



Agricultural and rural livelihoods evaluation

Executive Summary Final Report

Dutch Entrepreneurial Development Bank (FMO)

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Acronyms

AFF	Agriculture, Food and Forestry
BoP	Base of the Pyramid
CD	Capacity Development
DC	Development Contributions
FCS	Fragile and Conflict-affect States
FIs	Financial Institutions
JIM	Joint Impact Model
LIC	Lower Income Countries
LMIC	Lower Middle-Income Countries
MFI	Micro-finance institutions
MIS	Management Information Systems
MoFA	Dutch Ministry of Foreign Affairs
MSME	Micro, Small, and Medium Enterprises
NACE	Statistical classification of economic activities in the European Community
PE	Private Equity
RI	Reducing Inequalities
SO	Special Operations
TA	Technical Assistance
ToC	Theory of Change
UMIC	Upper Middle-Income Countries

1 Executive Summary

1.1 Background

The Dutch Entrepreneurial Development Bank (FMO) commissioned Ecorys to evaluate the Agricultural and Rural Livelihoods theme within MASSIF's portfolio. MASSIF, a Fund managed by FMO on behalf of the Dutch Ministry of Foreign Affairs (MoFA), focuses on promoting financial inclusion. This evaluation aims to provide [valuable insights to inform the development of the next MASSIF Strategy for 2027–2036](#), as the current strategy concludes in 2026. The new strategy will be discussed by FMO and MoFA.

Aligned with MASSIF's current Strategy, "The Next Frontier: 2017-2026", MASSIF investments support micro, small, and medium-sized entrepreneurs in Lower Income Countries (LIC) and Fragile and Conflict-affected States (FCS). Through providing essential financial services such as bank accounts, savings products, and loans, these investments play a role in fostering job creation and improving livelihoods for individuals at the Base of the Pyramid (BoP).

The four themes defined in the 2017-2026 Strategy are:

1. [The Unbanked](#): Supporting Micro, Small and Medium Enterprises (MSME) in least financially penetrated and fragile countries.
2. [Agriculture and Rural Livelihoods](#): Supporting access to finance for MSMEs in rural areas and their agricultural value chain to improve the livelihoods in these communities.
3. [Women-owned businesses and youth entrepreneurs](#): Creating opportunities and promoting gender equality.
4. [Innovations in Inclusive Business](#): Providing access to basic goods and services.

The 2017- 2026 MASSIF Strategy¹ also encompasses a capacity development (CD)² component which is intended to offer Technical Assistance (TA) to smallholders, farmers, and rural SMEs directly at end-client level, or indirectly through CD targeting customers , i.e. both complementing and supporting their offer. The projects emphasize assistance in four key cross-cutting focus areas:

1. Governance, risk, and Management Information Systems (MIS);
2. Environmental and social risk management;
3. Green opportunities (climate mitigation and adaptation, energy efficiency, water management); and
4. Gender.

Additionally, the 2017-2026 MASSIF Strategy aims to address the unique challenges faced by smallholders, farmers, and rural SMEs.

As of 2023, MASSIF has 143 customers with a total committed portfolio of EUR 493 million.³ The geographic distribution of the investments is: 40% in Africa, 26% in Asia, 21% Global, 9%

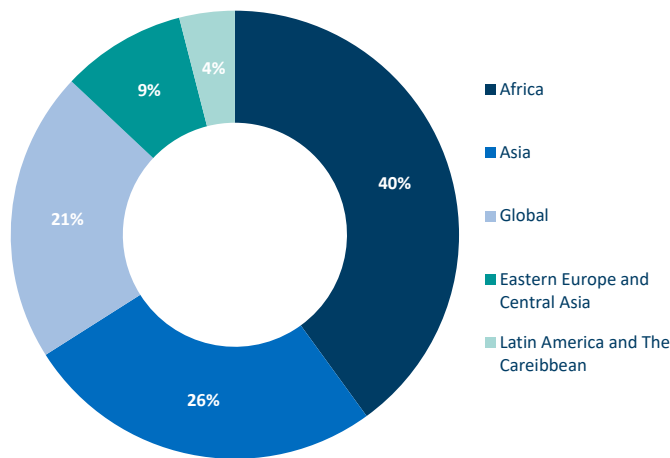
¹ The MASSIF Strategy 2017-2026 is different than FMO Strategy 2030.

² FMO currently uses the term 'Development Contribution' to refer to 'Capacity Development'.

³ Total Committed Portfolio shows FMO's risk exposure.

in Eastern Europe and Central Asia, 4% in Latin America and the Caribbean (Figure 1). In addition, there are 48 CD projects.

Figure 1. Geographic Distribution MASSIF's Portfolio



Source: Own elaboration based on FMO data

The departments of Agriculture, Food and Forestry (AFF), Financial Institutions (FIs), Private Equity (PE) and Special Operations (SO) currently manage MASSIF investments.

1.2 Scope and Objectives

The scope of this evaluation includes [all MASSIF investments supporting the theme Agriculture and Rural Livelihoods](#), across programmes and facilities, including Development Contributions (DCs) from 2018 to 2023.

The main objectives of this evaluation are to:

- Determine the extent to which MASSIF is supporting agri-rural beneficiaries;
- Gain insights into the portfolio identified as supporting the agri-rural theme, in terms of customers, distribution channels, products and expected impact;
- Gain insight into the impact that was realised but falls outside the indicators FMO uses as proxies for this theme; and
- Gain insights into the alignment between the expected and the actual impact.

1.3 Methodology

The evaluation utilized a mixed-methods approach, including a [desk review](#)⁴, [quantitative analysis](#) of FMO's impact data from active customers supporting the agri-rural theme during the 2018-2023 period⁵, [interviews](#) with FMO staff, and three [case studies](#) of selected investments.

⁴ The desk review included the Financial Proposals of 47 customers identified in the Agriculture and Rural Livelihoods theme.

⁵ The final impact data for 2024 was unavailable at the start of the evaluation in November 2024.

The quantitative analysis aimed to identify FMO's agri-rural customers⁶ and assessed their reach to agri-rural clients⁷. Customers were classified as agri-rural when evidence of agri-rural or agri-rural support activities was found in any of the following criteria: strategic sector, industry classification, NACE sector classification⁸; customers reporting on volume and/or share of rural micro-enterprise loans, number of smallholders supported, indicators and goals (RI label) for the 2018-2023 period. All available FPs were reviewed to confirm the identification of agri-rural customers.

Additionally, the desk review included an assessment of DCs, the MASSIF Theory of Change (ToC, see Annex 1) and the use of the Joint Impact Model (JIM)⁹ to estimate employment impacts. Additional details on the methodology are available in Annex 3.

1.4 Data Challenges and Limitations

The evaluation faced a few challenges, which included data gaps¹⁰, and small sample sizes for the data analyses. The limited opportunity for case study research constrained the depth and representativeness of information collected. The impact information is self-reported by customers or estimated based on self-reported data.

1.5 Key Findings of the Agriculture and Rural Livelihoods Theme

The key findings of the evaluation were the following:

Out of 143 MASSIF customers, 45 (31%) are assessed to support the Agriculture and Rural Livelihoods theme. Based on the latest available data, these customers are supporting approximately 2.1 million smallholders¹¹ and providing an estimated volume of rural micro-loans¹² of 976 million EUR¹³.

A total of 32 (71%) agri-rural customers are in Lower Middle-Income Countries (LMIC) and Lower-Income Countries (LIC) often serving individuals at the BoP, women and the youth. DC has been identified as a factor contributing to the reach of agri-rural clients.

⁶ A FMO customer receives a FMO Product, uses the proceeds as agreed for generating impact and/or runs a direct financial risk on.

⁷ Agri-rural clients are the clients of FMO customers.

⁸ The European Classification of Economic Activities (NACE) is the European reference framework for the production and the dissemination of statistics related to economic activities.

⁹ "The Joint Impact Model enables users to estimate financial flows through the economy and its resulting economic (value added), social (employment) and environmental (greenhouse gas emissions) impact". < [The Joint Impact Model | Joint Impact Model](#)>

¹⁰ Last available data point was used when there were data gaps.

¹¹ Based on a sample of Corporate customers and 3 Funds.

¹² 'Volume of rural micro-enterprise loans' is defined as the outstanding value of loans with original value up to USD 10,000 in rural areas or agricultural sector remaining on the customer's balance sheet at the end of the reporting period.

¹³ Based on a sample of 31 customers (9 Banks, 18 Other FIs, and 4 Others). 'Volume of rural micro-enterprise loans' was the main impact indicator used for these types of customers.

1.5.1 Portfolio Characterization

Out of the 45 customers, 30 are exclusively MASSIF¹³, 6 are DFC-MASSIF, 4 are NASIRA, and 5 are Ventures.¹⁴

Customer by Region/Country Income Category

In terms of regional distribution, 17 (38%) customers are in Asia, followed by 13 (27%) in Africa, and 15 (33%) in other regions (Figure 2). Among the 15, six customers (five funds and once holding company) have a Global focus. In terms of income levels, 22 (49%) customers are in a LMIC, followed by 10 (22%) in a LIC, and 4 (9%) in an UMIC. Nine customers (20%) have “Global” or a region as country focus and thus have not been assigned an income category. Finally, 11 (24%) customers are also in FCS. Figure 2 shows the distribution of customers by region and Figure 3 depicts the distribution by country income category.

Figure 2. Geographic Distribution of customers focusing on the Agriculture and Rural Livelihoods Theme (Region, Number, Percentage)

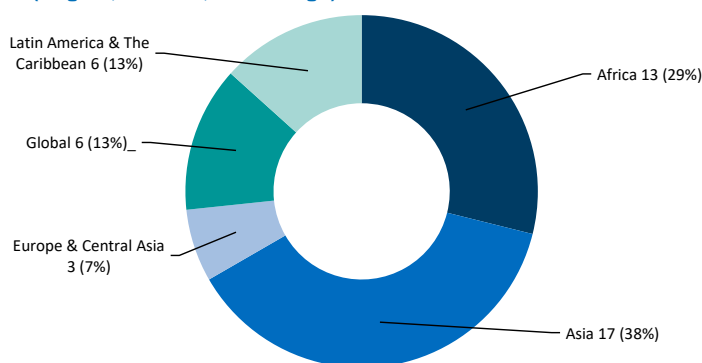
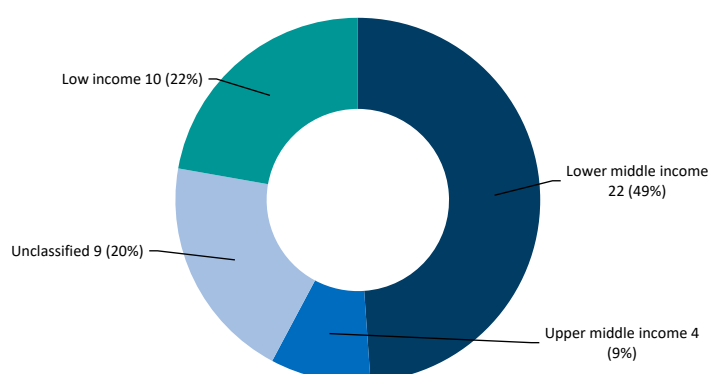


Figure 3. Distribution of Customers by Country Income Category - (Country Category, Number, Percentage)



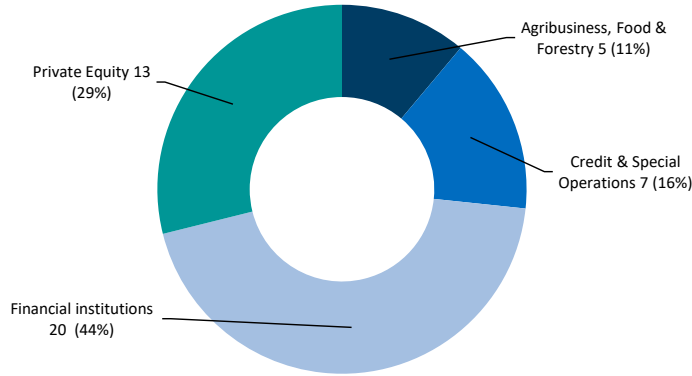
Distribution of Customers by Department

FI oversees 20 (44%) agri-rural customers, followed by PE with 13 (29%) customers, AFF with 5 (11%) customers and SO with 7 (15%) customers. Figure 4 shows the distribution of customers by department.

¹⁴ “Exclusively MASSIF” refers to customers with no additional “Program” like DFC-MASSIF, NASIRA or Ventures.

¹⁵ Two customers have two different opportunities associated with different “Program” thus the number adds to 47.

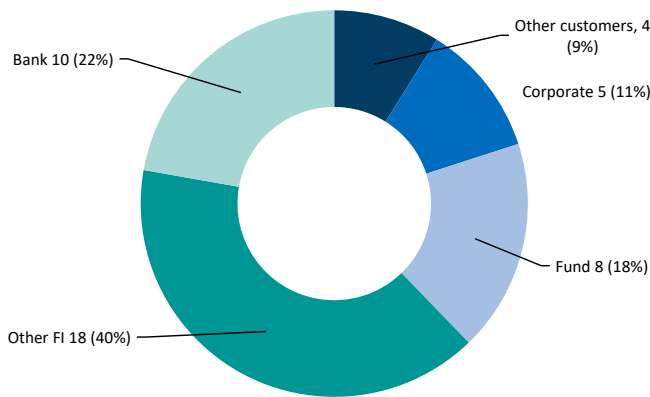
Figure 4. Distribution of Customers by Department - (Department, Number, Percentage)



Distribution of Customers by Type

There are 18 (40%) Other FI servicing agri-rural customers, followed by 10 (22%) licensed commercial banks, 8 (18%) funds, 5 (11%) corporates, and 4 (9%) Other customers, not included in any of previous categories¹⁶. Figure 5 shows the distribution of customers by type.

Figure 5. Distribution of Customers by Category - (Category, Number, Percentage)



To establish customer categories, we have combined FMO's indicator 'customer type' into four types: fund ('investment fund debt', 'investment fund equity' and 'investment fund other'), bank ('licensed commercial bank'), other FI ('other financial institution', which include for example MFIs) corporate ('corporate'), and other ('holding companies', 'special purpose vehicles', and 'portfolio'). The clustering was done to gather larger numbers of customers, making any comparison between categories more reliable.

1.5.2 Reach of Agri-Rural Clients

The estimated volume of micro-loans to rural clients is around 976 million EUR (based on a sample of 31 other FI, bank customers, and other customers). It is estimated that these micro-loans have reached 1.98 million rural micro-enterprises. The Agri-rural customers are supporting approximately 2.1 million smallholders, including 1.6 million smallholders by corporate customers and 526,000 smallholders by Funds. This indicates a relevant (indirect) contribution to the achievement of SDG10 by reducing inequalities within countries.

There are indications, albeit based on limited data, that “Other FIs” (‘other financial institutions’, which include for example microfinance institutions) [provide a relatively large proportion of micro-loans to rural clients \(76%\)](#). This suggests they may be more effective than banks in reaching agri-rural clients.

An analysis of a sample of 28 customers who reported on the impact indicator 'Volume of rural micro-enterprise loans EUR' over two years reveals an increasing share of rural micro-enterprise loans to customers with a Global or regional focus, from 4% to 31%. As consequence, there is declining *share* of rural micro-enterprise loans to customers in LICs and LMICs, from 89% to 69%. Nonetheless, the *volume* of rural micro-enterprise loans to customers in LICs and LMICs increased by 62%. For clients in FCS, the portfolio share decreased slightly from 20% to 18%.

1.5.3 Factors Influencing Reach

Factors contributing towards reaching agri-rural clients include the use of DC to improve customers’ knowledge about target beneficiaries. The study did not involve interviews with customers and clients, so the study has limited evidence regarding the extent to which DC projects achieve impact at the level of smallholder farmers and rural SMEs active in the agri value chains.

[Out of 45 customers, 14 received DC¹⁷.](#)

Total project costs are projected to be approximately EUR 4.5 million from 2017 to 2024. Interviews with FMO staff confirmed that DC projects are designed and offered based on the FMO team’s assessment of customer needs, in consultation with the customer. Consistent with this, our review of FPs confirmed there is a variety of DC project topics which address specific customer needs through tailored solutions or offer standardized frameworks in areas such as gender and ESG topics.

[Five of the DC projects are expected to directly increase the reach of agri-rural clients](#), creating impact for these clients and other beneficiaries. These projects focus on the following areas:

1. Funding 250 extension officers for an agricultural production company;

¹⁷ The DC projects included in the analysis were those funded by MASSIF and directly contracted via the customers.

2. Improving access for smallholders and providing technical assistance to farmers and producer organizations, including initiatives such as promoting product diversification and transitioning to organic farming;
3. Hiring a consultant to support women agri-rural clients in various areas of business development and entrepreneurship;
4. Supporting to improve monitoring of social and environmental performance; and
5. Improving outreach and services for agri-rural clients.

The remaining DC projects focus more on management, monitoring and business-related functions or processes that may enhance customer performance. Their impact on the reach and performance of clients is likely to be indirect and realized over the long term.

1.6 Assessment of Impact

The proxies used by FMO underestimate the potential agri-rural impact of MASSIF customers.

FMO's impact indicators provide feasible proxies to monitor higher-level outcomes, such as employment and income generation, including for women and youth, using methods like the JIM. However, several impacts mentioned in the FPs —like rural productivity, poverty reduction, innovation, and access to financial services—are less clearly linked to these indicators. Case studies validated some of these impacts, including improvements in product quality and productivity (DeHaat), financial inclusion and digitalization (DeHaat, Sanasa, Banco de Antigua), and supply chain efficiency (DeHaat).

1.6.1 Employment Estimations Using the Joint Impact Model (JIM)

Using the JIM, we estimate that agri-rural customers are supporting at least 360,000 direct jobs and 36,000 value chain and induced jobs through micro and SME loans in the Agri sector.

It is estimated that agri-rural customers supported 359,969 jobs via direct employment¹⁸ and 36,562 jobs via value chain and induced employment¹⁹ in the agri sector through rural micro-loans and rural SME loans²⁰. The impact attributable to MASSIF²¹ is 11,126 direct employment and 1,074 value chain and induced employment. Between 36-43% of the jobs supported attributable to MASSIF correspond to female employment and 15-16% to youth employment, according to the model. Table 1 shows the estimations of employment impacts for rural loans in the agri sector.

¹⁸ Jobs supported directly by recipients of rural micro-loans and SME loans and in their operations.

¹⁹ Jobs supported upstream in the agricultural value chain, due to increased demand for inputs and services (value chain); and jobs supported in the agri sector through additional household expenditures in the economy, because of higher incomes (induced).

²⁰ The volume of rural SME loans is not an impact indicator monitored by FMO systematically. It is estimated by calculating the share of rural to total micro-loans for each customer and applying it to the volume of SME loans.

²¹ Attribution is calculated based on MASSIF's share (outstanding amount) in the customer's total enterprise value. It represents the share of employment effects that can be directly linked to FMO's funding.

Table 1: Estimations of Employment for Rural Micro-loans on the Agri Sector²²

	Rural micro-loans and SME loans (MEUR)	Employment total impact (#)		Employment attributed impact (#)		Female	Youth
		Direct	Value chain and induced	Direct	Value chain and induced		
Rural micro-loans	976	248,390	26,196	7,361	730	43%	16%
Rural SME loans	824	111,578	10,366	3,766	343	36%	15%
Total	1,800	359,969	36,562	11,126	1,074		

1.6.2 Alignment between Expected and Actual Impact

Observed impact values on average fall below the expected values outlined in the FPs. This may indicate that the expected impact values are overly ambitious for customers in practice.

We compare the latest impact data point available for the indicator 'Volume of micro-enterprise loans' with the expected values defined in the FPs, for which the coverage is much more extensive than 'Volume of rural micro enterprise loans'. 13 (68%) of agri-rural customers are below, while 6 (32%) are aligned with or exceeding expectations.²³ The median alignment level for this variable with the expected values stands at 76%.²⁴

1.7 Mapping Challenges of the Portfolio with Respect to ToC

MASSIF's 2017-2026 Strategy has a Theory of Change (ToC, see Annexes 1 and 2) that is not fully consistent with categories/indicators currently utilised in FMO's Sustainability Information System (SIS). In consequence, data reported by MASSIF's customers does not always allow to clearly validate whether delivery is in line with MASSIF's ToC.

In practice, there are challenges in matching the labels that classify FMO's product (input), partners (customers) and outputs (loans to final clients), with the labels in the MASSIF ToC at all three levels:

- FMO products (inputs) – In MASSIF's ToC, the *finance* products are loans (including in Local Currency equivalent – LCY), mezzanine, equity, earmarked facilities, and innovative products. Fewer types of outputs are present in the FMO ToC, which distinguishes only between debt, equity and guarantees.
- Partners (customers) – With the data categories and indicators currently available to describe the investments, there is no straightforward way to see how the MASSIF ToC is followed. The six types of partners identified in the MASSIF ToC are not defined by FMO

²² Estimations of employment impacts based on the 'Volume of rural micro-enterprise loans' for 31 customers and the 'Volume of rural SME loans' for 24 customers for which these impact variables were available or could be estimated for at least one period.

²³ Based on a sample of 19 customers that reported on both the current and expected 'Volume of micro-enterprise loans'

²⁴ This is calculated dividing the observed value divided by the expected value at the year the indicator is collected.

or aligned with customer types in SIS.

- Outputs – The four financial outputs in the MASSIF ToC cannot easily be matched to what customers report as outputs. Most information collected involves data on loans for agri-rural client segments, but no other types of financial products / outputs as described in the MASSIF ToC.

1.8 Recommendations

Based on lessons learned from the portfolio analysis, our preliminary recommendations are the following

When discussing the new MASSIF Strategy 2027-2036, consider:

1. Utilizing agri-rural indicators to monitor the Agriculture and Rural Livelihoods theme. FMO currently includes indicators agreed upon with MoFA in the Impact Cards for MASSIF investments. The 'Volume of rural micro-enterprise loans EUR' is currently included among these indicators. However, the 'Volume of agri SME loans' is currently not included unless the investment has a financial services to agri or rural SME sublabel. The evaluation shows that including this indicator for MASSIF investments would support the monitoring of the Agriculture and Rural Livelihoods theme across FI, PE and AFF departments as many customers also serve the agri SME segment.

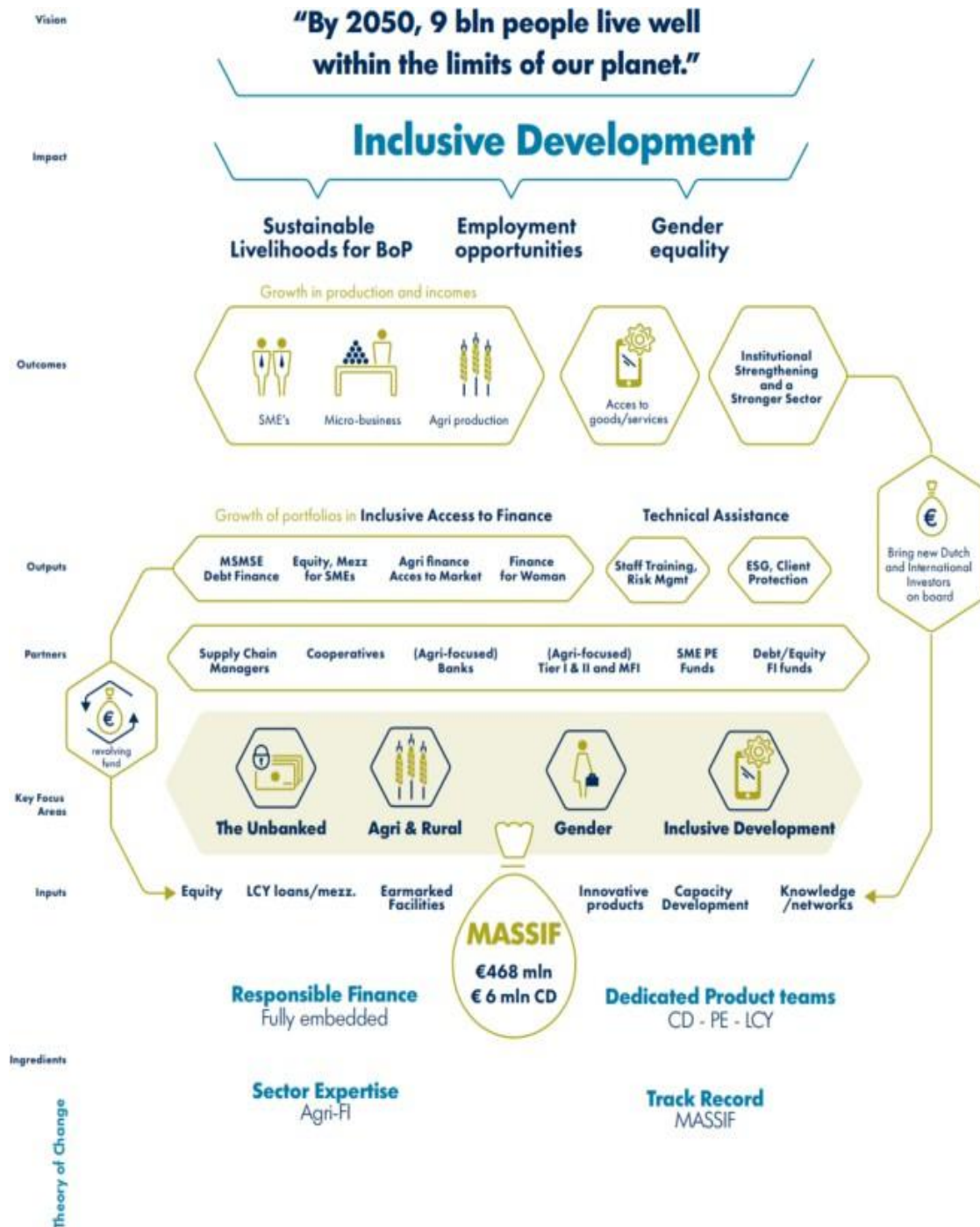
Alternatively, FMO could use proxies based on portfolio information. This could be done, for example, for the 'Volume of agri SME loans' and 'Number of rural micro loans'. The adoption of such proxies could be accompanied by validation studies to assess their feasibility and limitations.

2. Taking into account the findings of this evaluation. For example, the option to update the MASSIF ToC or utilize another tool which aligns with FMO categories and definitions used in SIS, in particular at the level of partners/customers.
3. If relevant for government fund reporting, FMO could use the JIM to assess impacts on employment and income of the customers in this theme. The JIM provides an accepted methodology to estimate impacts on employment at portfolio level, and it is currently in use at FMO for reporting. The methodology could also be used for MASSIF agri-rural customers to obtain direct and indirect employment estimates in the agri sector, as presented in this study. The adoption of the JIM for this purpose could also be accompanied by validation studies to assess possible limitations related to the characteristics of the MASSIF portfolio. Moreover, it should be based on reliable data, avoiding the use of estimated variables as inputs for the model.

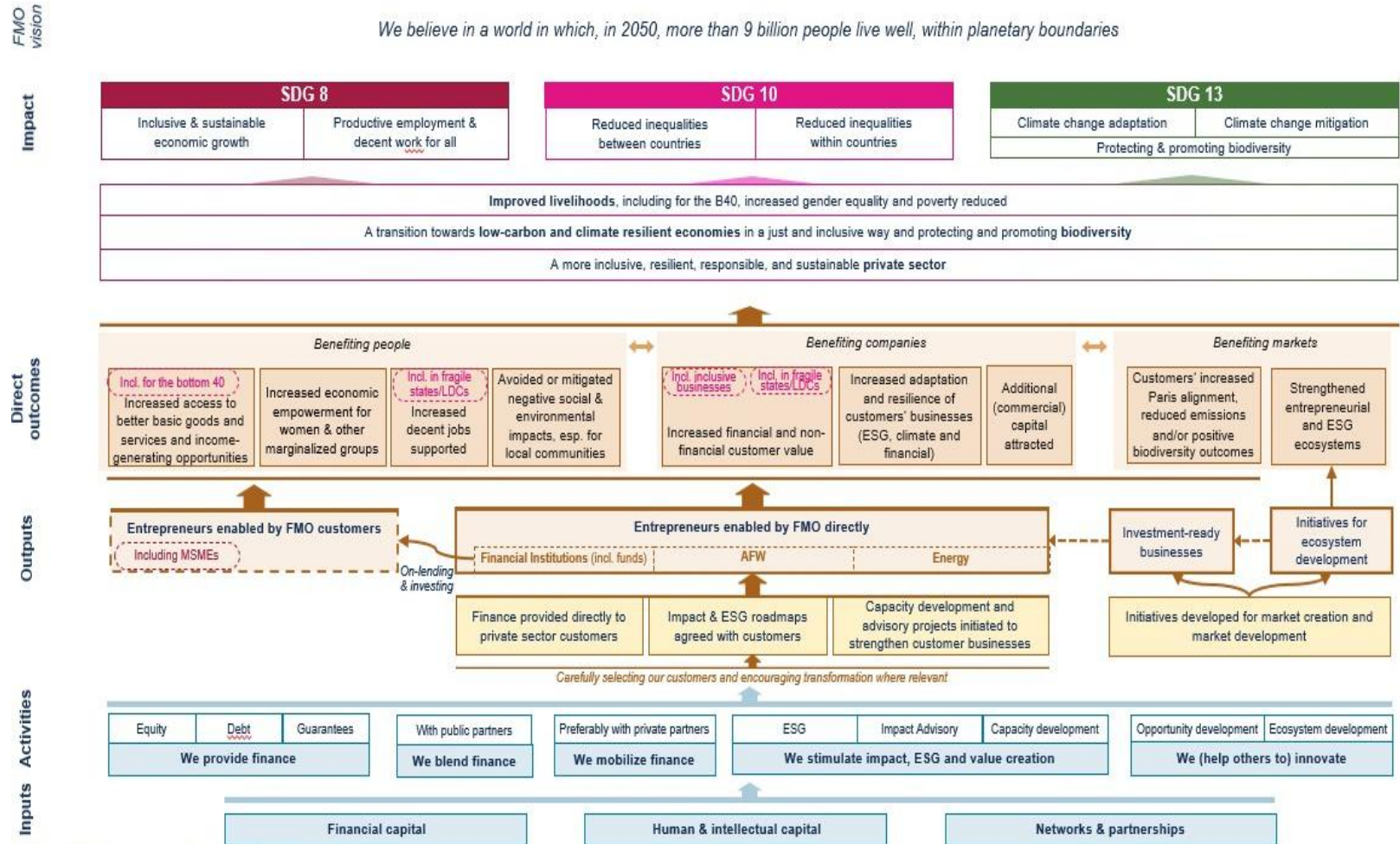
2 Case Study



Annex 1 – MASSIF Theory of Change



Annex 2 – FMO Theory of Change



FMO purpose

We create development impact by being additional in financing the private sector in low- and middle-income countries

Assumptions that need to hold (see next slide)

Annex 3 – Additional information on the methodology

The evaluation utilized a mixed-methods approach, including a [quantitative analysis](#) of FMO's impact data from active customers supporting the agri-rural theme during the 2018-2023 period and the use of the [Joint Impact Model \(JIM\)](#) to estimate employment impacts. Key approaches used in the quantitative analysis were the following:

Portfolio Characterisation

- Some customer classifications were manually corrected by the team, based on FMO pre-existing methodologies. In particular, the country income category levels and fragile and conflicted status were reviewed based on the MASSIF – The Next Frontier DGGF Country list.

Reach of Agri-rural clients

- Whenever possible, the study used 2023 data for impact indicators and customer information. When data for 2023 was not available, the latest available data points were used. Therefore, the latest year considered might differ across customers.
- For comparisons across time, the study compared the latest data point available (as described above) with the earliest data point. The earliest data point was defined as 2018, when available. When data for this year was not available, more recent data was used.
- The '[Volume of rural micro-enterprise loans](#)' was the main impact indicator used for Other FIs, Banks, and Other customer. The number of '[Smallholders reached](#)' was used for Corporates and Funds. For the latter, the data was collected from CCRs, since it was not available in Qlik Dashboard.
- The '[Number of rural micro-enterprise loans](#)' indicator was estimated based on two assumptions: (i) the average micro-loan size is the same for rural and non-rural clients (ii) and each micro-loan provided corresponds to a unique micro-enterprise receiving it.
- The '[Volume of rural SME loans](#)' is not an impact indicator monitored by FMO systematically. It has been estimated by calculating the share of rural to total micro-loans for each customer and applying this ratio to the volume of SME loans whenever this latter indicator was available.

Assessment of Impact

- The JIM-based estimations were done by the study team. They apply the estimated impact indicators informed in the study for '[Volume of rural micro-enterprise loans](#)' and '[Volume of rural SME loans](#)' to the employment multipliers estimated by the JIM.



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