017 period, only four clients had loans that ever became a non-performing loan (NPL). And only six clients have been managed by Special Operations (SO).

We rated a project as having a satisfactory operational performance if the project largely achieved its operational objectives (e.g. plantation expansion targets, capacity targets) and the project performed in line with initial expectations. A project was assessed as being partly satisfactory if the operational targets were slightly under achieved or experienced delays but expected to be completed. Lastly, a project received an unsatisfactory rating if the project experienced important delays or shortcomings and operational targets are not expected to be achieved. The figure below presents an overview of our findings.

Operational Results



Of AFW's 31 projects contracted between 2012-2014, 16 performed as expected receiving a satisfactory rating, with 1 performing above expectations, (55%). Eight projects in the portfolio were rated as partly satisfactory, meaning that operational targets were slightly under achieved or that their achievement experienced delays. Only three projects received a rating of unsatisfactory, meaning that the operational targets would not be achieved or experienced serious delays. Causes of underperformance or unsatisfactory outcomes²¹ were unidentified risks, shortcomings in project and product selection, and macro-economic factors. Forestry and Trading had the largest representation of projects that performed below expectations, each sub-sector contributing three projects.

Of the projects that were transferred to Special Operations, two of these are in forestry, one in primary food production, two waste-to-energy production, and the last (meanwhile returned by SO to AFW) in agribusiness inputs and equipment. The relatively poor performance of forestry projects has recently led to the development and adoption of a forestry investment strategy that aims at better investment selection and structuring while optimizing forestry's contribution to climate change mitigation.

4.4 IMPACT MEASUREMENT: Development results

In reviewing the sample of AFW projects that have reached maturity, our assessments were complicated by the fact that monitoring data on development indicators were not always available. It is important in this context to distinguish between standardized development indicators (that apply to a wide range of projects) and project-specific indicators. Data on a number of standardized development indicators (e.g. direct jobs, income tax, etc.) are available in FMO's Impact Card, a monitoring system FMO has had in place since 2015. Investments in our sample often have quite specific development objectives however – e.g. a forestry fund investment aimed to restore or sustainably manage hectares of forest, or a sisal plant investment where an important development rationale was to increase the yields of these plantations. Data on such project-specific development objectives are generally not available in FMO's data systems, so had to be sourced from a variety of reporting documents (e.g. ESG reports). When no data could be found, we tried to infer from the project's logic and business development whether the effects were likely to have taken place. Where effects were sufficiently plausible to have occurred, we have given projects the benefit of the doubt.

Development Results



Developmental performance is a function of operational performance and tied to project and product selection as well as the extent to which the project lived up to its initial development expectations. The development expectations were derived from the financing proposals and through interviews with front office staff. When available, supporting information was derived from E&S reports, impact cards, and other sources to assess the extent to which development results were achieved. In the absence of detailed information on development performance, we used operational performance as a proxy.²² Of AFW's sample of 31 projects contracted between 2012-2014, 20 (58%) were rated satisfactory, five partly satisfactory, and two unsatisfactory in terms of development results.²³ Seven projects (23%) dropped out due to prepayment, of which four dropped out very early, leaving insufficient information to rate development outcomes.



4.4.1 SDG 8 – Decent Work and Economic Growth

As previously stated, FMO uses an input/output model based on country- and industry-specific assumptions to estimate direct and indirect jobs supported through its investments. Though the model allows FMO to estimate its direct and indirect impact on jobs supported, input/output models are based on macro-economic averages and are therefore not precise enough to allow for a comparison of the total economic and employment effects between individual investments. As such, we utilized project level development impact data to assess project contributions to one narrow aspect of SDG 8, focusing on direct jobs supported by investments where employment was central to the development rationale of the investment. In the 2012-2014 sample of 31 projects, eight project development impact rationales articulated that a key expected development result would be a strong impact on direct jobs supported. 75% of these projects (6 of 8) dealt with primary production (e.g. pineapples, fertilizer, beef) with the remaining two projects in forestry. After two to four years of FMO investment, these eight investments supported a total of 22,000 direct jobs, with the majority located in sub-Saharan Africa. In terms of jobs supported, five of these projects substantially met their employment expectations (meaning they supported 600 jobs or more) and generated over 4,200 jobs. The remaining companies lagged behind meaning that direct employment did not grow as expected or in some cases contracted.

Besides supporting employment, FMO also aims to secure decent working and living conditions for our clients' employees. *Mohammed Enterprises Tanzania LTD (METL)* illustrates not only how it supported jobs in a formerly depressed sector, but also provided high quality jobs that afforded employees with significantly improved housing conditions. (See case study next page)

21. Poorly performing projects are managed by Special Operations.

22. FMO and other DFIs have consistently found that good development outcomes are largely driven by clients' business performance, provided that we have selected projects that are developmentally relevant.

23. Development Results Scale: Excellent: There was a high level of achievement exceeding the targets. Satisfactory: There was a good level of achievement in line with expectations and set targets. Partly Satisfactory: There was a low level of achievement, below expectations. Unsatisfactory: There was no achievement of the intended goals or significant negative effects.



Mohammed Enterprises Tanzania Limited (METL)

Supporting Decent Work by Reviving a Formerly Depressed Agribusiness Sector

Sisal fibers are used in the production of twine, bags, ropes, carpets, and even as an input for automotive parts by manufacturers such as BMW and Mercedes Benz. Sisal enjoyed peak market conditions in the 1960s but suffered severely over the next two decades when synthetic fibers largely replaced sisal. However, due to an increased global awareness of using environmentally friendly biodegradable products, the sisal industry is experiencing a resurgence. At present, only 2% of the sisal plant is used to produce sisal products. The remaining 98% of the sisal plant, which is currently thrown out, can easily be commercialized for energy (biogas), organic fertilizer, and animal feed, producing an alternate revenue source from these plants. Sisal also grows on degraded land, does not require fertilizer, and is drought resistant. As the world's 2nd largest producer of sisal after Brazil, Tanzania is uniquely positioned to benefit from this market resurgence.

Given this context, FMO identified the opportunity to foster rural development by supporting Mohammed Enterprises Tanzania Limited (METL) with a US\$20 mln loan to revitalize its sisal plantations while generating local employment in a previously depressed market. Since the start of the project in 2014, FMO has supported METL in planting almost 4,000 ha of sisal plants and producing 5,000 tons of sisal for commercialization. Due to METL's ambitious replanting schedule, local employment has jumped from approximately 2,000 workers in 2014 to over 5,000 workers in 2018 and is due to continue to grow given METL's plan to plant 2,000 ha of sisal per year until 2023. Without FMO's investment,

METL's sisal production would have decreased to 3,000 tons. Instead, FMO is helping METL maintain its present yield at 5,000 tons and will enable METL to reach 7,500 tons of sisal by 2020 through its new plantations, equating to 1 ton of fiber/ha per year.

The project not only supported more jobs, but also significantly improved employee working conditions through METL's investments in housing, community infrastructure, and health clinics. Prior to METL's investments, housing had not been maintained in 40 years due to the sisal market depression. Using FMO funds, METL allocated US\$4.5 mln for civil works. Over the past three years, METL has renovated over 480 employee houses, equivalent to 90% of current housing, with improved latrines (80 upgraded), changing rooms, a canteen, and a rest area. METL plantation estates have been facilitated with water purifiers to ensure the availability of clean and safe drinking water. In addition, food and transportation are provided to all METL employees with health services provided by doctors and nurses on company grounds. METL also supports community development projects including road rehabilitation, school construction (classrooms, latrines), and health centers by providing material and/or monetary support.

Over the course of the project, FMO will have supported METL with a US\$20 mln loan to increase its total planted area from approximately 12,700 to 20,600 ha, thereby increasing production from 9,623 tons in 2013 to over 19,600 tons in 2023.

Client
Mohammed Enterprises Tanzania Limited (METL)

Sector
Multiple

Country
Tanzania

Financial product
Loan US\$20 million

Contracted
2014

Instrument
Loan



4.4.2 SDG 10 – Reducing Inequalities

As discussed previously, two tracks underlie FMO's SDG 10 label: investment in LDCs and investment in inclusive businesses. The assumption underlying the LDC track is that through successfully investing in some of the least developed countries in the world, FMO makes an enhanced contribution to reducing inequalities between countries. If one accepts this assumption, from an ex-post perspective, it suffices to investigate whether FMO's LDC investments have been successful. We note that the LDC investments have generally performed well in operational and financial terms.

For AFW, inclusive investments are primarily those where supporting smallholders is a key development objective resulting in an increase in the number of smallholders supported (outreach), a larger impact on farmers (depth), or a combination thereof. Measuring these aspects is not part of FMO's impact monitoring. Instead, FMO measures outreach by tracking smallholder farmers supported by its clients. However, the available time series is short and the information was not reported in a consistent way, meaning that clients provided incomplete and/or erratic data year to year, thus calling into question the accuracy of the data. As such, we do not attempt to make aggregate, quantitative statements about the effects that the inclusive business investments in the sample have had on smallholders.

Based on the available and investment-specific evidence, we rated the operational performance of the inclusive investments as mostly satisfactory (five out of eight investments). Where no specific information on the effects on smallholders was available, we assumed that an operational performance in line with expectations went hand-in-hand with the expected effects on smallholders. In two cases, we rated the development performance as below expectations. One of the two cases is a fund investment where the fund experienced difficulties building up its portfolio. The other is an investment in a cacao processing company that experienced difficulties in setting up a farmer finance program. On page 33, we provide a case study on Sucafina, a successful inclusive coffee farming business in Africa that partnered with a local NGO to provide smallholder farmers, many of whom are women, with training on good agricultural practices (GAP). The caselet (opposite page) highlights Greenland Fedha, a client that provides Kenyan smallholder farmers with essential financial credit products to enable them to improve their lives and that of their families through payments for school fees for example.



– CASE STUDY –

Greenland Fedha

Providing Essential Financial Services to Small-scale tea Farmers in Kenya

Greenland Fedha Limited (GFL) is a non-deposit taking microfinance institution that started operations in 2009. GFL is fully owned by the Kenya Tea Development Agency Holdings Ltd (KTDA), the leading agency providing services to small-scale tea farmers in Kenya. GFL offers tea farmers a variety of loan products for productive assets, working capital, education, and emergencies ranging in size from a few hundred to a few thousand dollars. In 2014, through MASSIF, FMO provided a US\$10 mln medium-term loan facility to

GFL, intended to support GFL's rapid growth. Since FMO's investment, GFL has doubled the size of its loan portfolio and nearly doubled the number of farmers it serves – from approximately 70,000 in 2014 to over 130,000 in 2017. GFL has managed to rapidly grow its loan portfolio while maintaining a good asset quality, reflected by the low percentage of non-performing loans.





Sucafina

Supporting Smallholder Coffee Farmers in Rwanda

Introduction. In 2014, FMO made a USD 10 mln investment (7-year tenor) in Sucafina, a global coffee trader, to finance the acquisition and development of coffee washing stations, processing facilities, and warehouses in several countries. The bulk of FMO's financing flowed to East Africa (Uganda, Rwanda and Burundi), where Sucafina is among the key players in the coffee trade. Among East-African countries, there is important variation in how Sucafina's supply chain is structured.

Whereas in Uganda almost all coffee is acquired through middlemen, direct purchases from farmers constitute an important supply channel in both Rwanda and Burundi. As the purpose of this case study is to understand how Sucafina interacts with farmers and the effects of this interaction on farmers, it focuses on Rwanda, a country where Sucafina has significantly stepped up its engagement with farmers since FMO's investment. In May 2018, FMO conducted an evaluation visit to Rwanda which included visits to two washing stations in the coffee growing areas and to Sucafina's dry mill in Kigali, and involved interviews with Sucafina management, employees and farmers.

Coffee in Rwanda.

In spite of rapid economic growth in recent years, Rwanda continues to be a very poor country with an overall extreme poverty rate of over 50%. Its economy is dominated by agriculture, with coffee being a major export crop, accounting for over 25% of all exports. As in the rest of East Africa, coffee is produced almost entirely by smallholder farmers. In Rwanda, there are around 500,000 coffee farmers (out of a total population of 11 mln), most of whom cultivate coffee farms of less than 0.5 hectares (average farm size is around 0.1 ha). The very small farm sizes – combined with relatively low productivity and an inconsistent bean quality – lead to very low incomes. For a typical coffee farmer in Rwanda, yearly income from coffee farming is estimated to be less than EUR 150.

Given the importance of coffee as an export product, it has been a government priority for many years to increase the quantity and quality of coffee exports. A central element in the government's strategy has been the development of a network of coffee washing stations for the wet processing of coffee. Wet processing of coffee beans allows for better quality control and yields higher-value coffee. Whereas prior to 2002, there were only two washing stations in Rwanda, there exists now a network of over 200 washing stations.

(case study continues on the next page)

Client
Sucafina

Sector
Trading

Country
Uganda, Rwanda, Burundi

Financial product
Loan US\$ 10 million

Contracted
2014

Instrument(s)
Loan, Capacity Development Grant

Sucafina in Rwanda

Sucafina started operations in Rwanda in 1996. At the time, it traded semi-washed coffee purchased through middlemen. After acquiring its first washing station in 2006, Sucafina used FMO's financing to acquire ten more washing stations in 2014 and now operates a network of 19 washing stations throughout the country. The acquisition of the washing stations allowed Sucafina to increase the quality of the coffee it exports. But also, given that at the washing stations Sucafina purchases coffee cherries directly from the farmer, it allowed Sucafina to establish direct relationships with farmers and better control its supply chain – effectively transforming Sucafina into a supply chain manager. As of 2018, around 40% of the coffee Sucafina exports is purchased directly from farmers and processed in its own washing stations, while the remainder continues to be purchased through third parties. To strengthen relationships between the farmers and the washing station operators, the government of Rwanda has demarcated catchment areas or “coffee zones” around each washing station. Washing station operators are encouraged to work with farmers in their coffee zones to improve the quality and volumes of coffee. In the zones around Sucafina's coffee washing stations, there are around 21,000 farmers.

Support to farmers

Since acquiring the washing stations, Sucafina has been offering various types of support to farmers in the catchment areas around its washing stations. Most of the support is delivered through the Kahawatu Foundation – a foundation set up by Sucafina and funded by grants from donors and matched funding from Sucafina. A key element of support has been the capacity building program with modules covering good agricultural practices (GAP), financial literacy, etc. Most of Sucafina's 21,000 farmers have had exposure to the various modules.

The farmer training has been an essential building block for the certification of Sucafina's supply chain. Over 19,000 Sucafina farmers are now covered by one or more certification schemes (up from 15,000 farmers in 2016) – making Sucafina the leading exporter of certified coffee in Rwanda. The most common certification schemes that Sucafina works with are Rainforest Alliance, 4C and Starbucks' C.A.F.E.. While each of these certification schemes has slightly different requirements, they all cover social (e.g. no child labor) as well as environmental (e.g. no destruction of conservation areas) dimensions.

In addition to the training and certification activities covering the majority of farmers in Sucafina's zones, Kahawatu has, in recent years, also implemented a number of projects covering specific regions and/or themes. Examples are a health project covering health insurance and the renovation of health care centers and a project that involved the construction of an early childhood development center. Lastly, every year, Kahawatu distributes a large number of coffee plant seedlings for free (on average around 1 million seedlings per year over 2016-2017).

Effects on farmer income

Sucafina's support can potentially affect farmer outcomes in a number of ways. The two most important pathways to increase income are yield improvements and price premiums. Regarding yields, besides limited access to finance, low levels of technical and agronomic skills are generally seen as critical barriers to increased productivity. Effective and sustained training in good agricultural practices could thus potentially have important effects on yields. Measuring the impact of training on agricultural yields is quite complicated, however, and reliable estimates of the effects of Sucafina's training on yields are not available. When prompted, Sucafina staff estimated the yield effects to be in the order of 15%. The estimate is based on anecdotal evidence but is nonetheless in line with what some impact studies on the effect of GAP training have found in other contexts.

Conclusion

Globally speaking, a number of traders have in recent years moved deeper into their supply chains – transforming them into supply chain managers. The movement has been driven by increased demands from consumers on companies to demonstrate the sustainability of their supply chains. Meeting these demands implies the need for better traceability. In the case of Sucafina, FMO's investment has contributed to Sucafina's successful development of a network of washing stations throughout Rwanda. Around these washing stations, Sucafina has developed direct relationships with thousands of farmers and certified over 19,000 farmers. Although robust evidence on the effect of Sucafina's support on farmers' yields and incomes is not available, Sucafina's support and services seem to be valued by farmers.

Farmers and Sucafina have a common interest in improving the quantity and quality of coffee production. Over the past few years, Sucafina has developed a large farmer network and a robust infrastructure that can be leveraged to deliver even more meaningful services to farmers to achieve this objective. Reflections within Sucafina along these lines are ongoing.



4.4.3 SDG 13 – Climate Action

As noted previously, projects are assessed as having an impact on SDG 13 if they mitigate or adapt to climate change or result in another type of footprint reduction. Applying these criteria to AFW's 2012-2014 sample, five projects (whose green portion is valued at €52 mln) are noted as contributing to SDG 13. Four projects focused on forestry and one on inputs/equipment. The inputs/equipment project is performing as expected from a development perspective, while two of the four forestry projects are performing below expectations. One forestry investment, through which FMO extended a debt instrument, burdened the client with debt payments when insufficient cash-flow was available from timber sales, as the tree assets were too young to be harvested.²⁴ This created a ripple effect in other areas of the investment; specifically, limited cash-flow precluded E&S plans from being implemented. The second investment, a forestry fund, has been slow in deploying capital as it proved more time-consuming than anticipated to find adequate projects. The delay resulted when a key partner, which was expected to source the green investments, changed management, unexpectedly changed strategy, and dropped its intent to source green deals for the fund. Though some forestry projects have experienced complications, the Althelia Climate Fund case study (see case study opposite page) exemplifies a successful forestry investment, which is enabling a local partner to use an innovative business model to protect forests, while using carbon credits to repay its forestry conservation and agro-forestry loans.



4.4.4 SDG 2 – Zero Hunger

As previously noted, projects are assessed as having an impact on SDG 2 if they support in-country or in-region food availability in areas where food security has been identified as an issue. Applying this criterion to AFW's 2012-2014 sample, three clients (valued at €59 mln) are noted as contributing to SDG 2. One project invested in a large fertilizer plant in Nigeria while the second investment was channeled through a private equity fund that invests in agribusinesses in West Africa. The last investment supported palm oil production intended for the local market. All three investments were rated as having a satisfactory development performance. The palm oil plantation expansion to over 2,800 hectares has been reached enabling the client to increase domestic sales of edible palm oil in Zambia. The fertilizer factory (see page 39) is up and running and selling a significant portion of its output in Nigeria and other West-African countries. The private equity fund has invested in a number of companies that sell improved seeds and other agricultural inputs to farmers in Burkina Faso, Mali and Niger.

24. Though the tree assets were too young to harvest, from a climate impact perspective, investments in young trees have the greatest capacity for carbon capture. This is directly pertinent to FMO's stated goal of adhering to the 1.5 degree pathway which includes aligning its financing to support projects that limit the global temperature from rising more than 1.5 degrees Celsius. (See section 3.5)



– CASE STUDY –

Althelia Climate Fund

Maintaining our Alignment to the 1.5 Degree Pathway through Forestry Conservation and Sustainable Agriculture

As a natural sink for CO₂, forests play a critical role in maintaining our alignment to the 1.5 degree pathway. The primary objective of the Althelia fund is the preservation of natural capital through forestry conservation and sustainable agriculture. Given FMO's stated goals for the 2012-2020 period of doubling its impact, while halving its footprint through GHG avoidance, AFW forestry projects generate an important contribution to GHG avoidance.

In 2013, FMO invested €15 million in the Althelia Climate Fund valued at €100 million, based on contributions from other investors including: European Investment Bank, Finnfund, USAID, Conservation International, and Credit Suisse, among others. The Althelia Climate Fund, which aims to preserve forest while generating income from sustainable agriculture (e.g. fairtrade and organic certified coffee & cacao) for communities adjacent to the protected forest areas, is managed by Althelia Funds, the natural capital investment arm of Mirova, an international asset management and impact investing firm.

Through the Althelia Climate Fund, FMO provided a €5.6 mln loan to AIDER, a Peruvian NGO with over 30 years' experience delivering environmental programs supporting sustainable communities. One of Peru's largest National Protected Areas consists of two areas adjacent to the Tambopata and Bahuaja regions, totaling 1.4 mln hectares. The national

reserve was experiencing deforestation, mainly due to illegal mining, agriculture, and cattle ranching. In 2014, the Peruvian government granted a contract to AIDER to co-manage Tambopata requiring them to conserve 570,000 hectares of forest lands and restore 1,250 hectares of degraded lands in a buffer zone by installing agroforestry systems. The project generates impact through the avoidance of GHG emissions, which are verified to produce carbon credits. Althelia's innovative investment structure allows AIDER to repay its loan in carbon credits from forest conservation, which Althelia then sells on the market, through its partner Ecosphere+.

In addition, AIDER works with 350 local smallholder farmers, of whom 25% are women, to transform degraded land into productive agro-forestry systems where trees provide the necessary shade to protect and grow cacao trees. The project is estimated to increase farmer income by 60% after the cacao trees are fully productive. Fairtrade and organic certifications for the cacao will ensure high E&S standards. The final products will be sold to local and international markets.

Main project results: Over 418,000 verified carbon credits sold, prevention of 1000 hectares from deforestation, 1,200 hectares of degraded land restored.

Client Althelia Climate Fund	Country Global	Contracted 2013
Sector Agro-Forestry	Financial product Equity €15 million	Instrument(s) Equity, Capacity Development



– CASE STUDY –

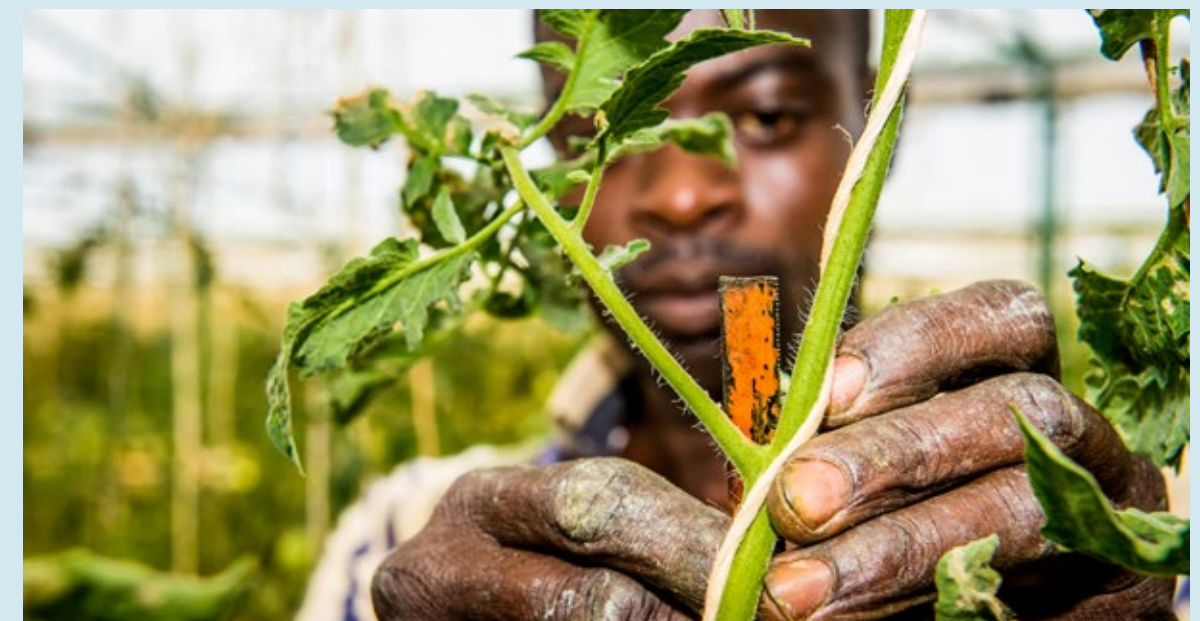
Indorama

Supporting Local Food Production through Fertilizer Manufacturing

Indorama Eleme Fertilizer and Chemicals Limited is a large newly-established fertilizer plant with a capacity of 1.4 mln metric tons per annum. In 2013, FMO, together with other DFIs, invested (debt and equity) in the project to finance the construction of production facilities. Fertilizer usage in Nigeria is very low and, as the company is selling a large fraction of its fertilizer domestically, the project is expected to support the development of the Nigerian agricultural sector, contributing to higher yields and improved food security. In 2017, the company became the largest seller of urea (a type of fertilizer) in Nigeria. It distributes fertilizer through a well-established network of distributors and dealers. To maximize the impact of its fertilizer sales, Indorama also runs a technical assistance program to increase the technical

capacity of smallholder farmers to produce higher yields through efficient fertilizer usage.

In 2018, FMO again joined together with other DFIs to finance the expansion of Indorama's fertilizer production capacity from 1.4 mln tons to 2.8 mln tons making FMO's total support reach US\$ 48 million. Other than supporting local food security, Indorama maintains strong forward linkages with farmers, sharing best practices on crop production and fertilizer management to help reduce waste and the cost of inputs, while increasing yields. Over 200,000 farmers were trained in 2017 and Indorama plans to train approximately 2.6 mln farmers in the next five years.



Client Indorama	Country Nigeria	Contracted 2013
Sector Inputs/Equipment	Financial product Loan US\$ 48.8 million	Instrument(s) Loan

5 LESSONS LEARNED & RECOMMENDATIONS

KEY FINDINGS

FMO maintains a healthy & growing AFW portfolio.

Since becoming a focus sector in 2011, Agribusiness has developed a financially healthy portfolio, with few problem clients (only four clients had loans that ever became a non-performing loan (NPL), equal to 3.8% of the invested volume across the portfolio). As a result, most projects (93%) could realize most of the operational and development results that were expected of them ex-ante, at least to a substantial degree. Only 7% (2 projects) of the AFW investments that were evaluated led to unsatisfactory development results. Starting with a portfolio base mainly in Latin America and Eastern Europe, FMO expanded its AFW portfolio into Asia and sub-Saharan Africa. The portfolio is spread over subsectors including agro-processing, commodity trading (often with links to smallholder production), primary production, the production of agricultural inputs and equipment and agro-forestry. The result is a highly diverse portfolio.

FMO financing for AFW projects was additional to the market.

Our review found that for all FMO investments in AFW, financial additionality was highly plausible. That is, alternative funding was not available from commercial lenders and investors on workable terms. Frequently, FMO provided financial additionality by providing scarce long-term finance, and by filling financing gaps in the funding of clients' (often sizeable) investment plans. For projects financed out of FMO-managed government funds, the investments' additionality was even more evident, as these funds allow FMO to accept risks – including country risks – that do not qualify for regular DFI funding. FMO was also successful in mobilizing funding from other financiers for AFW projects, especially for some larger, long-standing clients in South America.

FMO adds significant value through impact management measures that ensure clients adhere to high ESG standards including IFC Performance Standards.

Projects in AFW typically display relatively high environmental and social risk profiles (73% have high or elevated medium risk). In order to manage this risk, FMO articulated a 2017 goal to resolve 90% of all E&S actions required that year across all FMO sectors. AFW surpassed this target by addressing 90.7% of the E&S actions required in 2017. In addition, our desk review observed that FMO has generally been effective in ensuring that such risks are well managed over time. When observing the performance of our clients over our analysis period,

2012-2017, 77% of clients were performing as expected at the time of this review, meaning that the client complied with all applicable standards or is on track in making the required steps towards compliance. A further 20% experienced delays but were still expected to reach material compliance. Clients were also supported in addressing identified risks in their corporate governance.

FMO's regular impact measurement practices reveal that AFW investments from 2012-2017 are estimated to support 250,000 jobs.

In 2014, FMO articulated its ambition to Double Impact (jobs supported) while Halving its Footprint (GHG avoided) by 2020. Using an input/output model to estimate FMO's impact through direct and indirect jobs supported, the model estimates that AFW's portfolio investments, at contracting, were forecast to support 250,000 jobs, with the largest contribution stemming from indirect employment (65% of the total). Investments in large scale mechanized grain production and commodity trading in LAC and ECA make relatively small employment contributions.

Potential employment gains in Africa and Asia are stronger than in LAC.

More AFW jobs are supported per million euro invested in Africa & Asia. As such, in order to optimize impact, AFW has an opportunity to increase its contributions to SDG 8, decent work and economic growth, by channeling more investments in these two regions should credit-worthy projects present themselves.

FMO engages in Impact Steering to optimize the number of AFW investments making significant contributions to FMO's three headline SDGs (8, 10, 13) or SDG 2, in addition to general contributions to economic growth.

In 2017, FMO adopted four SDGs to articulate its key AFW development results: Zero Hunger, Decent Work & Economic Growth, Reduced Inequalities and Climate Action. (SDG 2, 8, 10 and 13 respectively). In light of the SDG framework, FMO is increasingly steering more investments to make contributions to its headline SDGs as well as to sector-specific SDGs, for which further instruments are being developed. Specifically, GHG emissions tables for key sectors and regions are being developed, so that FMO deal teams can incorporate GHG intensity into their decision-making process when evaluating a project and measure whether FMO stays on the 1.5 degree pathway.

RECOMMENDATIONS

Further elaborate the AFW sector strategy to steer project selection that identifies more impactful investment opportunities.

FMO has adopted steering metrics and targets for the percentage green and reduced inequalities labelled projects to be contracted in years to come, and sector / department strategies have been developed to achieve these and other corporate ambitions. While the AFW sector strategy makes references to SDG-related impact objectives, it is recommended that the department develop plans and allocate resources to pro-actively source more deals that:

- **contribute to fighting hunger** (through local provision of affordable and nutritious food, and food inputs),
- **support employment** (invest more in labor-intensive subsectors, and in Africa and Asia),
- **help reduce inequalities** (gender positive, smallholder based), and / or
- **support climate action** (also through investments in forestry or other projects that lead to GHG footprint reduction)

Development impact rationale of investments need to be more explicitly articulated to enable effective results monitoring.

Realized results relating to project impact objectives could be better monitored, thus enabling AFW to properly account for development results achieved through its investments. We recommend that AFW gives priority to strengthening its impact management throughout the project cycle, from improved analysis of the ex-ante impact case at acceptance (early review), through quality monitoring of relevant ex-post development results data, to drawing and applying lessons of experience.

AGRIBUSINESS, FOOD, AND WATER (AFW) CONTRACTED PROJECTS

The AFW Review mapped the SDG relevance of the 70 AFW projects contracted between 2012-2017. Of these, 31 projects reached operational maturity at the time of this review and were contracted between 2012-2014. The following list highlights the 31 projects for which we did a deep dive and conducted an analysis on their SDG contributions.

AFW Contracted projects	
2012-2014	2015-2017
1. Nidera S.a.	32. Renova S.a.
2. Vicentin S.a.i.c.	33. Compania Argentina De Granos Sa
3. Asociacion De Cooperativas Argentinas	34. Molino Canuelas S.a.c.i.f.i.a
4. El Tejar S.a.	35. Ll Firm Astarta-Kyiv
5. Tafilar S.a.	36. Trans-Oil International Sa
6. O Telhar Agropecuaria Ltda	37. Usher Eco Power
7. V.v. Kischenzi Ltd	38. Usher Agro Limited
8. Zambeef Products Plc	39. Excellent African Foods Limited
9. Tropical Asia Forest Fund	40. Mymensingh Agro Limited
10. Upala Agricola S.a.	41. Danper Trujillo S.a.c.
11. Ecom Agroindustrial Corporation Ltd	42. Agrofertl S.a
12. Tiryaki Agro Gida Sanayi Ve Ticaret	43. Plantations Et Huileries Du Congo Sa (Feronia)
13. Koppert Beheer B.v.	44. Beefmaster Holdings Proprietary Ltd
14. Ics Ffa Trans Oil Ltd S.r.l.	45. Tigris Water Fund L.p.
15. Moringa S.c.a. Sicar	46. Ll Tsukoragroprom
16. Aviv Tanzania Ltd	47. Zanzibar Sugar Factory Limited
17. Jain Irrigation Systems Ltd.	48. Sitio O De Quequén S.a.
18. Indorama Eleme Fertilizer And	49. Moms Kitchen International S.a.r.l.
19. Green Resources As	50. Pampa Agribusiness Follow-On
20. Tulip Cocoa Processing Ltd.	51. Kida Power Company Ltd.
21. Olam Cocoa Processing Cote D'ivoire Sa	52. Beijing Enterprises Water Group Ltd
22. India Agri Business Fund Ii Limited	53. New Forest Company (Uganda) Ltd.
23. Laad Americas N.v.	54. New Forest Company (Tanzania) Ltd.
24. Mk Group D.o.o. Beograd	55. Agricola Pampa Baja S.a.c.
25. Fairtrade Access Fund Sa, Sicav-Sif	56. Africa Improved Foods Holding Bv
26. Injaro Agricultural Capital	57. Reka Bitkisel Yaglar Sanayi Ve Tica
27. Machu Picchu Foods S.a.c	58. Frieslandcampina Pakistan Holding B.v.
28. Althelia Climate Fund	59. Global Beer Georgia Ll
29. Sucafina Holding S.a.	60. New Forest Company (Rwanda) Ltd.
30. Mohammed Enterprises Tanzania Ltd	61. Agronomika Finance Corporation
31. Greenland Fedha Limited	62. Abraaj Fertiliser Holdings Bv
	63. Comercial Internacional Exportadora S.a.
	64. Vsap Agriservices Lp
	65. Babban Gona Farmer Services Nigeria Limited
	66. Gobind Sugar Mills Limited
	67. Angkor Kasekam Roongreung Co. Ltd.
	68. Africa Sustainable Forestry Fund Limited Ii
	69. Nibulon Agricultural Limited Liability Company
	70. Peyman Kuruyemis Gida Aktariye Kimyevi Mad- deler Tarim Urunleri Sanari Ve

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