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H.E. Mr. Mamo E. Mihretu Governor National Bank of Ethiopia

FOREWORD

By the Governor of the National Bank of Ethiopia

The National Agri-Finance Implementation Roadmap (NAFIR) represents an important contribution to the financial sector deepening agenda under the Bank's National Financial Inclusion Strategy (NFIS). Ethiopia has enjoyed significant success scaling up financial inclusion during the first NFIS period, 2016-2020. This has continued throughout the lifetime of NFIS II as it nears its conclusion. Headline NFIS II targets for 2025, such as the number of transaction accounts per 100 adults, have already been met and significantly exceeded during 2024. Digital transformation continues apace as digital financial services experience exponential growth in the country.

Deepening financial inclusion in agriculture will contribute extensively to national development objectives. Agricultural modernization is a key objective of Ethiopia's national development framework, the Homegrown Economic Reform Agenda. Deepening financial inclusion in the agricultural sector also addresses a broader array of national priorities. These range from livelihood strengthening and resilience, to job creation, to enterprise development, to gender transformation, to climate adaptation, to technological innovation, to industrial development, to value addition, import substitution and export growth. Just as importantly, the sustainability of Ethiopia's long-term growth and development trajectory is premised on an enduring national commitment to shared prosperity through quality economic growth that benefits all members of society.

Deepening financial inclusion means building upon basic financial access with services such as credit, savings and insurance tailored to the needs of priority sectors, especially agriculture. Agriculture has long been underserved by the formal financial system. The sector contributes 32 percent of Ethiopia's gross domestic product (GDP), 64 percent of employment, and 79 percent of exports, but has historically received far less than 10% of national credit supply. Residual financial exclusion is heavily concentrated in rural areas. Over 80% of Ethiopia's population lives in rural areas. Yet only 10% of rural women and 26% of rural men have access to formal financial accounts.

The reasons for the persistent under-financing of Ethiopian agriculture are complex and multi-faceted. They cover deeprooted challenges in both the financial and underlying real sectors, including policy and legal-regulatory frameworks, financial and physical infrastructure, stakeholder capacity, uneven distribution of resources and technologies, and the structure and dynamics of smallholder agriculture. Therefore, an important foundation

for NAFIR has been a thorough investigation of these challenges, incorporating extensive quantitative analyses combined with a strong focus on stakeholder partnership and collaboration, as well as detailed review of African and international experiences.

NAFIR does not start from a blank slate. Investments by Government, development partners and the private sector to build the enabling ecosystem for agri-finance are recognized and applauded. A stock-taking of these investments has been performed in the development of NAFIR and linked to a wide-ranging stakeholder survey to identify remaining gaps. In particular, close attention has been paid to designing transformative 'game-changers' in the spirit of the country's bold economic reform process. These form the pillars of NAFIR and serve to integrate and energize Ethiopia's emerging agri-finance ecosystem, not only to drive the scale-up of agri-finance overall, but also to make sure it reaches the most marginalized and under-served populations that need access to financial services the most.

The resultant NAFIR roadmap represents an innovative and ambitious effort to capitalize on previous investments, harness ongoing digital advances, and build with key partners an inclusive financing system tailored to serve the needs of Ethiopian agriculture. The Bank extends particular appreciation to the Ministry of Agriculture for a strong and fruitful collaboration jointly developing NAFIR. We also recognize the important engagements with the Agricultural Transformation Institute and National ID. We further acknowledge with sincere thanks the important critical contributions of development partners and private sector — financial institutions, cooperatives, agribusiness, service providers — that were generous with both their time and insights, participating in consultation and validation meetings, and responding to surveys. The participation of stakeholders has been vital to shaping a catalytic and demand-driven national Roadmap. Extending these partnerships will be a crucial success factor to achieve national aspirations in agriculture through impactful implementation.

We therefore underline our continued commitment as the Bank to work in close collaboration with stakeholders to convert the NAFIR Roadmap into a practical reality so that actors in the agricultural sector have ready access to appropriate, affordable and user-friendly financial services for the shared prosperity of all members of society.

H.E. Mr. Mamo E. Mihretu Governor National Bank of Ethiopia



H.E. Girma Amente, PhD Minister of Agriculture Federal Democratic Republic of Ethiopia

FOREWORD

By the Minister of Agricutture

Agriculture remains the cornerstone of Ethiopia's development an enduring foundation for our national prosperity and a critical engine of inclusive growth. With 64% of our workforce employed in the sector, contributing 32% to GDP and most export earnings, agriculture is not only the mainstay of livelihoods but also the platform for ensuring food and nutrition security, resilience, and equitable transformation.

Yet for far too long, our farmers—particularly the vast majority of smallholders—have been left on the margins of the formal financial system. Despite their central role in feeding the nation and driving rural economies, they receive less than 10% of total domestic credit. This under-financing reflects structural weaknesses, fragmented institutional arrangements, and the absence of a coherent, sectorwide financing framework.

It is in this context that I am proud to introduce the National Agri-Finance Implementation Roadmap (NAFIR) 2025—2030, a result of close collaboration and strategic alignment between the Ministry of Agriculture (MoA) and the National Bank of Ethiopia (NBE). At our recent landmark joint meeting, our two institutions reached a consensus not only on the urgent need for a dedicated Agricultural and Rural Enterprise Policy Bank but also on a practical path forward, rooted in strategic initiatives and empirical data. This new chapter marks a turning point in addressing the systemic constraints that have long hindered access to finance in the agricultural sector.

NAFIR is more than a roadmap—it is a bold commitment to action. Anchored in Ethiopia's Homegrown Economic Reform Agenda 2.0 (HGER) and the Ten-Year Development Plan (TYDP), and aligned with the National Financial Inclusion Strategy (NFIS), this initiative outlines a comprehensive framework to modernize agri-finance, unlock private sector engagement, and transform the financial ecosystem that supports agriculture.

At its heart, NAFIR introduces three game-changing mechanisms:

- The National Agri-Finance Accelerator (NAFA) to mobilize and de-risk capital flows into agriculture,
- Farmer Access to Streamlined Financial Services (FAST) to simplify compliance and reduce transaction costs,
- And an Agri-Finance Centre of Excellence (CoE) to build capacity, financial literacy, and robust risk management practices.

Through these mechanisms, we aim to expand access to affordable finance, improve productivity, strengthen rural enterprise, and integrate smallholders into value-added markets and export opportunities. Importantly, this roadmap places a premium on climate resilience, gender inclusion, digital innovation, and public-private coordination—all indispensable pillars of sustainable transformation.

Realizing the vision outlined in NAFIR will require collective resolve and coordinated execution. I urge all financial institutions, development partners, regional governments, and the private sector to join forces behind this effort. By aligning our resources and priorities, we can bridge the financing gap, revitalize rural economies, and empower millions of Ethiopian farmers and pastoralists to lead the next chapter of our national development story.

Let us walk this path together—boldly, inclusively, and with a shared commitment to lasting impact.

H.E. Girma Amente, PhD Minister of Agriculture Federal Democratic Republic of Ethiopia

ACRONYMS

ACC - Agricultural Commercialisation Cluster ACF - Agricultural Credit Facility (Uganda)

AfDB - African Development Bank

Agfintech - Agricultural and Financial Technologies

AOSS - Agricultural One Stop Shops

APC - Agricultural Producer Cooperative

ARC - Africa Risk Capacity

ATI - Agricultural Transformation Institute

AU - African Union

CAGR - Compound Annual Growth Rate
 CBE - Commercial Bank of Ethiopia
 CBL - Cashflow-based Lending

CCF - Collateralised Commodity Finance

CoE - Centre of Excellence
CRB - Credit Reference Bureau
CSA - Climate Smart Agriculture
DBE - Development Bank of Ethiopia
DFI - Development Finance Institute

DFS - Digital Financial Services

ECC - Ethiopian Cooperatives Commission
 ECX - Ethiopian Commodity Exchange
 EIFS - Ethiopian Institute of Financial Studies

EIH - Ethiopian Investment HoldingsESX - Ethiopian Securities Exchange

ETB - Ethiopian Birr

EthioSIS - Ethiopian Soil Information System

EtLITS - Ethiopian Livestock Identification and Traceability System

FAST - Farmer Access to Streamlined Financial Services

FI - Financial Institution

FSD - Financial Sector Deepening
 GoE - Government of Ethiopia
 GDP - Gross Domestic Product

Ha - Hectare

HAFIL - Hub for Agri-Finance Institutional LinkagesHGER - Homegrown Economic Reform Agenda 2.0

IAIP - Integrated Agro-Industrial Park

ICIP - Index-based Crop Insurance Promotion Project for Rural

Resilience Enhancement

ID - Identity

IFAD - International Fund for Agricultural Development

IFB - Interest-Free Banking

IFC - International Finance CorporationIRFF - Insurance and Risk Finance Facility

IVR - Interactive Voice ResponseIVS - Input Voucher System

JICA - Japanese International Cooperation Agency

ACRONYMS

KfW - German Development Bank

KYC - Know Your ClientMFI - Microfinance Institution

MoA - Ministry of Agriculture
MoF - Ministry of Finance

MoTRI - Ministry of Trade and Regional IntegrationMPSR - Movable Property Securities Register

MSME - Micro-, Small- and Medium-sized Enterprises

MT - Metric Tonnes

NAFA - National Agri-Finance Accelerator

NAFIL - National Agri-Finance Literacy Programme

NAFIR - National Agri-Finance RoadmapNAFID - National Agri-Finance Database

NAIP - National Agricultural Investment Plan 2021-30

NBE - National Bank of Ethiopia

NDPS - National Digital Payments Strategy 2021-24

NFIS - National Financial Inclusion Strategy

NFES - National Financial Education Strategy, 2021-2025

NMIS - National Market Information System

NRLAIS - National Rural Land Administration Information System

NWRS - National Warehouse Receipt System

PARM - Partnership for Agriculture Risk Management

PHL - Post-Harvest Loss
QR - Quick Response

Qu - Quintals

RSF - Risk Sharing Facility

RUFIP - Rural Financial Intermediation Programme RuSACCO - Rural Savings and Credit Cooperative

SCF - Supply Chain Finance

SDG - United Nations Sustainable Development Goals

SLLC - Secondary Level Land Use CertificateSTCF - Structured Trade and Commodity Finance

TAF - Technical Assistance FacilityTIN - Tax Identification Number

TYAPP - Ten-Year Agricultural Sector Perspective Plan 2021-2030

TYDP - Ten Years Development Plan: A Pathway to Prosperity 2021-2030

UNDP - United Nations Development Programme

USD - United States Dollars
 VCF - Value Chain Finance
 WFP - World Food Programme
 WR - Warehouse Receipt

WRF - Warehouse Receipt FinanceWRS - Warehouse Receipt System

EXECUTIVE SUMMARY

PURPOSE AND METHODOLOGY

The National Agri-Finance Implementation Roadmap (NAFIR) is a joint project of National Bank of Ethiopia (NBE) and the Ministry of Agriculture (MoA) implemented under the National Financial Inclusion Strategy (NFIS), the NBE Strategy 2023-26 and the MoA Ten-Year Agriculture Sector Perspective Plan (TYAPP) 2021-2030 to enable the scale-up of agri-finance in Ethiopia. NAFIR proposes a package of transformative solutions that will integrate and energize Ethiopia's emergent agri-finance landscape through a five-year implementation framework.

NAFIR supports the achievement of key policy objectives under the NFIS, NBE Strategy and TYAPP as well as the Homegrown Economic Reform Agenda 2.0 (HGER). These goals include the deepening of financial inclusion in the agricultural sector; the modernization of Ethiopian agriculture; the strengthening of sectoral linkages between agriculture and industry; and value addition and export growth. Key outcomes linked to the policy objectives include improved farmer incomes and livelihoods, strengthened food security, economic growth, job creation, climate resilience, gender equality and digital transformation, and contributing to multiple UN Sustainable Development Goals and African Union Agenda 2063 priorities.

NAFIR has been developed using a mixed methods approach:

- Quantitative analysis has been performed on the demand- and supply-side data, which has been obtained from official sources and peer-reviewed research.
- To supplement the official data with a deeper understanding of the cyclical, distributional, and qualitative performance of agri-finance in Ethiopia, and to systematically engage stakeholders on their perspectives and experiences, two rounds of stakeholder consultations took place during NAFIR's preparation (see Annexes II and III), as well as a series of validation workshops to review the draft output (see Annex IV).
- This was supplemented by qualitative analyses of the policy environment, the agricultural and socio-economic context, a stock-take that has mapped Ethiopia's agri-finance landscape, and a comparative review of international experience.
- These quantitative and qualitative analyses have shaped a gap analysis together with recommendations on how the identified gaps may be addressed drawing on Ethiopian, African and wider international experiences. These recommendations have subsequently been structured into a coherent over-arching NAFIR strategy, results framework, and implementation roadmap.

CONTEXT

Agriculture is under-financed in Ethiopia despite its critical contribution to the national economy and society generally. In 2023-24, credit flows to agriculture represented 8 percent of loans disbursed by banks (24 percent, including the fertilizer financing scheme of the Commercial Bank of Ethiopia¹ [CBE]) and 18 percent of loans outstanding from microfinance institutions (MFIs). This compares with the 32 percent contribution that agriculture makes to Ethiopia's gross domestic product (GDP), 64 percent to the country's employment, and 79 percent to its exports. As of 2023-24, just 2 percent of the total potential demand opportunity for agri-finance was fulfilled (it was 5

NBE defines agricultural credit as lending to a "business that includes cultivating soil, producing crops, raising livestock, beekeeping, fishery and other related activities" (NBE Directive No. MFI/24/2013). The large-scale fertilizer financing scheme funded by the Commercial Bank of Ethiopia (CBE) is one major source of financing that may be categorized as 'other related activities'. Under this arrangement, significant quantities of fertilizer are imported and distributed to rural areas through regional governments and cooperatives. Without this scheme, farmers may not have access to fertilizer. It is therefore of high importance and makes a major contribution to Ethiopian agriculture. However, the scheme does not result in the provision of credit to primary producers, as the end farmer still must pay cash for the fertilizer or find credit from another source. Therefore, it does not contribute to the ETB 2,582 billion of potential demand from farmers for credit, as documented below. Yet the CBE fertilizer finance accounts for nearly 70 percent of total reported agri-loan disbursement for 2023/24. For purposes of the analysis in this document, the report quotes agri-finance statistics that may include or exclude the CBE fertilizer finance, according to context, and as stated in the text. It is emphasized, the same underlying official NBE data has been used in all cases, and any apparent differences would stem from analyses in which the CBE fertilizer finance has been excluded.

percent including the CBE fertilizer finance), which amounted to Ethiopian Birr (ETB) 52 billion per annum (the figure was ETB 125 billion ², with the CBE fertilizer finance amount included). This sum was supplied against the ETB 2,582 billion annual potential demand opportunity for agricultural producers across the key agri-finance 'use cases'³. The national Ten-Year Development Plan (TYDP) sets as a policy target a ETB 881 billion per annum credit flow to agriculture by 2030.

However, the demand-supply gap for agri-finance in Ethiopia is not merely quantitative, but also cyclical, qualitative, and distributional. Agri-finance must be tailored for different types of agricultural borrower⁴ across Ethiopia's diverse agro-ecological zones and agricultural value chains to fulfil key agricultural use cases at the right time of the season: crop inputs, irrigation, mechanization, livestock, outputs, and insurance. Fulfilment of these use cases drives productivity gains, farm size expansion, post-harvest loss (PHL) reduction, and diversification. It also strengthens livelihoods, gender and youth inclusion, as well as climate adaptation and resilience. In addition, agri-finance is necessary to enable efficient aggregation and the supply of agricultural raw materials to downstream agro-industries, and to mitigate the high structural risks faced by the sector.

PROBLEM STATEMENT AND RATIONALE FOR THE ROADMAP

The causes of agricultural under-financing in Ethiopia are multi-faceted. Financing agriculture involves higher costs and risk compared with other sectors. Loan sizes are small, reflecting the smallholder-predominant modes of production across Ethiopia's agricultural value chains. The cost of providing finance is high, driven by geographic distance, infrastructure gaps, low bank presence, financial illiteracy, and challenges complying with regulation and documentary requirements. High structural risks emerge from seasonality, cyclicality, and the volatility of climate, price and financial sector credit availability, which remain difficult to mitigate. Furthermore, agricultural borrowers tend not to possess the types of collateral typically accepted by financial institutions (Fls). Conversely, many Fls do not have the specialized agricultural-financing knowledge or offer the tailored products required to sustainably finance the sector.

Significant investments have been made over recent years by the government, development partners and the private sector to address these challenges and build Ethiopia's agri-finance landscape. Registries have been developed by NBE and the Ministries of Agriculture (MoA), and Trade and Regional Integration (MoTRI) so that agricultural assets can serve as loan collateral to fulfil key agri-finance use cases. Regulations and cross-cutting financial and digital infrastructure have been introduced, such as the credit reference bureau (CRB), the national identity scheme (National ID), and frameworks for capital goods financing, contract farming and integrated agroindustrial parks (IAIPs). MoA has established a rural finance unit and is developing an 'agri-stack' to digitize and integrate agricultural functions and services under the ministry's Digital Agriculture Roadmap 2032. The Ethiopian Cooperatives Commission (ECC) has worked to strengthen rural Fls, supported by the Agricultural Transformation Institute (ATI), which has launched an extensive array of initiatives to build foundations for access to agri-finance and rural financial inclusion. Significant multi-stakeholder programmatic efforts have improved crop and livestock insurance in the country. Agri-finance has also been positively impacted by the emergence of agriculture finance technology (agfintech') platforms such as Lersha and Kifiya, which help Fls to overcome the physical barriers of financing agriculture, as well as digital platforms that connect farmers to essential services, like Mastercard Farm Pass.

However, even when all these investments come to maturity, key structural and coordination constraints are still likely to hold back the scale-up of agri-finance to meet policy ambitions.

² ETB 125 billion of agri-finance for financial year 2024 comprises ETB 107 billion of agri-finance reported by banks (of which CBE fertiliser finance is understood to account for approximately ETB 72 billion), ETB 4 billion from MFIs and ETB 13 billion from saving and credit cooperatives (SACCOs). If the CBE fertiliser finance is excluded from this total, for reasons set out in footnote 1, total agri-finance would stand at ETB 52 billion

³ This total potential demand opportunity represents a scenario of modernized agriculture and comprises the key agri-finance use cases in which producers access credit to purchase crop and livestock inputs, irrigation, equipment and mechanization services, and use output finance to support enhanced aggregation and marketing.

⁴ Subsistence farmers: smallholder farmers: pastoralists: semi-commercial and commercial farmers.

- Structural constraints represent missing parts of the agri-finance landscape and include:
 - Quantitative and cyclical limitations on the loanable funds available for FI agri-lending, reflective of economy-wide credit constraints in which demand for finance far outstrips supply.
 - o Specific disincentives for financing agriculture compared with other sectors driven by the high costs and risks of financing farmers.
 - o Compliance bottlenecks as producers struggle to meet regulatory and documentary requirements, driving weeks if not months of time-consuming and resource-intensive effort by both producers and FI to approve and disburse a loan.
- Coordination constraints do not represent an absence of activity but rather inadequate coordination to drive sustainable, nationally scalable impact. These limitations have been identified in the following areas:
 - o Building the financial literacy of agri-borrowers.
 - o Developing agricultural risk management frameworks.
 - o Building integration and institutional linkages between agri-finance actors⁵.

As Ethiopia rebalances its economy towards greater private sector participation, the agrifinance outlook is challenging, with current trajectories trending negative. Agri-lending by the historic private banks — those established prior to 2021 — has remained range-bound within 1-3 percent of total credit supply. There has been a declining trend in the microfinance sector over the last four years that has seen the proportion of credit provided to agriculture fall from 30 percent to 18 percent. The drop was even more pronounced for those MFIs that converted to banks between 2021-22. Between them, Tsedey, Siinqee, Omo and Shabelle Banks experienced a fall in the proportion of lending they made to agriculture from 57 percent to 32 percent in just one year.

Despite the importance of financing agriculture, and the sizable challenges there are to scaling the sector's financial support and services, no over-arching strategy is in place to coordinate stakeholder actions across Ethiopia's agri-finance landscape. Initiatives are fragmented under the auspices of different institutions. There is limited data captured or monitored to provide insights on the evolving status of agri-finance in the country. And there has not been a systematic effort to coordinate actions across the different stakeholders involved.

In this context, the rationale for developing a national agri-finance implementation roadmap is therefore to:

- **Develop an over-arching strategy** to integrate and energize Ethiopia's developing agri-finance landscape and resolve remaining constraints through transformative solutions.
- **Build a comprehensive database** to establish a baseline of relevant indicators and monitor progress going forward towards achieving national policy targets.
- Put in place a coordinating mechanism for joined-up multi-stakeholder action.

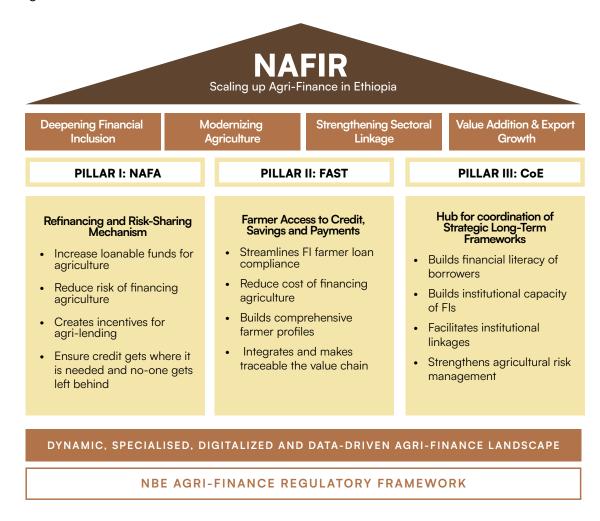
VISION AND SOLUTIONS

Drawing on African and international experience, three 'game-changing' solutions are proposed as the pillars of NAFIR for short-term impact that will resolve the remaining constraints to agri-finance scale-up within a dynamic, specialised, digitalised and data-driven agri-finance landscape:

National Agri-Finance Accelerator (NAFA): This is a refinancing and risk-sharing vehicle that
makes available loanable funds earmarked specifically for agriculture and reduces the risk of
lending to the agricultural sector.

⁵ This includes between commercial banks and rural Fls, domestic and foreign institutions in the context of the opening of the banking sector, and Fls and new and emerging digital platforms that hold the potential to overcome key barriers to financial inclusion in the agricultural sector.

- Farmer Access to Streamlined Financial Services (FAST): This is an efficient interface for FIs
 to access farmer information, and for the farmer to access credit, streamlining compliance and
 reducing the cost of lending to the agricultural sector.
- Agri-Finance Centre of Excellence (CoE): This is a hub for the sustainable, nationally scalable, coordination of efforts to build borrowers' financial literacy, Fls' capacity, institutional linkages, and agricultural risk management solutions. These undertakings will be integrated efficiently and cost-effectively into the NAFIR implementation process through strategic and coherent long-term frameworks.



The framework that emerges offers a holistic, data -driven, incentives-based approach across its three pillars. Pillars I and II address the identified structural constraints: NAFA increases loanable fund availability and reduces the risk of lending to agriculture; FAST streamlines compliance and reduces the costs of financing the sector; and CoE addresses the identified coordination constraints, building the financial literacy of borrowers and the institutional capacity of lenders, addressing both the demand- and supply-sides of the agri-finance landscape.

A new policy instrument to further incentivize lending to agriculture may be considered subject to further assessment.

PILLAR I - NAFA:

The refinancing component of NAFA is designed to make available a new source of loanable funds for FIs under an inclusive targeting framework. NAFA would act as a conduit for pooling resources from government, development partners and private sources. It would channel the pooled resources to ensure that they not only reach agriculture, but also that credit is available for the sub-segments where it is needed the most — agri-borrower types, use cases, value chains, regions, gender, and insurance — to make sure no one is left behind. Agri-lending would be strengthened by the application of consistent definitions and the tagging of loans by identified sub-segments through NAFA. NAFA will implement and scale incrementally based on 'test and learn' cycles targeting identified agricultural sub-sectors and regions meeting defined readiness criteria.

This approach is structured to crowd in and scale up private sector funding for agriculture, in line with the HGER policy emphasis for Ethiopia's transition to a private sector-led growth model. When a FI originates an agri-loan that qualifies for refinancing and risk-sharing incentives through NAFA by addressing under-served segments defined in the inclusive targeting framework, the FI refinances that loan by selling a portion of it to NAFA. That portion of the loan capital is then received back by the FI and becomes available for originating new loans. The result is a risk-sharing arrangement in which NAFA bears the risk for the portion of the loan that it refinances, and potentially more. It is proposed that NAFA may also take a first-loss position for loans provided to high priority and underserved segments through credit guarantee. Selective pre-financing (credit lines) may also be offered as an additional incentive to reach under-served segments, subject to an organized and ready pipeline of validated borrowers (e.g., a contract farming scheme)⁷.

NAFA uses a data-driven, incentives-based approach for increasing the flow of credit not merely to agriculture overall, but also to ensure that it reaches the under-served segments where it is needed the most.

Hypothetical Examples — How incentive levers may be used to stimulate the flow of agri-finance to underserved segments.

<u>Hypothetical Example 1:</u>

Commercial cash crop farmer near Addis Ababa: 10 percent refinancing at refinancing base interest rate, with no risk sharing.

Hypothetical Example 2:

Smallholder grain farmer in rural center (e.g., Arsi): 50 percent refinancing at refinancing base rate minus 20 percent, with 75 percent risk share.

Hypothetical Example 3:

Lowland pastoralist: 75 percent refinancing at refinancing base rate minus 50 percent, with 80 percent first loss

⁶ This would take note that, while there is a 5 percent minimum requirement for lending against movable assets already in place, less than 1 percent of assets registered in Ethiopia's Movable Property Security Registry are agricultural assets. Learning lessons from international experience, it is recommended that a minimum agri-credit lending requirement, if introduced, would create maximum flexibility in how Fls could fulfil the requirement. Fls may on-lend through other Fls. They may provide credit that is intermediated via, for example, cooperatives, off-takers, agro-dealers, aggregators, warehouse operators, commodity exchanges, mobile money and agfintech platforms. They may purchase loans from other Fls whose loan value exceeds the requirement and so have a surplus. This would create a market-based incentive for Fls to aim as high as possible with their agri-loans and not stop once they reach the minimum requirement, spurring some Fls to specialize in agri-finance and boost their rural presence, knowing these investments would be rewarded.

A key risk with pre-financing is that funds allocated under a credit line may only be utilized slowly or not at all. In the context of Ethiopia's high systemic credit constraints, it is essential every birr of additional funding for agriculture is put to work. It is therefore recommended that credit lines are provided on an exceptional basis for particularly underserved segments, not as the norm, and only when the pipeline is already in place to allow for rapid disbursement.

'Levers' that may incentivize the distribution of agri-finance to underserved segments include8:

- A higher proportion of the total loan amount refinanced.
- Lower cost of refinancing.
- Full or part prefinancing through credit lines.
- Lower cost of prefinancing.
- A higher level of risk sharing.
- First loss versus "pari-passu" (equal sharing) risk position.

In addition, FI agri-finance performance would be closely monitored with high-performing FIs and innovators recognized in an annual awards ceremony and rewarded with preferences — e.g., through government and development partner financing and project opportunities.

As agri-finance ecosystems mature, the proportion of credit provided direct by FIs to farmers tends to reduce as FIs use innovative channels to reach the farmer and overcome rural infrastructure gaps. Therefore, while loans refinanced by NAFA may originate from FIs that loaned directly to the farmer, the FIs will also be encouraged to provide finance indirectly through onlending or pass-through arrangements via available channels. These include:

- Off-takers linked to contract farming arrangements to enable the financing of the farmer through their value chain relationships.
- **Digital platforms** e.g., the Agricultural Transformation Institute (ATI) input e-voucher system (IVS), mobile money (e.g., TeleBirr/MPESA), and agfintech and digital platforms (e.g., Kifiya/Lersha/Farm Pass).
- **Input distributors**, such as cooperatives, agro-dealers, or ATI agricultural one-stop shops (AOSS), which may provide farmers with crop inputs, animal feed and health products on credit.
- **Equipment vendors** or mechanization service providers, which may provide goods and services to the farmers on credit.
- Warehouse operators that may disburse credit to the farmer on behalf of the FI, secured against the farmer's outputs stored in a professionally managed warehouse.

Fls benefitting from NAFA refinancing and risk-sharing would meet eligibility requirements in line with good practice to ensure sustainability and impact. These would include meeting minimum requirements for specialised agri-finance product design, emphasis on promoting agricultural assets as movable collateral as well as use of alternative data, robust loan lifecycle procedures, and the application of fair commercially-based interest rates and fees to assure the affordability of credit for the farmer. These requirements would create incentives for Fls to design specialised, farmer-inclusive and competitive agri-finance products backed by dedicated in-house agri-finance capability, supported with the provision of capacity-building services by the CoE (see below)

NAFA would be integrated closely with the existing components of Ethiopia's agri-finance landscape for a coordinated scale-up of credit to meet policy ambitions. NAFA Integration and Scalability Plans would be developed by the 'landscape enablers' — registries, initiatives, and programs — across both the financial and real sectors, which drives the fulfilment of each agrifinance use case. These would set out the actions required from each landscape enabler to build the necessary capacity so the landscape can support more farmers, more transactions, more locations, and more value chains.

⁸ The levers may be adjusted to optimize agri-finance distribution based on continuous analysis of the elasticities and crosselasticities of agri-credit provision in response to changes in one or more of these levers for a given agri-borrower type.

NAFA is intended as a time-bound approach to catalyze the initial scale-up, while accompanied by longer-term measures that further increase the availability of loanable funds for agriculture over time. A ratings system for Fls and the cooperative sector would create transparency and strengthen readiness for taking on agri-finance-earmarked credit lines. Inter-bank markets would enable the trading of available loanable funds for agri-credit among Fls, so these funds reach those institutions best placed to originate new agri-loans. Agro-securitization would be developed via the Ethiopian Securities Exchange (ESX) to facilitate access to funds from the capital markets.

The combination of refinancing with risk-sharing through NAFA has been recommended over other possible approaches. Alternatives include:

- An agri policy bank may result in the centralization of agri-credit supply, crowding out the
 private sector, and dampening the dynamism and innovation that results from competition, as
 well as sectoral concentration that may challenge risk management and prudent operation best
 practices. However, there is scope over time for a specialised agri-bank to be introduced on
 a fully commercial basis, including as a public-private partnership blending government and
 private sector investment.
- A national risk-sharing facility, which as a standalone approach would not address the constraint in loanable fund access that holds back the scale-up of FI credit flows to agriculture.
- Relying on Fls to source their own credit lines and risk-sharing facilities, which is important and will be supported through NAFIR. However, it would not as a short-term standalone measure result in a systematic and coordinated solution to ensure sufficient capital is raised to meet national policy targets or that credit reaches where it is needed most to make sure that no one gets left behind.

PILLAR II - FAST

FAST is a mechanism for rapid farmer access to financial services via a mix of mediums that may include physical or digital credit cards, QR codes, agent-based and other offline solutions applicable to context. A FAST unique identifier would be linked to a named farmer, Fayda ID number, farm plot and/or tagged livestock in MoA databases, cellphone number where available, and provide a digital wallet for the farmer to facilitate digital payments for goods and services, receive sales proceeds, and make savings. The use of agent-based access models would overcome digital literacy gaps, combined with an extensive financial and digital literacy training framework to accompany rollout. Presentation by the farmer of their FAST or Fayda identifier to a FI would allow immediate access to all relevant information the FI requires to issue a loan to that farmer, per NBE regulatory frameworks to be updated. The aim is to cut out entirely the need for farmers to submit compliance documentation to the FI, eliminating large amounts of paperwork, processing effort, and time delays.

The implementation of FAST would be managed in partnership with the National ID, MoA, ATI and ECC, closely linked to the imminent rural roll-out of National ID. National ID is responsible for issuing the Fayda unique identifier along with physical and digital cards. It will shortly commence its rural rollout, reaching millions of farmers during 2025 itself and tens of millions in 2026 and subsequent years. National ID has already integrated with the MoA's land registry database, which is understood to cover 18 million farmers, linking the Fayda unique identifier with essential farm data such as geolocation, plot size and crop mix. National ID will also shortly introduce a digital credentials wallet that allows for a farmer's FAST unique identifier credential to sit alongside the Fayda identifier and others (e.g., driving licenses, social protection credentials) offering a readily accessible and interoperable technology backbone for implementation of FAST. The MoA will also play an important role building the real sector's enabling environment for scaling up agri-

finance, while ATI, through agricultural commercialization clusters (ACC), AOSSs, the IVS, and the 8028-farmer hotline. In addition, ECC will help integrate FAST with efficient 'last mile' delivery systems for inputs, equipment and mechanization services that reach the farmer even in remote rural areas.

An automated, centrally developed credit-scoring algorithm would generate a personalized seasonal credit allowance for each farmer, linked to their FAST identifier. The algorithm would be jointly developed by the FIs under NBE auspices, like the way in which FIs collaborated with mobile money platforms to develop credit-scoring algorithms embedded in those platforms to support digital micro-lending. The algorithm would calculate each farmer's seasonal credit allowance according to the farmer's need — based on factors such as farm plot size, crop mix and production cost — as well as market price and past performance to assess the affordability of credit. The allowance would be sub-allocated to different use case 'windows' for crop inputs, irrigation, mechanization, livestock, outputs and insurance, and would be pre-cleared for NAFA refinancing and risk-sharing to closely link farmer access with FI incentive. A fund allocation for non-farm and household purposes may also be provided, recognizing that many producer households engage in non-agricultural activities. Gender-intentionality would be incorporated into the credit allocations, recognizing the specific needs and challenges facing women farmers.

As a condition of access to credit through FAST, crop or livestock insurance would automatically be taken for the farmer. This would enable the bundling of insurance with credit, refinanced by NAFA on a risk-sharing basis, and repaid out of the farmer's sales proceeds along with other credit the farmer takes via FAST. As a result, crop and livestock insurance would become more affordable for the farmer and create the conditions for significant growth in farmer uptake, with the economies of scale and efficiencies of distribution driving a potential reduction in premium costs, and with a strategy in place to systematically raise awareness and provide education to farmers.

Also, as a condition of access to credit through FAST, the farmer would need to use their FAST identifier when making or receiving digital payments related to agro-input, mechanization, and output transactions.

The use of FAST for procuring agro-inputs and mechanization equipment or services would provide assurance that the farmer is using credit for the intended purposes and create an audit trail of the farmer's input and equipment use over time.

The use of FAST to receive the sales proceeds from the farmer's output marketing would enable loan repayments to be deducted from the farmer's sales proceeds and create an audit trail of the farmer's marketable surplus and income over time.

With the farmer's output marketing transactions systematically recorded, FAST would create traceability of the flow of goods along the value chain. In so doing, FAST would also serve to deter and detect 'side-selling' against contract farming commitments, providing stimulus for contract farming and related value chain finance (VCF)-based lending. This would help to strengthen value chain relationships, integrate farmers into the formal economy, and provide opportunities for digitalizing revenue collection by government linked to the 'Digital Ethiopia 2025' national digital transformation strategy. To strengthen sectoral linkages between agriculture and industry and create the absorptive capacity for the offtake of increased farm-level output, a special provision for NAFA refinancing and risk-sharing would be made for loans to off-takers that participate in contract farming arrangements and IAIPs. This would create incentives for closer relationships between producers and off-takers and create a stimulus for value addition and export growth.

Data from FAST would feed into a National Agri-Finance Database (NAFID), building a comprehensive profile for each farmer to drive bankability and a surge in farm-level investment. This profile would comprise farmer identity, farm data, marketing track record, and

financial history. Over time, on-farm monitoring that measures farm performance (productivity, water efficiency, PHL) would also feed into NAFID, enabling the comprehensive tracking of progress towards agricultural modernization by value chain and region. Importantly, the NAFID database, and the data-sharing protocols linked to it, would be protected by best practice data security and consumer protection frameworks.

PILLAR III — COE

The CoE is intended as a hub for stakeholder coordination, implementation and monitoring in the areas of financial literacy, FI capacity development, agricultural risk management and FI linkages. Its purpose is to supersede approaches that in the past may have been fragmented, small scale and program-specific with strategic and coherent frameworks that are systematic, coordinated, and have long-term continuity backed by a technical assistance facility.

The CoE may be structured to have regional outreach to cover the country as a whole, and would be tasked with four action areas:

National Agri-Finance Literacy (NAFIL) Framework: The CoE would oversee the development and delivery of a national framework for agri-financial and related digital literacy, under the National Financial Education Strategy (NFES). NAFIL would include, among other things, a segmented stakeholder needs assessment, a gap analysis, and the scoping and development of relevant content necessary to build the financial and digital literacy of producers and cooperatives to successfully absorb and put to effective use agri-finance across the different use cases and value chains. NAFIL would be delivered smartly to farmers and cooperatives by integrating it with the rollout of NAFA and FAST, in partnership with MoA, ECC, and ATI, to improve efficiency, inclusiveness, and cost-effectiveness.

FI and Regulatory Capacity Development: The CoE would support FIs to introduce specialised agri-finance products and build up their in-house specialised agri-finance capability by developing best practice principles, guidelines and templates, backed by training and capacity-building services. It would also support FI development of Interest Free Banking (IFB) equivalent agri-finance products to address the needs of Muslim borrowers. The CoE would run competitions to stimulate agri-finance and agfintech innovations, providing technical support for early implementation and related capacity-building. Importantly, the CoE would offer differentiated approaches by FI type, and enable a renewed focus on agri-finance by the MFI sector, as well as the converted MFIs now licensed as banks, so the proportion of MFI credit provided to agriculture may reverse its current downward trajectory. Special provision would be made for capacity-building to financial sector regulatory authorities to ensure adequate knowledge, understanding and skills are in place to effectively regulate the new environment.

Hub for Agri-Finance Institutional Linkages (HAFIL): The CoE would build improved access for Ethiopian Fls to credit lines from international sources, and for MFls and rural savings and credit cooperatives (RuSACCOs) to credit lines and on-lending facilities from banks. A further linkage facilitated by HAFIL would be between Fls and digital platforms, including mobile money and agfintech platforms, to drive forward digital transformation in agriculture. The CoE's role would be to facilitate partnerships, disseminate information, study and share best practices, and monitor progress.

Agriculture Risk Management: An Agriculture Risk Management Permanent Working Group under the CoE would be formed which would cohesively address the range of challenges facing the scale-up of agricultural insurance in the country, including policy, regulation, strategy, capacity, product design, distribution and cost: The Working Group would have two broad objectives:

■ To integrate crop and livestock insurance within the NAFA/FAST framework. This would enable the bundling of insurance with credit, refinanced by NAFA, and repaid out of the farmer's sales proceeds along with other credit the farmer takes via FAST. As a result, crop and livestock

insurance would become more affordable for the farmer and create the conditions needed for improved farmer uptake.

- To develop and implement a national policy framework and strategy for agricultural risk management, including components on crop and livestock insurance, and price risk management. Under this workstream:
 - The initial focus will be to continue scaling up crop and livestock insurance, building on the four dialogue platform meetings that took place under the Japan International Cooperation Agency (JICA) Index based Crop Insurance development project between May 2022 and January 2024, while linking to ongoing initiatives such as the Integrated and Risk Finance Facility (IRFF)⁹ and Africa Risk Capacity (ARC)¹⁰, and addressing new developments including the prospective establishment of an insurance regulator, and enhancing the institutional distribution arrangements for insurance in the country.
 - The medium-term focus would be developing a framework for price risk management. Price risk management solutions are not yet available in Ethiopia, even though Fls cite price volatility as a significant risk that constrains agri-lending. An agricultural price risk management strategy would be developed under which solutions would be gradually introduced, such as hedging tools offered by domestic and international commodity exchanges, and actuarial solutions.

GOVERNANCE AND IMPLEMENTATION

NAFIR will be implemented in close partnership with the institutions supporting the key components of Ethiopia's agri-finance landscape across both the financial and real sectors. NAFA will be funded through a resource mobilization strategy based on a follow-up readiness assessment, including through use of NAFA for channelling government support to farmers in a sustainable and catalytic framework. Funds for NAFA implementation may be sourced from government, development partners, and private sources, and may encompass in-kind as well as cash contributions. FAST will be implemented in partnership with the National ID, MoA, ATI, and ECC, and interface with digital platforms (e.g., agfintech platforms, Farm Pass), based on regulations for credit provision through FAST. The CoE will be delivered in partnership with the Ethiopian Institute for Financial Studies, MoA, ATI and ECC, and in collaboration with global centers of excellence.

Governance of NAFIR implementation is recommended to take place through a steering committee co-chaired by the Governor of the NBE and the Minister of Agriculture. This mechanism will convene the key institutional actors supporting agri-finance in Ethiopia and is intended to drive a whole-of-government approach. A technical sub-committee would sit under the steering committee. The steering committee would also oversee a project management unit housed initially within the NBE to facilitate implementation. A NAFIR consultative body would comprise demand- and supply-side stakeholders, development partners, and experts from academia and technical institutions. It would meet with the steering committee on a regular basis to review the progress of NAFIR and identify enhancements.

The key NAFIR target is the TYDP policy target of ETB 881 billion per annum credit flow to agriculture by 2030. Further scale-up to fulfil larger portions of total agri-finance potential demand may be considered for a potential second NAFIR covering the period 2031-2035. A full results framework and implementation plan has been developed and will be updated based on pre implementation readiness studies.

⁹ IRFF is a collaboration between MoA and the United Nations Development Program.

¹⁰ ARC is a specialized agency of the African Union, which is rolling out parametric insurance services to member states and farmers via innovative financing mechanisms that pool disaster-related risk across Africa and transfer it to international risk markets. In Ethiopia, ATI has been partnering with World Food Program (WFP) to introduce ARC products.





1.1 INTRODUCTION

NFIS identifies agriculture and the rural poor as priority segments which have not benefitted proportionally from Ethiopia's economic and credit growth over the past decade.

Agriculture makes a critical contribution to Ethiopia's national economy and to society. The sector contributes 32% to Ethiopia's GDP, 64% to employment and 79% to exports¹¹. Of this, crops contribute approximately 60% of agricultural GDP, and livestock contributes 27%¹².

Ethiopian agriculture is characterised by the predominance of smallholder family farms. Smallholder farmers account for approximately 95% of Ethiopia's land under cultivation and 90% of total agricultural output¹³. 88% of Ethiopia's poor live in the rural areas and are engaged in agriculture¹⁴.

Farming practices remain undeveloped in the country. Most smallholder production is rainfed, using traditional technologies, and involves minimal integration between primary production and the downstream agro-industries. Value chains tend to be characterised by multiple layers of non-value-adding intermediaries transacting informally via cash-based transactions, although the massive scale-up of digital finance in recent years is likely to spur significant change. A large majority of Ethiopia's exports comprise raw or primary processed agricultural commodities with limited value addition performed onshore. In this context, financial inclusion, agricultural modernisation, strengthening sectoral linkages between agriculture and industry, value addition and export growth are key national policy objectives.

1.2 RATIONALE FOR A NATIONAL AGRI-FINANCE ROADMAP (NAFIR)

Agri-finance is a key enabler of achieving these policy objectives.

Improved access to financial services is a necessary condition for scaling investment in primary production and along the value chain. Producers need credit to boost productivity, expand farm size, reduce PHL, diversify production, strengthen livelihoods including for women and youth farmers, and build climate adaptation and resilience. Agri-finance is also a necessary condition for strengthening aggregation and supply of agricultural raw materials to downstream agro-industries, and for mitigating the structural risks faced by Ethiopia's agricultural value chains that result from exposure to the volatilities of climate, price and financial sector credit availability.

However, agriculture is significantly under-financed in Ethiopia. In 2023-24, credit flows to agriculture represented 8% of loans disbursed by banks (24%, including CBE fertiliser finance) and 18% of loans outstanding from MFIs. As previously noted, this compares with the 32% contribution that agriculture makes to Ethiopia's GDP, 64% to employment and 79% to exports. Per African Development Bank (AfDB) analysis, credit constraints impact over two-thirds of Ethiopia's smallholder farmers¹⁵. Alleviating these constraints could drive national productivity gain over 60%¹⁶.

NBE defines agricultural credit as lending to "business that includes cultivating soil, producing crops, raising livestock, bee-keeping, fishery and other related activities" (NBE Directive No. MFI/24/2013). The large-scale fertiliser financing scheme funded by the Commercial Bank of Ethiopia (CBE) is one major source of financing that falls under the 'other related activities'. Under this arrangement, significant quantities of fertiliser are imported and distribued to rural areas through regional governments and cooperatives. Without this scheme, farmers may not have access to fertiliser. However, the scheme does not result in the provision of credit to primary producers as the end

 $^{{\}tt 11} \quad {\tt NBE~2022/23~-} \ {\tt agriculture~contribution~to~GDP~and~exports;} \ {\tt World~Bank~2020~-} \ {\tt agriculture~contribution~to~employment.}$

¹² National Agricultural Investment Plan (NAIP), 2021-30

¹³ Ibid

¹⁴ World Bank (2020). Ethiopia Poverty Assessment: Harnessing Continued Growth for Accelerated Poverty Reduction. Washington DC. © World Bank

¹⁵ Mukasa et al (2017), Credit constraints and farm productivity: Micro-level evidence from smallholder farmers in Ethiopia, Working Paper Series N° 247, African Development Bank, Abidjan, Côte d'Ivoire.

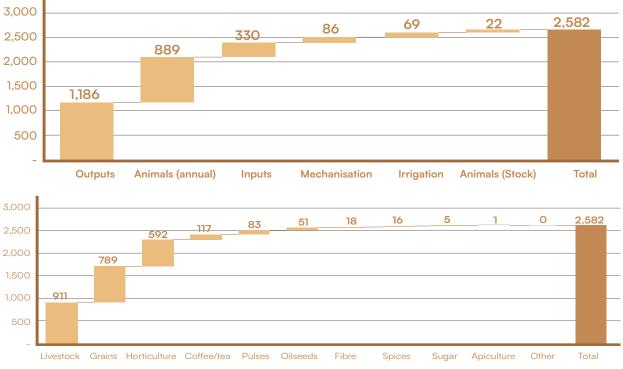
¹⁶ Ibid.

farmer still has to pay cash for the fertiliser or find credit from another source. Yet this finance accounts for nearly 70% of total reported agri-loan disbursement for 2023/24. For purposes of the analysis in this document, the report quotes agri-finance statistics that may include or exclude the CBE fertiliser finance, according to context, and as stated in the text. It is emphasised, the same underlying official data has been used in all cases, and any difference versus official NBE data and publications stems from the statistics in which the CBE fertiliser finance has been excluded.

Analysis performed in the development of NAFIR suggests that as little as 5% of the total national demand opportunity for agri-finance is currently fulfilled (2% excluding CBE fertiliser finance). Per the 2023-24 official data, agri-loans of Ethiopian Birr (ETB) 125 billion per annum (ETB 52 billion, excluding CBE fertiliser finance) was supplied against the total annual potential demand opportunity of ETB 2,582 billion per annum¹⁷. This total annual potential demand opportunity represents a scenario of fully modernised agriculture and comprises the key agrifinance use cases for which producers across Ethiopia's agricultural value chains would access credit for crop and livestock inputs, irrigation, equipment and mechanisation services, and use output finance to support enhanced aggregation and marketing.

It is noted that this demand for agri-finance is not all required at the same time but rather over the course of the season during production and post-harvest activities. Therefore, the loanable funds requirement to fulfil the annual demand opportunity is substantially lower than the demand opportunity itself. The total annual potential demand opportunity comprises crop inputs (ETB 330 b/annum), irrigation (ETB 69 b/annum), mechanisation (ETB 86 b/annum) and outputs (ETB 1,186 b/annum). Demand for finance from the livestock sector is also significant, comprising annual material costs of production (ETB 887 b/annum) and stock replenishment (ETB 22 b/annum). The total potential demand opportunity for agri-finance is projected to grow to ETB 2,928 billion by 2030¹⁸.

Charts 1-2: Agri-Finance Potential Annual Demand Opportunity by Use Case & Sector (ETB billions, 2024)



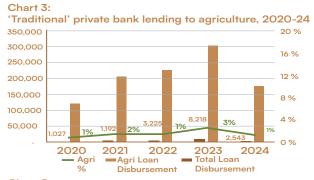
Source: Author (See Chapter Three for methodology)

¹⁷ ETB 125 billion of agri-finance for financial year 2024 comprises ETB 107 billion of agri-finance reported by banks (of which CBE fertiliser finance is understood to account for approximately ETB 72 billion), ETB 4 billion from MFIs and ETB 13 billion from saving and credit cooperatives (SACCOs). If the CBE fertiliser finance is excluded from this total, for reasons set out in footnote 1 above, total agri-finance would stand at ETB 52 billion

¹⁸ This is driven by area (crops) and animal stock (livestock) growth only. Prices have been held constant at 2023/24 levels.

As Ethiopia rebalances its economy towards greater private sector participation, the outlook for agri-finance looks challenging with current trajectories trending negative. Agri-lending by the historic private banks — those established prior to 2021 — has remained range-bound at just 1-3% of their total credit supply. There has been a declining trend in the microfinance sector over the last four years which has seen their proportion of credit provided to agriculture fall from 30% to 18%. The drop was even more pronounced for those MFIs which converted to become banks between 2021-22. Between them, Tsedey, Siinqee, Omo and Shabelle Banks experienced a fall in the proportion of lending to agriculture from 57% to 32% in just one year.

Charts 3-5 Agricultural Loans, 2020-24 (ETB millions, %) — Historic Banks, Converted Banks, MFIs



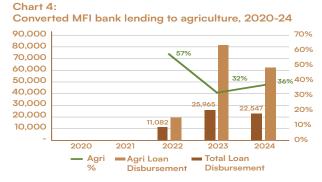
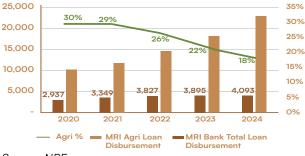


Chart 5: MFI lending to agriculture, 2020-24



Source: NBE

The causes of agricultural under-financing in Ethiopia are multi-faceted and well-documented¹⁹. Financing the agricultural sector involves higher cost and risk compared with the manufacturing, industry and service sectors. Loan sizes are small, reflecting the smallholder-predominant modes of production across Ethiopia's agricultural value chains. The cost of providing finance is high, driven by geographic distance, infrastructure gaps, low bank presence, the financial illiteracy, and challenges complying with regulation and documentary requirements (see Box 1 below). In addition, many Fls do not have the specialised knowledge or offer the specialised agri-finance products required to sustainably finance the sector.

Box 1: Practical Experiences Financing Smallholder Farmers in Ethiopia

Financial institutions that have engaged in pilot smallholder and MSME agri-financing schemes report a large amount of laborious groundwork to comply with mandated know your client (KYC), credit and consumer protection requirements. Farmer loan applications can take many weeks or months, requiring repeat — and often fruitless — visits either by the bank to the borrower, or by the borrower to the bank.

¹⁹ See for example Gutierrez et al 2023, 'Agri Finance Navigator: A Snapshot of the Ethiopian Agri-SME Financing Ecosystem', BIC Ethiopia; Elias and Beshir 2022, 'Agricultural Finance and Insurance in Ethiopia; Challenges and Policy Options', Ethiopian Economics Association Policy Working Paper 08/2022; Schmidt and Engelhardt 2022, 'Barriers to Agri-Finance in Ethiopia', GIZ;

Key challenges include: obtaining documents from regional and woreda administrations, which often entails delays, inconsistencies, system challenges and lack of understanding; use of various local languages; variant spelling within and across these languages; obtaining consistent signatures; different naming conventions; different marital structures; inefficient document renewal regimes; requirement for Tax Identification Numbers (TIN) numbers which most farmers do not have; the high number of documents and contracts that a borrower — often facing literacy and awareness challenges — needs to sign; and the need to obtain and navigate NBE exemptions and waivers for various parts of the above.

Source: NAFIR Stakeholder Engagement and Survey

High structural risks in agriculture emerge from seasonality, cyclicality and the volatilities of climate, price and financial sector credit availability, which remain difficult to mitigate, while agricultural borrowers tend to lack possession of the types of collateral typically accepted by Fls.

Despite the importance of agri-finance, and the sizable challenges it faces to scale-up, no overarching strategy is in place to coordinate stakeholder actions across Ethiopia's agri-finance landscape. Rather, initiatives are fragmented under the auspices of different institutions. There is limited data captured or monitored to provide insight on the evolving status of agri-finance in the country. And there has not been a systematic effort to coordinate actions across the different stakeholders involved.

In this context, the rationale for developing a national agri-finance roadmap is therefore to:

- 1. **Develop an over-arching strategy** to integrate and energise Ethiopia's emergent agri-finance landscape and resolve remaining constraints through transformative 'game changing' solutions.
- 2. Build a comprehensive database to establish a baseline of relevant indicators and monitor progress going forward towards achievement of national policy targets.
- 3. Put in place a coordinating mechanism for joined-up multistakeholder action.

1.3 STRUCTURE OF THIS REPORT

The report continues in Chapter Two with the definitions and scope of agri-finance.

In **Chapter Three**, the methodology that has been used in the development of NAFIR is set out, along with a review of the data used and of the analysis that has been conducted.

Chapter Four reviews the policy context ahead of **Chapter Five** which conducts a stock-taking of agri-finance in Ethiopia to date. Based on the stock-taking, and taking into account consultations with stakeholders through engagement and survey, the emergent Ethiopian agri-finance landscape has been mapped.

Chapter Six identifies gaps in the agri-finance landscape that constrain the scale-up necessary to meet targets. Recommendations have been provided that address these gaps.

Chapter Seven presents the 'game changers' — transformative solutions to address the remaining gaps — packaged together as three pillars in a coherent overall NAFIR vision and strategy for integrating and energising Ethiopia's agri-finance landscape to drive the necessary scale-up.

Chapter Eight provides illustrations of how the NAFIR vision would work in practice under several scenarios.



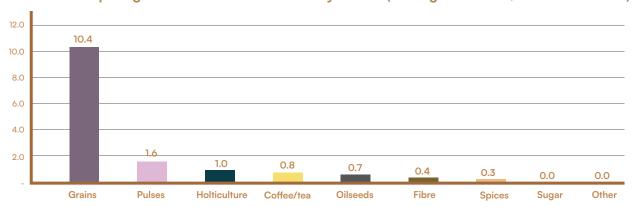


2. AGRI-FINANCE: DEFINITIONS AND SCOPE

Finance is taken to comprise four kinds of service — credit, savings, payments and insurance.

Agriculture follows the NBE definition of agriculture as "business that includes cultivating soil, producing crops, raising livestock, bee-keeping, fishery and other related activities" (NBE Directive No. MFI/24/2013). Key agricultural sub-sectors include grains, pulses, horticulture, coffee/tea, oilseeds, fattening, poultry, dairy, spices, fibres, apiculture, forestry and fisheries.

Chart 6: Ethiopia Agricultural Production Area by Sector (Average 2020-23, Million Hectares)



Source: FAOSTAT (crops only)

Note: Teff is not included in FAOSTAT. Data has been sourced from Tiguh et al (2024), "Assessment of harvest and postharvest losses of teff", Heliyon 10 (9), based on Central Statistical Agency data.

Agricultural finance ('agri-finance') denotes provision of financial services to a party engaged in **primary production**, i.e. farm-level activities, as well as related activities, in line with NBE's definition as noted above²⁰.

Related activities in this context may include:

Intermediated finance:

i.e. finance that reaches primary producers via sources which may include offtakers, aggregators cooperatives, input suppliers, agro-dealers and equipment vendors

II Finance for the downstream agricultural value chain:

i.e. finance that supports the movement and transformation of goods along the agricultural value chain through actors involved in aggregation, primary and secondary processing, manufacturing, distribution, retail and export.

Box 2:

Estimates suggest that in comparative contexts, as much as 30% of agri-finance may be delivered through the value chain, and 45% through cooperatives and other rural institutions (IFC 2018)

Box 3:

National policy frameworks recognise the need to strengthen sectoral linkages between primary agriculture and industry, Production gains that result from agricultural modernisation require absorptive capacity from the downstream value chain so that it leads to sustainable farm-level investment, livelihood gain and economic growth.

Use Cases: Within the context of smallholder production systems, there are five main purposes, or 'use cases', for which agricultural credit is typically provided. Each of these use cases can contribute to solving the deep-rooted challenges faced by Ethiopian agriculture. As agrifinancing ecosystems mature, each use case tends to be supported by specialised agrifinance loan products.

Table 1: Agri-Finance Use Cases and their Impacts

| Use Case | Description | Impact | Specialised Products | |
|---------------|---|--|---|--|
| Inputs | Funding the annual material costs of production — seed, fertiliser, plant protection products, etc. | Increased inputs use can boost agricultural productivity and close Ethiopia's yield gap. Ethiopian wheat yields of 2.5 MT/ha stand at only 30% of their 8.4 MT/ha potential, and maize yields stand at only 22% of their potential ²¹ . Higher yields positively impact farmer income and livelihoods, food security, import substitution, value addition and export. | Value chain finance (VCF) involves structuring the loan around the farmer's value chain relationship, often linked to a contract farming scheme. Cashflow-based lending (CBL) is a data-driven approach which models the farmers year-round cash flows and structures credit around them. Crop receipt finance involves the farmer collateralising the loan with the crops under production as reflected on a 'crop receipt'. | |
| Irrigation | Funding for the costs of acquisition, operation and maintenance of irrigation systems, which may include various kinds of pump, or alternative systems such as drip. | Increased use of irrigation can build Ethiopia's climate resilience while also boosting productivity through consistent water supply enabling year-round production. Over 50% of Ethiopia is drought-prone ²² , yet only 0.47% of total agricultural land is currently irrigated ²³ . | Small asset finance in which loans are paid back from the increased cashflows generated by irrigation/equipment usage, with the equipment itself serving as collateral. Pay-as-you-go financing, involves farmers paying for the asset as and when they accrue cash. The asset may be remotely switched off or locked if minimum payments are not met. In some schemes, payment of a sufficient sum over time results in the transfer of asset ownership to the farmer. Lease-to-own finance is similar to pay-as-you-go, but usually has a pre-specified lease schedule. | |
| Mechanisation | Funding for the acquisition of equipment, or payment for the use of mechanisation services, in the course of primary crop production (pre- and post- harvest) and livestock raising. | Access to mechanisation assets and services can drive the expansion of Ethiopia's area under cultivation from its current level of 14.5% of the total ²⁴ . Mechanisation can also contribute to reduced post-harvest loss (PHL), which range between 20-30% for grains and 30-50% for horticulture ²⁵ . | | |

²¹ Global Yield Gap Atlas

²² Skoufias et al 2021, "Quantifying Vulnerability to Poverty in the Drought-Prone Lowlands of Ethiopia", World Bank Policy Research Working Paper 9534, drawing on Ethiopian Development Research Institute data

²³ World Bank Development Indicators 2020

²⁴ World Bank Development Indicators 2022

²⁵ Ministry of Agriculture, Postharvest Management Strategy of Ethiopia, 2024

| Use Case | Description | Impact | Specialised Products |
|------------------|---|--|---|
| Outputs | Funding to provide liquidity which enables producers and producer organisations to incur the carry costs (storage, | Output finance empowers and remunerates the farmer to realise higher prices and income ²⁷ , drives aggregation efficiency by enabling the supply of raw materials faster, at higher | Collateralised commodity finance (CCF) ²⁸ involves the farmer pledging goods deposited in a licensed warehouse as collateral against a loan. |
| | finance) that enable deferred or forward sale, to fund value addition and other services ²⁶ . | scale and at lower cost to agro-industries and export markets, in turn driving competitiveness, and supports increased use of storage which smooths the flow of goods to market, | Supply chain finance (SCF) solutions create liquidity for the suppliers of large buyers whose invoices may be discounted to access early payment. |
| | | reducing price volatility and PHL, while improving the quality and safety of the raw materials supplied. | Structured trade and commodity finance (STCF) ²⁹ is a form of self-liquidating trade finance in which the sale of the financed asset results in the repayment of the loan. |
| Livestock | Funding the annual material costs of livestock production including animal feed and health products, as well as the costs | Increased access to finance enables pastoralists to boost livestock productivity, noting that Ethiopian egg. milk and meat yields stand at 60-70% of the African average and 50% of the global average (15% of the | Value chain finance (VCF) in the case of livestock involves structuring the loan around the farmer's value chain relationship with, e.g. a dairy or slaughterhouse. |
| | of replenishing animal stock. | global average for milk) ³⁰ . | Small asset finance in which the animal serves as collateral, and the credit amount and repayments are structured according to the cashflows |
| In addition navn | nents savings and | linsurance solutions form | an important part of the agri- |

In addition, payments, savings and insurance solutions form an important part of the agrifinance product mix. FI-delivered payment solutions tend to be more efficient than cash-based transactions. They enable producers to convert farm profits much faster and more reliably into livelihood gain and on-farm investment. Savings and insurance solutions strengthen the resilience of farming to the volatilities and shocks to which producers are exposed. By mitigating key credit risks that can impair loan performance, savings and insurance products help to improve the bankability of agricultural producers.

²⁶ In the context of long, informal value chains, output finance typically flows to value chain intermediaries or offtakers enabling them to fund the aggregation of outputs from primary producers.

²⁷ IFC-supported warehouse receipt system (WRS) pilots in 2020/21 demonstrated that farmers can receive over 20% higher income from use of storage, net of the costs of storage and finance.

²⁸ Also known as warehouse receipt finance (WRF) or inventory finance

²⁹ Also known as trade finance, commodity finance and structured commodity finance

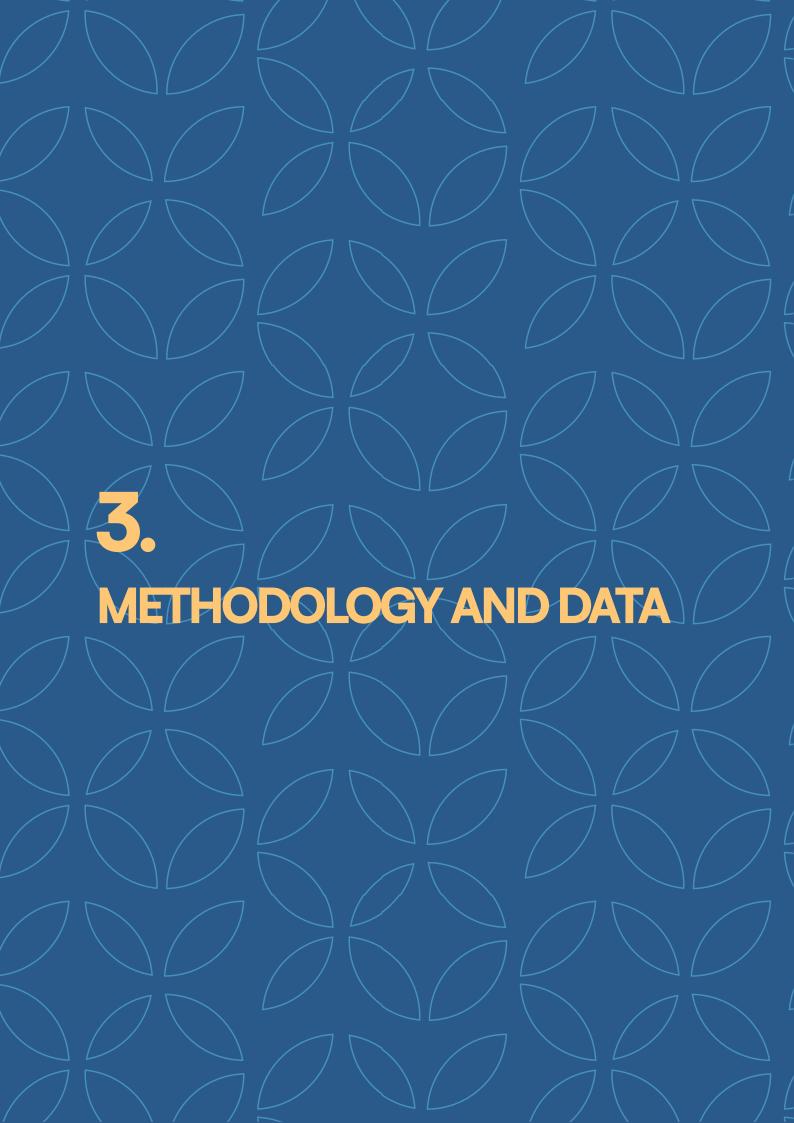
³⁰ FAOSTAT, with milk yield sourced from Temesgen et al (2023), 'Exploring policy options to transform traditional dairy system in Ethiopia, Heliyon 9(11) based on analysis of FAOSTAT data

Agri-finance in the context of smallholder production systems addresses the needs of financially excluded populations in rural communities. In particular, these include micro-, small-and medium-sized enterprises (MSMEs), women and youth. Therefore, there is a close relationship between agri-finance, which is a specialised form of finance that results in the funding of agricultural use cases, and more general forms of rural finance. Agri-finance may therefore be considered a specialised subset of rural finance, specifically targeted at on-farm activities, whereas rural finance is much broader and may support the non-farm and off-farm activities of a rural household.

Over time, new categories of finance have emerged that closely intersect with agri-finance. These include:

- Climate finance, especially as it applies to the adoption of 'climate smart agriculture' (CSA) via new farm-level techniques and technologies that promote climate adaptation and resilience:
- **Digital financial services (DFS)**, which can synergise with the increasing digitalisation of agriculture itself, under the banner of 'precision agriculture', a term that refers to the growing utilisation of on-farm monitoring technologies backed by data analytics to improve the efficiency of agricultural production; and
- Interest free banking (IFB), which addresses the requirements of Islamic borrowers, and is an NFIS priority, and offers shariah-compliant product equivalents to conventional interest-bearing loan products that can fulfil each of the major agri-finance use cases.





3. METHODOLOGY AND DATA

3.1 METHODOLOGY

NAFIR has been developed using a mixed methods approach.

Quantitative analysis has been performed on demand and supply-side data (see 3.2 below). Data has been sourced from official sources and peer-reviewed research. The official data is highly aggregated. Fls report data to the NBE on total agri-finance loan disbursement per financial year as well as loans outstanding at the end of the financial year.

However, the demand-supply gap for agri-finance in Ethiopia is not merely quantitative, but also cyclical, qualitative and distributional. Agri-finance must be tailored for different types of agricultural borrower³¹ across Ethiopia's diverse agro-ecological zones and agricultural value chains to fulfil key agricultural 'use cases' at the right time of the season: crop inputs, irrigation, mechanisation, livestock, outputs and insurance. Fulfilment of these use cases drives productivity gain, farm size expansion, post-harvest loss (PHL) reduction, diversification, livelihood strengthening, gender and youth inclusion, climate adaptation and resilience. Agri-finance is also necessary to enable efficient aggregation and supply of agricultural raw materials to downstream agro-industries, and to mitigate the high structural risks faced by the sector.

Box 4:

Agri-Finance Demand/Supply Gaps

Quantitative Gaps: is the supply of agri-finance sufficient to meet demand? **Cyclical Gaps:** to what extent is agri-finance available **when** it is needed?

Distributional Gaps: does the agri-finance <u>reach</u> those who need it — borrower types, use cases, value

chains, regions and gender?

Qualitative Gaps: to what extent does the supply of agri-finance fulfil the needs of the beneficiary?

Therefore, to supplement the official data with a deeper understanding of the cyclical, distributional and qualitative performance of agri-finance in Ethiopia, and to systematically engage stakeholders on their perspectives and experiences, two rounds of stakeholder consultation took place during the preparation of NAFIR, as well as a series of validation workshops to review the draft output:

- **Direct stakeholder engagement** a round of meetings and workshops held in November 2024, and some additional meetings thereafter (see Annex II).
- Stakeholder survey survey instruments were distributed in January 2025 by NBE to licensed financial institutions and development partners; and through field survey interviews conducted across Ethiopia with a sample of agricultural producer cooperatives (APCs), rural savings and credit cooperatives (RuSACCOs) and agro-processors (see Annex III).
- Validation workshops were held in April 2025 with financial institutions, public institutions and development partners, as well as bilateral meetings with key stakeholders (see Annex IV).

To shape understanding of the policy environment, the agriculture and socio-economic context, and the agri-finance stocktaking (see Chapters Four and Five below), a literature review has been

³¹ Subsistence farmers; smallholder farmers; pastoralists; semi-commercial and commercial farmers.

performed, incorporating policies, legislation, strategies, roadmaps, action plans, official reports, and peer-reviewed research, which has also been triangulated with outputs from the stakeholder engagement and survey. This review, coupled with stakeholder engagement, has generated a gap analysis (see Chapter Six) from which the NAFIR recommendations have emerged.

Finally, to provide inspiration for NAFIR, and in particular the transformative 'game changing' solutions required to address unresolved challenges (see Chapter Seven), a literature review of African and global agri-finance experience has been performed.

3.2 DATA AND ANALYSIS

A demand/supply analysis has been performed in the development of NAFIR to assess the demand and the supply of agri-finance in Ethiopia:

- <u>Demand-side analysis</u>: quantification of which stakeholders need how much agri-finance for which kind of use cases and value chains.
- <u>Supply-side analysis</u>: quantification of which financial institutions are providing how much agri-finance for which kind of use cases and value chains.

Damand-for-Finance

Four demand-for-finance benchmarks have been identified:

Table 2: Annual Demand for Finance Baseline Benchmarks 2023/24

| Method | TYDP Policy Target | By GDP Allocation | By Current Farmer Average Loan Size | Potential Opportunity based on Use Case Quantification by Value Chain |
|--|-----------------------|----------------------|---|--|
| Total Potential Demand (ETB billions) | 126 | 154 | 184 | 2,582 |
| Demand fulfilment (%) — Including CBE Fertiliser Finance | 99% | 81% | 68% | 5% |
| Demand fulfilment (%) — Excluding CBE Fertiliser Finance | 41% | 34% | 28% | 2% |

TYDP: The TYDP policy target for agri-finance in 2029/2030 is ETB 881 billion, rising from ETB 34.2 billion in 2019/20 at a compound annual growth rate (CAGR) of 38.5%. The 2023/24 benchmark has been calculated using this CAGR, providing a 2023/24 policy target of ETB 126 billion, as against actual supply of ETB 52 billion (ETB 125 billion with CBE fertiliser finance). This equates to 99% of the target including CBE fertiliser finance, and 41% excluding CBE fertiliser finance.

GDP Allocation: Per latest NBE statistics, agriculture contributes 32% to Ethiopian GDP. The

equivalent proportion of total bank, MFI and RuSACCO lending for financial year 2023/2024 is here taken, providing a total of ETB 154 billion. Current agri-finance supply stands at 81% of the target including CBE fertiliser finance, and 34% excluding CBE fertiliser finance.

Farmer Average Loan Size: Ethiopian Economics Association Policy Working Paper 08/22 calculates agri-finance demand for 2021/22 based on the number of smallholder farmers multiplied by an average loan size per farmer (ETB 10,085) that has been derived from their own survey data. The 2021/2022 indicator — ETB 122 billion - has been increased by the national inflation rate to provide a 2023/24 value of ETB 184 billion. Current agri-finance supply stands at 68% of the target including CBE fertiliser finance, and 28% excluding CBE fertiliser finance.

Total Potential Demand Opportunity based on Use Case Quantification by Value Chain: In the development of NAFIR, a granular quantification of potential annual demand-for-finance has been calculated by value chain according to each of the five main 'use cases' identified above. This represents a scenario of fully modernised agriculture and comprises the key agri-finance use cases across Ethiopia's agricultural value chains in which producers access credit for crop and livestock inputs, irrigation, equipment and mechanisation services, and use output finance to support enhanced marketing. Current agri-finance supply stands at 5% of the total potential demand including CBE fertiliser finance, and 2% excluding CBE fertiliser finance.

This latter method is likely to represent the truest measure of agri-finance total potential demand by Ethiopian farmers based on the actual costs for which they need finance.

For crops, the average hectares planted per crop, sourced from FAOSTAT, has been multipled by the cost per hectare for each of the four crop-based agri-finance use cases — crop inputs, irrigation, mechanisation and outputs (amortised where applicable). Cost assumptions have been sourced from published peer-reviewed journals³². For livestock, the number of animals per category — cattle, sheep, goats, and poultry — as well as hives for apiculture has been multiplied by the annual material costs of production (mainly feed and animal health) per animal/hive, and the amortised animal stock replacement cost has been multiplied by animal/hive numbers according to estimated average lifetime.

Table 3: Potential Demand-for-Finance Opportunity Use Case Quantification Methodology

| Use Case | Methodology |
|---------------|---|
| Crop Inputs | Annual costs of seed, fertiliser and protection products per value chain, has been multiplied by hectares planted per value chain based on 2020-2023 average area under production data. |
| Irrigation | Annual amortized cost of the irrigation kit and, where applicable, fuel, has been averaged across three technologies — solar pump, diesel pump and rope and washer pump, assuming one pump serves two hectares. |
| Mechanisation | Cost of tractor hire per hectare has been used, assuming two uses per year: one for land preparation pre-harvest, and one for harvest support and post-harvest transportation. |

³² Costs of production were obtained for 25 crop value chains, representing 86% of total area (hectares) under production per FAOSTAT, and then scaled up pro rata against average cost of production across the 25 value chains to account for the residual 14%.

| Use Case | Methodology |
|-----------------------|---|
| Outputs ³³ | 2020-2023 average production data (metric tonnes) has been multiplied by current average price data. |
| Animals (Annual) | Annual costs of animals per animal type for feed and animal health has been used, multiplied by headcount. |
| Animals (Stock) | Annual amortised cost of animal purchase has been used, based on animal lifespan statistics, multiplied by headcount. |

All outputs have been standardised at 2024 values, adjusting for inflation using the historical inflation rate. It is assumed, for purposes of this demand quantification, that credit would cover 70% of the total cost under each use case (e.g. if equipment cost is ETB 2,000/hectare, then credit would cover 70% of this amount, or ETB 1,400/hectare).

To quantify the 2030 target, for crops, the long-term average trend in area under production growth has been projected forward at a growth rate of 5.7% per annum, reflecting the 10-year average according to World Bank Development Indicators. For livestock, historical animal headcount growth rates per animal type have been sourced from peer-reviewed research and projected forward. Prices have been held constant at 2023/24 levels.

Supply-of Finance

Agri-finance statistics in the country are reported by different categories of financial institution to the NBE and the Ethiopian Cooperatives Commission (ECC).

Table 4: Supply of Finance — Official Data

| FI Category | Reporting | Source | Agri-Finance definition |
|-------------|--|--------|---|
| Banks | Annual agri-finance loan disbursement.Agri-finance loans outstanding at end of year | NBE | Unclear |
| MFIs | Agri-finance loans outstanding at end of year | NBE | NBE Directive No MFI/24/2013 which defines agriculture as 'business that includes cultivating soil, producing crops, raising livestock, beekeeping, fishery and other related activities' |

³³ At present time, producers receive minimal funds for aggregation finance. It is assumed that in a fully modernised agricultural system producers would store their produce and market it at a favourable time, likely using a warehouse receipt system or an equivalent collateral custody arrangement to support aggregation financing, with loans secured against the warehoused stock. This financing may be intermediated through cooperatives or other forms of aggregator.

| FI Category | Reporting | Source | Agri-Finance definition |
|--|---|--------|----------------------------|
| Insurance | Sum insured (ETB) Premiums collected (ETB) Claims (ETB) Data has been provided separately for crop, livestock and — in one case — floriculture insurance, disaggregated by insurance provider | NBE | Unclear |
| Capital Goods Financing Companies | Outstanding balance (ETB) | NBE | Unclear |
| RuSACCOs | Savings mobilisation (ETB) Loan disbursement amount (ETB) Repayment rate (%) Number of borrowers (primary cooperatives only) Data has been provided at aggregate level per year, separately for primary cooperatives and unions | ECC | Unclear |

Two definitional considerations merit attention:

- Fertiliser finance: Per the reported data, CBE is the largest supplier of agri-credit in Ethiopia, providing in 2023/24 75% of total reported agri-finance, 17.9% of total bank credit across all sectors, and 16.6% of total credit across all sectors by all FI categories. Per CBE's own estimates, approximately 90% of its agri-credit comprises the large-scale fertiliser financing that the bank offers to support the availability and distribution of fertiliser in the country. In this arrangement, the end user of the fertiliser the farmer must pay cash for the fertiliser, not take it on credit³⁴. Therefore, while recognising the critical importance of CBE fertiliser financing, statistics in the report are shown both including and excluding this amount (as stated in the text) according to context.
- **Grant finance:** Government of Ethiopia (GoE) and development partners distribute significant agricultural goods and services to producers without charge. While recognising there are different views, grant financing or alternatively, free credit is widely classified as a type of finance. During consultations, several stakeholders have observed that while there may be merit to the practice of providing goods and services without charge to smallholder producers, based on considerations of equity and affordability, especially when linked to national social protection frameworks it is important that these transfers are recorded within the scope of agri-finance reporting for two reasons. Firstly, it will enable grant funding to be leveraged in

³⁴ It is understood that historically, the regional governments have extended credit to producers for funding the purchase of fertiliser, but that most of those schemes no longer function (see Abahey et al (2015), 'Fertilizer Supply Chain in Ethiopia: Structure, Performance and Policy Analysis', Afrika Focus 28 (1).

ways that can be catalytic for increased private sector credit flows. Secondly, the effectiveness of such funding — both on its own terms, and relative to other funding approaches — will benefit from measurement and analysis. While grant funding has not been captured in the NAFIR agrifinance data, the roadmap presented below proposes a pathway towards the future recordal and leveraging of grant financing for catalysing increased private sector credit flows.

Data has also been obtained from stakeholder surveys. Surveys have been distributed by NBE to all licensed Fls — banks, MFls, capital goods financing firms, and insurance providers — and through field survey to a cross-representative sample of APCs, RuSACCOs and agro-processors that covers the diverse regions, agro-ecological zones and value chains of the country. Each region was allocated a specific number of survey targets based on the prominence and number of entities in that area, allowing for focused data collection. The surveys were conducted through a combination of face-to-face interviews and telephone surveys. This dual approach allowed for flexibility in reaching participants, particularly in remote areas where face-to-face interaction was not always viable.

3.3 LIMITATIONS

The official data is highly aggregated, comprising reporting by Fls on total agri-finance loan disbursement per annum and loans outstanding at year end. However, the potential agri-finance demand/supply gaps may not only be quantitative but also cyclical, distributional and qualitative. Therefore, the stakeholder engagement and survey sought to understand — from both the demand-for-finance and the supply-of-finance perspectives — these other dimensions of demand/supply performance.

For the FI sector, not all FIs have responded to the surveys. Completed surveys responses have included qualitative and quantitative data. In some responses, there have been gaps, imprecisions or misunderstandings which NBE has followed up to resolve to the extent that has been possible within the study timeframe. However, a significant number of gaps remain due to existing FI systems not systematically categorising agri-loans according to key parameters such as agri-borrower type, use case, value chain, region and gender. Estimates have been sought where data has not been available. The NAFIR framework presented below proposes a mechanism that will enable this data to be more effectively defined, monitored and reported, and would be strengthened by application of consistent definitions and tagging of loans by identified sub-segments.

For the APC, RuSACCO and agro-processor sectors, the survey execution faced significant challenges that affected participation and data integrity. A critical limitation was the variability in respondents' willingness to engage, resulting in uneven response rates across regions. As with the Fls, significant gaps emerged from respondents' under-developed data management systems which hampered the accuracy and completeness of the information collected. The reluctance of some representatives to participate or share data further complicated the survey efforts, resulting in a lower response rate and potentially skewed data. Furthermore, reliance on face-to-face interviews introduced logistical challenges, especially due to travel restrictions and the limited availability of respondents. Variability in literacy levels among participants affected their comprehension of survey questions, potentially leading to inaccuracies in the information provided. These factors collectively highlighted the complexities of data collection in diverse regions, underscoring the need for adaptable strategies to accommodate data- and information-gathering in varied contexts.

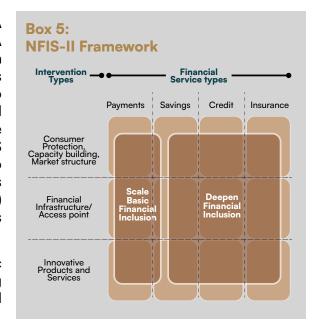




4. POLICY CONTEXT

NAFIR is a joint project of NBE and the MoA under NFIS, the NBE Strategy 2023-26 and MoA TYAPP to enable the scale-up of agri-finance in Ethiopia. NAFIR intersects with NFIS primarily as a means to deepen financial inclusion, while also contributing to the scaling of financial inclusion and the advancement of financial education. It drives the financial deepening agenda primarily through NFIS Program B2 ('expanding access to credit'), while also contributing to agri-sectoral efforts under Programs B3 ('developing a strong micro-insurance system') and B4 ('drive Sharia-compliant financial products and services').

NAFIR contributes to NBE Strategy Strategic Objective 3: Ensure Financial Inclusion, Deepening and Digitisation, including the implementation and monitoring of NFIS (3.1), enhancing financial

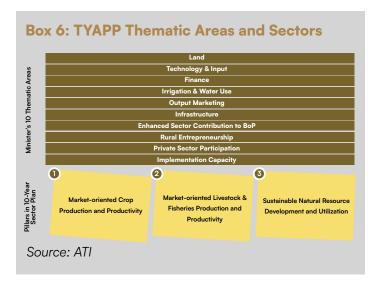


education and consumer protection (3.2), ensuring widespread adoption and usage of DFS (3.4), and improving credit reference and rating infrastructure (3.5). It also contributes to NBE Strategy Strategic Objective 4: Ensure Excellence in People, Processes and Technology, by re-establishing the EIFS as a Center of Excellence for the financial sector (4.4).

NAFIR contributes to the Ministry of Agriculture (MoA)'s Ten-Year Agricultural Sector Perspective Plan 2021-30 (TYAPP). TYAPP links closely with HGER and TYDP, while learning lessons from earlier development plans, including the first and second Growth and Transformation Plans.

Key lessons include: the need to shift from supply- to demand-based targeting to drive import substitution and export growth; a shift to high value products and market-oriented agriculture; and expansion of irrigation. In the TYAPP, agri-finance is one of ten thematic areas.

Priority actions for agri-finance in TYAPP include institutional strengthening, loan portfolio development, increased use of movable asset collateral, alternative sources of finance, and enhancing agricultural insurance.



NAFIR also contributes to other NBE strategies. These include the National Financial Education Strategy 2021-25 (NFES, Strategy 2: Design and Implement Impactful National Financial Education Programs, Modules and Channels) and the National Digital Payments Strategy 2021-24

(NDPS, Action 13: Digitise Payments in Agriculture).

More broadly, NAFIR supports overarching national policy objectives. These include the Homegrown Economic Reform Agenda 2.0 (HGER) and the Ten-Year Development Plan 2021-2030 (TYDP).

The main aim and focus of the HGER is the "enhancement of productivity and competitiveness of the overall economy, and a gradual transition from public to private sector-led growth" ³⁵.

| Box 7: | | |
|---------------------|----------------------|--------|
| Aims of HGER | Agri-Sectoral | Reform |

| Expand small-to large-scale irrigation development; Improve supply of inputs and finance; Enhance livestock productivity; Reduce PHL; Protect the environment and natural resources Improve agri-production methods Improve the role and participation of private sector Promote research-based food security systems Promote import substituting agri-crop production. | Use Case Alignment | Cross-Cutting Measures |
|---|--|---|
| | to large-scale irrigation development; Improve supply of inputs and finance; Enhance livestock productivity; | environment and natural resources Improve agri-production methods Improve the role and participation of private sector Promote research-based food security systems Promote import substituting agri- |

In this context, HGER agricultural sector reforms align closely with the agri-finance use cases identified above, as well as HGER cross-cutting themes such as increased private sector participation, research, and import substitution:

Source: TYDP

The TYDP "has emphasised the proper identification of the linkages between various sectors of the economy [and] recognizes the high interdependence and interconnectedness of the various productive sectors, particularly, modern agriculture, manufacturing and mining through input-output linkages.".

In this context, the TYDP identifies key focus areas for agricultural development, which also align with the agri-finance use cases identified above, including irrigation, mechanisation, and expansion of area under cultivation. These measures share a set of common objectives, which are to improve farmer incomes and livelihoods, strengthen food security, enhance raw material supply to agroindustries, grow exports, create jobs, and strengthen climate resilience. Gender equality is an important cross-cutting priority.

In this context, the TYDP sets a policy target for 2029/30 of loans to agriculture reaching **ETB** 880.8 billion. This reflects growth from the baseline ETB 34.2 billion in 2019/20. Based on the CAGR this represents, it suggests a 2023/24 target of **ETB** 126 billion, as against actual supply of **ETB** 52.0 billion per the latest NBE statistics for 2023/24³⁶.

³⁵ TYDP (page 9).

³⁶ This excludes the CBE fertiliser financing, which has been traditionally counted as a component of agri-finance but is in fact a form of intermediated finance which does not result in financing to the farmer who must buy fertiliser for cash.

Average 2019/20 2020/21 - 2024/25 2025/26 — 2029/30 2020/21 — 2020/30 2029/30 **Total Loan** 290.8 591.0 2214.2 1328.8 3262.1 553.86 Agriculture 34.2 122.0 318.2 8.088 Industry 155.1 289.3 857.9 547.8 1295.1 27.2 Manufacturing 137.3 683.36 385.5 1131.2 For service 101.5 179.7 802.26 462.8 1086.2 Loan supply by institutional beneficiary Total Loan 290.8 3262.1 591.02 2214.2 1402.61 Private 96.1 115.22 242.92 179.07 326.2 194.7 475.76 1971.3 1223.53 2935.9 Government

Table 5: Allocation of Domestic Loans by Sector (ETB, billions)

Source: TYDP

Strengthening agri-finance is identified as one of nine 'Complementary Investment Projects' under Ethiopia's National Agricultural Investment Plan (NAIP) 2021-30. Drawing on HGER and TYDP, summarises national agri-finance priorities as follows:

"Improving access to agricultural finance includes both the availability of agriculture-suitable products in the formal banking sector as well as formalizing and strengthening the rural savings and credit cooperatives sector.

Initial efforts will include formalizing the cooperatives sector, developing liquidity linkages with commercial banks and microfinance institutions, and building a modern management capability and financial control system to appropriately serve the rural population.

Further efforts to identify and create agricultural financial institutions including agricultural and cooperative banks should be explored.

Tailored efforts to promote agricultural finance products also include enhancing microlending and forward contracts through the building of institutional capacity of market actors. Collateralized commodity financing system (Warehouse Receipts System) is some of the areas to be promoted." (p14)

Measures proposed by the NAIP including policy review, strengthening rural financial institutions, increasing use of movable property collateral, and — over the medium-to-long term — establishing an 'Agricultural Bank of Ethiopia'. More broadly, echoing HGER, the NAIP emphasises the need for increased private sector participation, in part to bridge the financing gap in agriculture that was noted above. Another way to bridge the agri-financing gap is to improve the linkages between cooperatives and rural financial institutions on the one hand and the commercial banking sector on the other.

By fulfilling HGER, TYDP, NAIP and TYAPP objectives, NAFIR maps to the United Nations Sustainable Development Goals (SDGs), and the African Union (AU) Agenda 2063.

Table 6: Mapping Policy Objectives to the SDGs

| Key SDG Contributions: | 2 zero Hunger | 9 MOUSTRY, PRODVATION AND INFRASTRUCTURE |
|---------------------------------------|--|---|
| Additional SDG Contributions: | 1 NO SEQUELITY THE PROPERTY THE PROPERTY | 8 DECENT WORK AND ECONOMIC GROWTH 13 CLIMATE ACTION |
| Key Agenda 2063 Contributions | Goal 4: Transformed economies Goal 5: Modern Agriculture for Inc | creased Productivity and Production |
| Additional Agenda 2063 Conttributions | Goal 7: Environmentally-sustainab | quality of life and well-being for all citizens. le climate-resilient economies & communities spheres of life polity for financing her development goals |

In addition, NAFIR contributes to a wide range of additional agricultural- and agri-finance-related strategies, roadmaps and action plans that have been developed in recent years. These are documented below in Table 7 under Chapter Five.



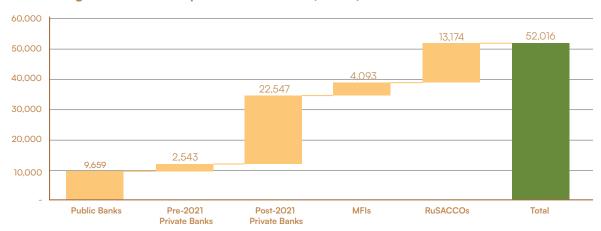


5. AGRI-FINANCE STOCK-TAKING

5.1 AGRI-FINANCE PERFORMANCE REVIEW

Ethiopia's agri-finance supply originates from five sources³⁷: public banks, private banks, MFIs, RuSACCOs and through grants provided by government and development partners³⁸. For purposes of highlighting salient trends in the following analysis, the private banks have been split between the historic banks that existed pre-2021, and the new banks — some of them converted MFIs — that were licensed by NBE from 2021.

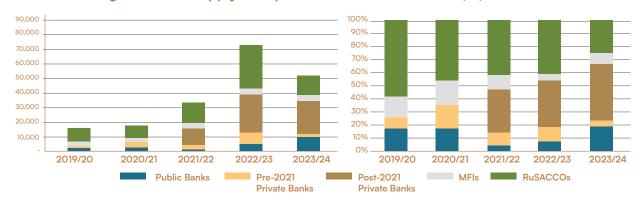
Charts 7: Agri-Finance Composition 2023/24 (ETB b)



Source: NBE

Note: In this and the succeeding charts, CBE fertiliser finance has been excluded based on estimate provided by CBE of the proportion of fertiliser financing of total CBE credit supply to agriculture. RuSACCO lending is not reported separately for agri- and non-agri lending. As the RuSACCO sector offers finance to rural borrowers, it has been counted towards agrifinance in totality although an indeterminate portion is likely to finance non- or off-farm activities.

Charts 8-9: Agri-Finance Supply Composition 2019/20-2023/24 (%)



Source: NBE

Note: excludes CBE fertiliser finance; MFI loan outstanding has been converted for purposes of comparability into loan disbursement using a ratio derived from the four converted MFI banks.

Overall supply in 2023/24 stood at ETB 52 billion, representing a reduction on previous years

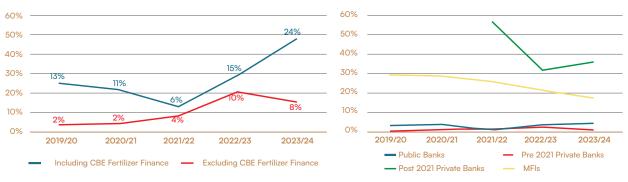
³⁷ There may be additional provision of equity funding into agriculture from non-bank private sector investors but this data is not available.

³⁸ Data has not been captured for grant finance.

levels in the context of overall credit contraction, but standing higher than previous years. The largest contributions to agri-finance came from the post-2021 private banks (43%), followed by RuSACCOs (25%), public banks (19%), MFIs (8%) and pre-2021 private banks (5%). Since they converted to become banks, the converted MFIs have accounted for a large and increasing share of agri-finance in the country, rising from 33% in 2021/22 to 43% in 2023/24. Conversely, the shares of RuSACCOs and MFIs have been falling steadily — RuSACCOs from 58% in 2019/20 to 25% in 2023/24 and MFIs from 18% in 2019/20 to 8% in 2020/23. The public bank contribution, excluding fertiliser finance, has held relatively steady at current levels while the pre-2021 private banks saw some level of volatility in their contribution — from 6% in 2019/20, up to 18% in 2020/21, and then gradually falling back to its current level of just 5%.

Charts 10-11: Proportion of Overall Bank Credit Supplied to Agriculture 2019/20-2023/24 (%)

Proportion of FI Credit Supplied to Agriculture 2019/20-2023/24 (%)



Source: NBE

Note: excludes CBE fertiliser finance; RuSACCO lending is not reported separately for agri- and non-agri lending. As above, the RuSACCO sector offers finance to rural borrowers, it has been counted towards agri-finance in totality.

The proportion of total credit supplied to agriculture varies significantly in amount and trend across different FI types. The overall proportion of bank credit reaching agriculture, as reflected in official NBE reporting data, stood at 24% in 2023/24 — an impressive performance which shows a steeply upward growth curve. However, these numbers mask a number of underlying trends that become visible when the data is broken out by FI type. Firstly, most of the growth has been driven by public sector financing, the large majority of which comprised the CBE fertiliser finance. When the CBE fertiliser finance is excluded, the proportion of bank credit that reaches the farmer stood at approximately 8% in 2023/24.

Overall, this represents a rising trend from 2019/20. Despite this, when the data is broken out by FI type, it shows that, aside from the public banks, all sectors are showing a decline in the proportion of credit that is supplied to agriculture. There has been a long-term decline in the proportion of credit supply to agriculture from the MFI sector, and a sharp fall from the new banks and converted MFIs. For the pre-2021 private banks, the proportion of credit supplied to agriculture remains range-bound at minimal levels (1-3% of total lending) with a fall during 2023/24.

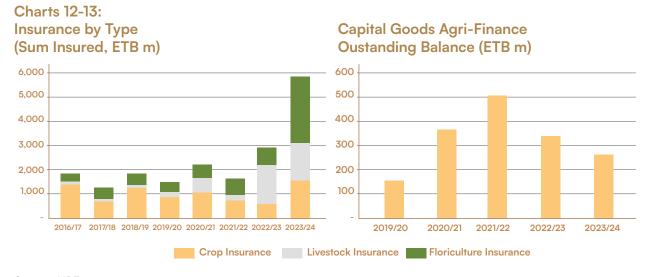
| 2023-24 Credit Correction | Total Banks | Public Banks | Pre-2021 Private Banks | Post-2021 Private Banks | MFIs* | RuSACCOs |
|------------------------------|-------------|--------------|---------------------------|----------------------------|-------|----------|
| ALL | -14% | +59% | -43% | -24% | +26% | |
| AGRI-FIN | +41% | +97% | -69% | -13% | +5% | -55% |

Table 7: Agri-Finance Performance during the 2023-24 Credit Contraction

During 2023/24, there was a 14% credit contraction in overall bank finance. Despite this, on average, agri-finance significantly expanded. However, this expansion was mainly driven by the public banks which were unaffected by the credit contraction.

The private banks saw agri-finance fall. In the case of the converted MFIs, this fall was proportional to the overall credit contraction. However for the pre-2021 private banks, lending to agriculture fell more than proportionally compared with total lending. RuSACCOs also experienced a significant contraction, with lending falling by 55%. MFI lending increased during the period, but agri-loans grew significantly less rapidly than overall lending.

Insurance has shown significant overall growth since 2021/22, with particular growth in livestock and floriculture insurance from four providers (Africa, EIC, Nyala, Oromia). However, despite a significant increase in crop insurance from 2022/23 to 2023/24, the total value stands at a level not much higher than in 2016/17.



Source: NBE

An extensive range of initiatives to promote agro-insurance have been established through partnerships between government and development partners. The United Nations Development Programme (UNDP), with the MoA, launched the Insurance and Risk Finance Facility (IRFF) in 2024, while ATI has partnered with World Food Programme (WFP), the African 'insurtech' firm, Pula, and the German development agency, KfW, to promote disaster-risk insurance in key drought-affected areas linked to the Africa Risk Capacity (ARC) framework.

Financial Sector Deepening (FSD) Ethiopia has provided support for agro-insurance through the

launch of an insurtech accelerator platform, BimaLab. Programmatic frameworks have focused on strengthening insurance, including the Japanese International Cooperation Agency (JICA)-sponsored Index-based Crop Insurance Promotion Project for Rural Resilience Enhancement (ICIP), which held four stakeholder Dialogue Platform Meetings between May 2022 and January 2024, and the IFAD-led Platform for Agricultural Risk Management (PARM).

Capital goods financing, based on legislation introduced in 1998 and amended in 2013, has also been growing but suffered reverses between 2021/22 and 2023/24. Six capital goods financing businesses have been licensed by the NBE, of which one has since exited. The sector provides leasing solutions that fund the procurement of equipment, including agricultural assets such as tractors, combines, irrigation systems and other farm equipment.

5.2 AGRI-FINANCE LANDSCAPE ANALYSIS

Looking at the agri-finance landscape more broadly, significant investments have been made in recent years by GoE, private sector and development partners (see Table 8 below).

Regulations and cross-cutting financial and digital infrastructure have been introduced. These include the CRB, the national identity (National ID) scheme, and frameworks for capital goods financing, contract farming and integrated agro-industrial parks (IAIPs).

Registries have been developed by NBE, the MoA and MoTRI so that agricultural assets can serve as loan collateral to fulfil key agri-finance use cases. These include:

- Secondary level land use certificates (SLLCs) under the National Rural Land Administration Information System (NRLAIS) operated by the MoA;
- Warehouse receipts (WR) under the National Warehouse Receipt System (NWRS), operated by MoTRI, and under the Ethiopian Commodity Exchange (ECX);
- Livestock in the Ethiopian Livestock Identification and Traceability System (EthLITS), operated by MoA, which is in the process of being enhanced; and
- Movable assets under the Movable Property Security Registry (MPSR) operated by NBE.

These registries enable agricultural assets to be uniquely identified, registered and pledged as collateral security against credit. This new financial infrastructure has been underpinned by legislation, strategies and programmes, and backed by capacity-building efforts focused on both the demand- and supply sides, with support from development partners such as the International Finance Corporation (IFC).

Table 8: Agri-Finance Landscape by Use Case

| | Inputs | Irrigation | Mechanisation | Outputs | Livestock |
|----------------------------------|---|--|---|---|---|
| Registries | NRLAIS | NRLAIS | NRLAIS | WRS (NWRS/ECX) | E†LITS |
| | MPSR | MPSR | MPSR | MPSR | MPSR |
| Laws | Rural Land Administration and Use Proclamation 2024 | Rural Land Administration and Use Proclamation 2024 | Rural Land Administration and Use Proclamation 2024 | WRS Proclamation 2003 / implementing directive 2020 | Live Animals Marketing Proclamation 2013 |
| | | Capital Goods Leasing Business (Amendment) Proclamation 2013 | Capital Goods Leasing Business (Amendment) Proclamation 2013 | Special Economic Zone Proclamation 2024 | |
| | Agricultural Contract Production Proclamation 2023 | Agricultural Contract Production Proclamation 2023 | Agricultural Contract Production Proclamation 2023 | Agricultural Contract Production Proclamation 2023 | Agricultural Contract Production Proclamation 2023 |
| | MPSR Proclamation 2019 / Directive 2020 | MPSR Proclamation 2019 / Directive 2020 | MPSR Proclamation 2019 / Directive 2020 | MPSR Proclamation 2019 / Directive 2020 | MPSR Proclamation 2019 / Directive 2020 |
| Strategies, Roadmaps | Agricultural Extension Strategy 2017 | National Smallholder Irrigation and Drainage Strategy 2016 | Ethiopian National Agricultural Mechanization Strategy 2014 | National Storage Strategy (ATI) 2017 | Livestock Information System Roadma 2021 |
| | Ethiopia Seed Sector Strategy and Investment Plan (AGRA) 2022 | Ethiopia Climate Smart Agriculture Roadmap 2020-30 / Investment Plan / 2024 | Postharvest Management Strategy of Ethiopia 2024 Grain Postharvest Management Strategy 2018 | Ethiopia Industrial Development Strategy 2013-25 / Roadmap 2014 | Livestock Master Plan 2015-20 Livestock and Fisheries Extension Strategy and Roadmap 2023- 33 |
| Initiatives and Programmes | Agricultural Commercialisation Clusters/One Stop Shops (ATI) Input Voucher System (ATI) Ethiopia Soil Information System (EthioSIS) | Participatory Small-Scale Irrigation Development Programme II (IFAD) Ethiopia Soil Information System (EthioSIS) | KfW/DBE Agri Mechanization Project | National Market Information System (NMIS) (ATI) | Livestock & Fisheries Sector Development Project Food Security Improvement Project for Pastoralists (BREFONS, DRIVE) |

Cross-Cutting Enablers MoA TYAPP 2021-2030 / Revised Agriculture and Rural Development Policy 2024

Ethiopian Agricultural Authority

Agro/Livestock Insurance — Insurance and Risk Finance Facility (MoA/UNDP), ARC (ATI/

WFP), PARM (IFAD), ICIP (JICA) Credit Reference Bureau (CRB)

National ID ('Fayda')

Interest Free Banking — banks, RuSACCOs

DFS Strategies (e.g. Digital Ethiopia 2025, Digital Agri Roadmap 2032 (MoA), National Digital Payments Strategy (NBE) 2021-24, ATI Digital Agri..)

DFS Platforms - AgTech (Lersha, Kifiya), Mobile Money (TeleBirr, MPESA), MCF FarmPass Cooperatives — ECC Strategy; Agricultural Cooperative Development Strategy (ATI) 2015 National Financial Education Strategy (NFES)

RuSACCO Capacity Building Project (ATI)

National Programmes (e.g. RUFIP III (IFAD, EIB, EU, AGRA), Integrated Agricultural Development Project (WBG)

Value Chain Strategies (e.g. Coffee 2019-33, Horticulture 2025-2034, Pulses 2016-20, Apiculture 2013)

Value Chain Specific Programmes (e.g. Horticulture - Ethio-SHEP 2, Wheat — CREW)

The value of loans disbursed against agricultural assets pledged in the new registries has grown rapidly and reached significant levels. Total lending against agricultural assets reached ETB 20 billion in 2023/24, equivalent to nearly 40% of the total ETB 52 billion supply of agrifinance during that year (ETB 125 billion including CBE fertiliser finance).

Table 9: Agricultural Registry Utilisation, 2023-24

| | NRLAIS | NWRS | MPSR | EthLITS | TOTAL |
|--|-----------|-----------|------------|---------|---------------|
| Value of Loans taken against Pledges | ETB 1.0 b | ETB 0.7 b | ETB 18.5 b | ETB 0 b | ETB 20.2 b |
| % of Total Agri-Finance (excluding CBE fertiliser finance) | 1.9% | 1.3% | 35.6% | 0% | 38.8% |
| Number of Assets | 1.6m | 157 | 1,563 | 0 | N/a |
| Number of Fls | 17 | 3 | 17 | 0 | 32 |

Source: MoA, MoTRI, NBE, MoA

Note: The assets registered under the MPSR include SLLCs and WRs, therefore the table above is likely to reflect some element of double-counting. However, not all SLLCs and WRs were pledged in the MPSR.

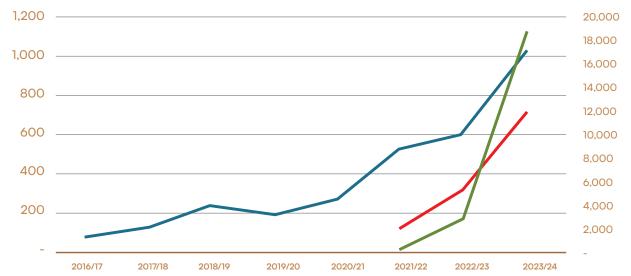


Chart 14: Loans disbursed against Pledged Collateral (ETB millions)

Source: MoA, MoTRI, NBE, MoA

Note: Lending against SLLCs and WRs is per the primary axis, against the MPSR is per the secondary axis

The number of agricultural assets registered in the MPSR has seen particular growth, but these remain a small fraction — less than 1% — of total registered assets. This growth has been assisted by the regulatory requirement for Fls to disburse 5% of loans per annum against movable collateral³⁹. MPSR 2023/24 data shows that total movable asset registrations stood at 221,367 assets⁴⁰. Of these, 1,563 — less than 1% — were agricultural assets. Of these agricultural assets, a majority — 1,311 of the 1,563 — were machinery, followed by WRs (131), consignments of produce (103), and SLLCs (11). Livestock has not yet been registered to date.

The MoA has established a Rural Finance Unit and is working to develop an 'Agri-Stack' under the Digital Agriculture Roadmap 2032. These initiatives will leverage the registries and digitisation initiatives the MoA has established to support the further development of the agrifinance landscape and link the agri-finance scale-up efforts to the real sector enablers, including land and livestock registries, extension services, and input distribution systems.

Significant efforts have been made by the Agricultural Transformation Institute (ATI) to build foundations for access to agri-finance and rural financial inclusion (see Box 8 below).

Box 8: ATI Initiatives

ACCs: clearly defined geographic clusters specialising in priority commodities across the four major agricultural regions of the country. They act as hubs through which regions are supported to maximise production and productivity while integrating commercialisation activities. Currently, there are over **101,000 ACCs** comprising nearly **4.5 million farmers** that cultivate **3.5 million hectares** with **twelve focal crops** (seven grains and oilseeds, five horticulture products).

AOSS: input centres and retail shops that provide access for smallholder farmers to agricultural inputs and advisory services across the four agricultural regions. Over **330 AOSS** have been established with total transaction value of **ETB 11.7 billion**.

IVS: vouchers issued by FIs, including RuSACCOs and MFIs, to smallholder farmers to be redeemed for fertiliser and improved seed at a primary cooperative store. The IVS enables FIs

³⁹ Directive No MCR/01/2020, article 19.1

⁴⁰ Of these, 143,072 (65%) were non-agricultural vehicles, and 57,786 (26%) were non-agricultural machinery.

act as a payment agent for cash sales and a formal lender for credit sales, reducing the cash risk exposure for farmers, and allowing for effective audit and control processes. After initially rolling out as a manual system, ATI joined up with Kifiya in 2024 to digitalise the IVS as an e-voucher platform to promote efficiency and scalability. In 2023, over 6.6 million producers participated (20% female), purchasing over 11.5 million quintals of seed and fertiliser, in cash or on credit, with total value of ETB 31.7 billion.

NMIS: provides timely, accurate, and relevant market information to stakeholders, based on weekly market data polled from by woreda-level government enumerators, subject to a scientific polling methodology and the application of advanced analytical techniques for price forecasting and trend analysis. The NMIS is available through website, by email for registered subscribers, and via toll-free interactive voice response (IVR)-based hotline. Currently, the NMIS covers **19 crops** and **311 marketplaces**. The hotline has registered over **1.6 million users**, and there have been **8.8 million visits** to the NMIS website to access market data.

8028 Farmer Hotline: a toll-free service that disseminates advisory information to farmers on agronomic best practices, financial literacy, and other relevant information. It works via SMS and IVR, which is critical given the low literacy rates and smart phone penetration in many rural parts of Ethiopia. The hotline has four components — an automated call service which farmers can call to obtain advice; broadcast SMS and IVR 'push' content, to send out customised messaging to farmers; an IVR-based expert help desk; and an interactive survey to collect data from users.

RuSACCO support: An institutional strengthening framework delivered by ATI together with ECC and Regional Cooperative Producer Agencies. ATI has performed capacity assessments and gap analyses on nearly **4,000 RuSACCOs** using a diagnostic tool, leading to structured interventions comprising staff training, improved policies and manuals, strengthened information systems, and support for improved agricultural product design.

Source: ATI

These initiatives include the development of agricultural commercialisation clusters (ACCs), agriculture one-stop shops (AOSS), the input e-voucher system (IVS), the 8028 farmer hotline, and the national market information system (NMIS). ATI has also provided extensive capacity-building support in partnership with the Ethiopian Cooperatives Commission (ECC) to RuSACCOs under an institutional strengthening framework.

Agri-finance could potentially benefit from the surge in DFS that Ethiopia has experienced since 2020., if expanded into rural areas in the next phases. Digital access points in the country have multiplied nearly seven times in just three years, rising from 38,700 in mid-2020 to 253,000 by mid-2023. Digital payments have grown by more than 750% over the last five years and surpassed the value of cash transactions.

Chart 15: Digital Access Point and Accounts Volume 2019-23

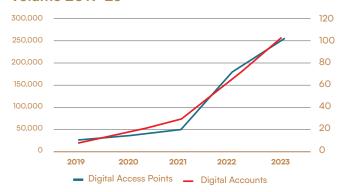


Chart 16: Cash versus Digital Transaction (ETB b), 2019-23



Source: NBE

Mobile money agents have increased over ten times in the same period. Digital accounts have risen from 18.6 million to over 100 million. Of these, over 70 million mobile money accounts have been created through Ethio Telecom's TeleBirr service and Safaricom's M-PESA. It is understood that much of the DFS growth to date has taken place in urban areas.

The emergence of agfintech platforms such as Lersha and Kifiya, and digital platforms such as Mastercard Farm Pass have made an impact in the agri space specifically. Agfintech platforms combine field-based agents, highly functional technology platforms and big data analysis, which enable Fls to overcome the physical barriers to financing agriculture. Farm Pass, introduced by Mastercard in partnership with the Cooperative Bank of Oromia, enables farmers and cooperatives to digitally connect to the agriculture marketplace, streamlining transactions and financial services, and enhances access to inputs, services and credits. More than 510,000 farmers, primary cooperatives and cooperative unions have been onboarded, generating more than ETB 440million in transactions in key value chains such as coffee, wheat, barley, and dairy.

Agri-finance has featured within numerous programmes and pilots. The key national programme specifically focused on agri-finance is the Rural Financial Intermediation Programme (RUFIP), funded by the International Fund for Agricultural Development (IFAD) together with the European Investment Bank, European Union and AGRA (see Box 9 below).

Box 9: RUFIP-III

RUFIP is now in its third iteration having been originally launched in 2001.

RUFIP-III is a USD 300 million project, which launched in 2020. Implemented by the Development Bank of Ethiopia (DBE) in partnership with the NBE, ECC, and the Association of Ethiopian MFIs, it is organized around three technical components:

- (i) Building capacity of MFIs and Financial Cooperatives;
- (ii) Improving regulation, supervision and institutional discipline; and
- (iii) Facilitating funds flow and diversification of Rural Financial Institution business.

The third technical component has involved the provision of credit lines, which as as of January 2025, have reached **14 MFIs** and **26 RuSACCOs** with a total value of **ETB 378 million** since project inception. RUFIP-III also made provision for a credit guarantee mechanism and microinsurance initiative.

Source: IFAD RUFIP-III reporting

Other national projects whose focus impacts agriculture, include the IFAD-funded Participatory Agriculture and Climate Transformation Project, the World Bank-funded Integrated Agricultural Development, Sustainable Land Management 2 Project and Climate Action through Land Management Project, and the Finnish-supported Responsible and Innovative Land Administration of Ethiopia 2. Additional value chain specific programmes are in place, including the AfDB-funded Climate Resilient Wheat Value Chain Development Project, the Japan-funded Project for Smallholder Horticulture Farmer Empowerment through Promotion of Market-Oriented Agriculture, and the World Bank-funded Livestock and Fisheries Sector Development Project.

NAFIR survey responses, comprising 23 banks and 22 MFIs, identified **eleven agri-finance pilots** that took place between 2010-2024 — six by banks and five by MFIs.

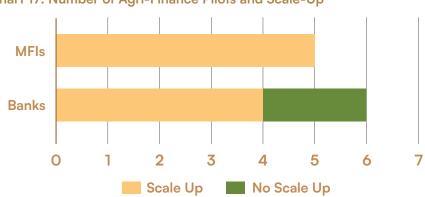


Chart 17: Number of Agri-Finance Pilots and Scale-Up

Source: NAFIR Survey 2025

These pilots have covered a range of themes:

- Gender: Introducing new lending and distribution techniques for reaching women farmers;
- Products: introducing new products such as VCF and other types of farmer production loan, backed by risk-sharing facilities;
- Technologies: introducing new technologies for digital distribution of agri-finance and microloans; and
- Linkages: introducing new on-lending arrangements between banks and MFI/RuSACCOs.





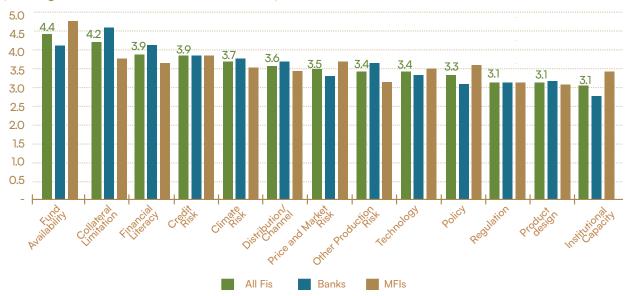
6. GAPS AND RECOMMENDATIONS

As shown in the previous chapter, significant investment has been made by government, development partners and private sector to build Ethiopia's emergent agri-finance landscape.

In this context, a key question explored during the development of NAFIR is the following:

Will the maturation of agri-finance initiatives already underway be sufficient to drive the scaleup of agri-finance to the necessary levels, or are there additional measures also required?

Chart 18: Key Constraints to Scaling-Up Agri Finance — the Fls' Perspective (5 = High Constraints; 1 = No Constraints)



Source: NAFIR Survey 2025

Note: the chart shows the; average scores across 45 respondents (23 banks, 22 MFIs); FI respondents were asked "What are the key bottlenecks to scaling up agri-finance in Ethiopia today? Please rate each one on a scale from 1 (not a bottleneck at all) to 5 (a major bottleneck), and add comments to explain your response."

The findings suggest that even when all these investments come to maturity, key structural and coordination constraints are still likely to hold back the scale-up of agri-finance to meet policy ambitions.

- Structural constraints represent missing parts of the agri-finance landscape and include:
 - o Quantitative and cyclical limitations to loanable funds availability for FI agri-lending, reflective of economy-wide credit constraints in which demand for finance far outstrips supply;
 - Specific disincentives for financing agriculture compared with other sectors driven by the high costs and risks of financing farmers; and
 - o Compliance bottlenecks as producers struggle to meet regulatory and documentary requirements, driving weeks if not months of time-consuming and resource-intensive effort by both producer and FI to approve and disburse a loan.
- Coordination constraints do not represent an absence of activity but rather inadequate coordination to drive sustainable, nationally scalable impact, and have been identified in the

following areas:

- o Building the financial literacy of agri-borrowers;
- Developing agricultural risk management frameworks; and
- o Facilitating integration and institutional linkages among agri-finance actors⁴¹.



STRUCTURAL CONSTRAINT 1 — LOANABLE FUND AVAILABILITY:

Demand today for agri-finance far exceeds supply. Systemic constraints in the availability of loanable funds — cyclical as well as quantitative — are likely to prevent a natural scale-up of the agrifinance supply to fulfil this demand even as the range of agri-finance landscape initiatives reach maturity. The current round of national reforms — in particular, the opening of the banking sector — is likely to make available additional resources, some of which may flow to agriculture. However, this is **unlikely to fill all, or even most** of the agri-finance resource gap. We can anticipate this because, even though most African banking jurisdictions have long been open, the under-financing of agriculture remains a continent-wide challenge.

RECOMMENDATION 1: To fill the agri-finance resource gap, there is need for a mechanism that can mobilise additional resources and ensure these funds flow specifically to agriculture.



STRUCTURAL CONSTRAINT 2 - DISINCENTIVES:

Costs and risks of financing agriculture are higher than in other sectors. FI shareholder and depositor interests are served by allocating finance to sectors that offer the highest returns. The agrifinance initiatives already underway will help reduce the cost and risk of financing agriculture. However, it will take many years for these costs and risks to fully equalise with other sectors⁴². We may conclude from this that the market for finance, left to function by itself, will not fulfil the needs of agriculture for the foreseeable future due to the sector's continuing high cost and risk profile. The proportion of private sector bank credit to agriculture remains persistently low while the banks that converted from MFIs, and the MFIs themselves, are significantly reducing the proportion of credit supplied to the sector. The NBE's 2020 Directive requiring 5% of bank lending to take place against movable assets — a directive issued with the intent to help scale funding to agriculture and MSMEs — has not seen a significant supply of credit flow to agriculture, with agricultural assets having a share of less than 1% of total assets registered in the MPSR in the last financial year.

RECOMMENDATION 2: There is need for a comprehensive framework of incentives to stimulate more lending by FIs to agriculture that reduce the costs and risks of financing the sector.

⁴¹ Including between commercial banks and rural FIs, between domestic and foreign institutions in the context of the opening of the banking sector, and between FIs and new and emerging digital platforms which hold the promise to overcome key barriers to financial inclusion in the agricultural sector.

⁴² Among other factors, agri-loans for the foreseeable future will remain small-scale and fragmented; there is a long-term horizon for scaling risk mitigation instruments, developing distribution, diffusing technology, and building financial literacy.



STRUCTURAL CONSTRAINT 3 - COMPLIANCE: We understand from various agri-finance pilots in Ethiopia that trying to finance smallholder farmers is costly, time-consuming and difficult (see Box 1 in Chapter One above). Pilots have ended up financing many fewer farmers than targeted. In the past, temporary exemptions and waivers have been requested from NBE so that pilots can take place. Obtaining documents to comply with regulations has been a particular challenge. The National ID scheme can help to address part of this documentary challenge by streamlining the 'know your client' (KYC) requirements to onboard new agri-borrowers. However, the documentary requirements to support credit appraisal will still generate many challenges for both borrower and lender to fulfil.

RECOMMENDATION 3: There is a need to streamline compliance to reduce the costs of finance and provide timely credit to Ethiopia's farmers as a way to scale up agri-finance in the country.

The remaining three constraints — financial literacy, agricultural risk management, and institutional linkages — are areas where important efforts have been made to date, reflecting significant investment by government, development partners and private sector. Yet these have been too often characterised as fragmented, small-scale and programspecific which has precluded decisive progress. There is a need in each area for strategic and coherent frameworks that are systematic, coordinated and have long-term continuity.



COORDINATION CONSTRAINT 4 - LITERACY: Ethiopia's farmers continue to struggle with financial literacy, as well as the digital literacy necessary to adopt DFS. It is understood that literacy programmes to date have been small-scale and program-specific rather than systematic.

RECOMMENDATION 4: There is a need for an effort to systematically build financial and related digital literacy at scale in the agricultural sector.



COORDINATION CONSTRAINT 5 — AGRICULTURAL RISK MANAGEMENT: The availability of suitable insurance products to mitigate key risks faced by producers is an important enabler of bankability to drive the scaling up of agri-loans. Crop and livestock insurance products remain a relatively small niche within the business of those insurance firms that offer them. Stakeholders — including the insurers themselves — have noted the scaling up of these products face major system-level constraints which require a sustained effort to address:

 High insurance premiums can be prohibitive for producers to take up crop and livestock insurance. These are driven by low levels of overall uptake, high distribution costs, and limitations in the diversification of the underlying risks; High levels of sensitisation and capacity-building are required by producers and cooperatives to understand the product and know why it is valuable. Factors such as geographic distance, infrastructure gaps and low field presence make this expensive and time-consuming to deliver.

In addition, it is noted that a solution has not yet been identified to mitigate the risks of price volatility which Fls cite as an important impediment to agri-finance (see Chart 18 above).

RECOMMENDATION 5: A national agricultural risk management framework is required to tackle the system-wide barriers to scaling-up crop and livestock insurance, and to introduce price risk management instruments.



COORDINATION CONSTRAINT 6 — INSTITUTIONAL LINKAGES:

Significant efforts have been made, by ATI and under RUFIP, among others, to build institutional linkages between banks on the one hand and MFIs and RuSACCOs on the other. These linkages enable banks to partner with rural FIs which own the customer relationships, have deep contextual knowledge of the rural client base, and operate distribution channels that bridge the rural 'last mile'. This can result in more efficient, inclusive and resilient distribution of financial products and services. New kinds of 'last mile' partnerships are also being established between FIs and emergent agfintech platforms such as Lersha and Kifiya. Furthermore, the opening up of the banking sector may bring partnership opportunities with foreign FIs which can help address the loanable funds and capacity constraints faced by the domestic institutions.

RECOMMENDATION 6: A national framework is required to systematise the facilitation of robust and scalable linkages among Fls, as well as digital platforms, especially in the context of the opening up of the banking sector to foreign institutions.





7. NAFIR GAME-CHANGERS AND VISION

'Game-changers' under NAFIR are positioned as transformative solutions to the remaining constraints that can integrate and energise Ethiopia's agri-finance landscape to catalyse and enable the necessary scale-up. In the development of NAFIR, a review of African and international experiences has been conducted to identify potential solutions for Ethiopia which may be effective in addressing those constraints.

Three game-changing opportunities have been identified as the pillars of NAFIR for short-term impact that will resolve the remaining constraints to agri-finance scaleup within a dynamic, specialised, digitalised and data-driven agri-finance landscape:

- National Agri-Finance Accelerator (NAFA): a refinancing and risk-sharing vehicle, based on experiences from Uganda, Nigeria, Ghana, Togo and India among others⁴³, that makes available loanable funds earmarked specifically for agriculture and and reduces the risk of lending to the agricultural sector.
- Farmer Access to Streamlined Financial Services (FAST): an efficient interface for Fls to access farmer information, and for the farmer to access credit, based on experiences from Côte d'Ivoire, India and Pakistan. FAST streamlines compliance and reduces the cost of financing agriculture, while integrating and creating traceability along the value chain; and
- Agri-Finance Centre of Excellence (CoE): a
 hub for integrating financial literacy,
 institutional linkages and agricultural risk
 management efficiently and cost-effectively
 into NAFIR implementation through strategic
 and coherent long-term frameworks, while
 building Fl and regulatory capacity to adopt
 agri-finance best practices and enhance
 readiness to take on credit lines that drive
 further scale-up of Fl loanable fund access.

Box 10: Uganda Agricultural Credit Facility (ACF)

Launched in 2009 by the Bank of Uganda, the ACF is a refinancing facility through which government shares in 50% of qualifying agri-loans provided by banks and 70% by MFIs. The loans are subject to minimum and maximum amounts, and a cap on the interest rate and FI processing fees. Activities eligible for ACF refinancing include irrigation, inputs, machinery, outputs, animal stock, land opening, storage and value addition.

Box 11: Côte d'Ivoire Cocoa/Coffee Farmer Card

Côte d'Ivoire — the world's largest cocoa producer — has developed and rolled out since early 2024 an electronic card for over 900,000 of the country's one million cocoa and coffee farmers. The card is integrated with electronic payment and digital wallet functionality. It is used during sales transactions to record and trace the sale of goods from farmgate, ensure farmers receive a price at or above the set minimum prices, facilitate digital payments by buyers, enable farmers to make savings and avoid the risks of keeping cash at home, and for use by farmers to buy farm goods.

Box 12: India's Kisan (Farmer) Credit Card

"The Kisan Credit Card scheme aims at providing adequate and timely credit support from the banking system under a single window with flexible and simplified procedure for the farmers. it meets the short-term credit requirements for: cultivation of crops; post-harvest expenses; produce marketing loans; consumption requirements of the farmer's household; working capital for maintenance of farm assets and activities allied to agriculture; and investment credit requirement for agriculture and allied activities."

Source: Reserve Bank of India Circular 2017

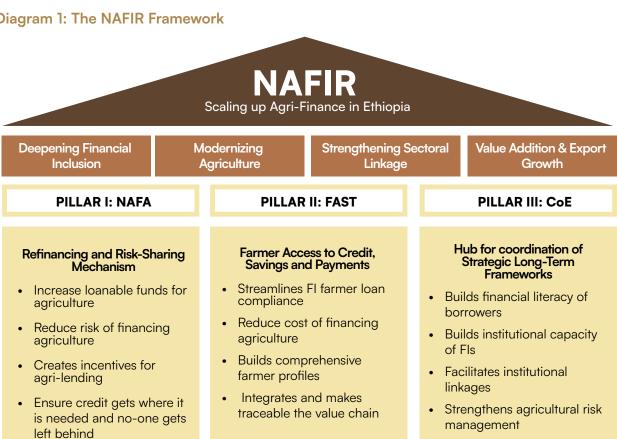
⁴³ See Szebini et al 2021. 'A technical review of select African de-risking schemes'. Rome, FAO, AGRA and IFAD.

This approach makes sure not only that mobilised resources are specifically earmarked for agriculture, but also that credit reaches where it is needed most — agri-borrower types, use cases, value chains, regions, gender, insurance — to make sure that no-one gets left behind.

NAFIR innovates by integrating the implementation of these game changers. It leap-frogs historical experiences in other countries by capitalising on innovations which are just coming to scale in Ethiopia, in particular Digital Financial Services (DFS), based on a wide range of advances including National ID, MoA digitisation initiatives, electronic agricultural asset registries, the ATI IVS and farmer hotline initiatives, and the emergence of mobile money and agfintech platforms.

Taken together, NAFIR offers a package of transformative solutions that address the remaining constraints to agri-finance scale-up while integrating and energising Ethiopia's agri-finance landscape after years of investment by government, private sector and development partners. In so doing, NAFIR addresses agri-finance demand/supply gaps that are not only quantitative (insufficient overall lending) but also cyclical (availability at the right time), qualitative (products and services not fulfilling beneficiary need) and distributional (credit not reaching those niches where it is needed).

Diagram 1: The NAFIR Framework



DYNAMIC, SPECIALISED, DIGITALIZED AND DATA-DRIVEN AGRI-FINANCE LANDSCAPE

NBE AGRI-FINANCE REGULATORY FRAMEWORK

The framework that emerges offers a holistic, data -driven, incentives-based approach across its three pillars. Pillars I and II address the identified structural constraints: NAFA increases loanable fund availability and reduces the risk of lending to agriculture; FAST streamlines compliance and reduces the costs of financing the sector. CoE addresses the identified coordination constraints, building the financial literacy of borrowers and the institutional capacity of lenders, addressing both the demandand supply-sides of the agri-finance landscape.

A new policy instrument for mandated minimum lending to agriculture may be considered subject to additional assessment⁴⁴.

Governance of NAFIR implementation is recommended to take place through a steering committee co-chaired by the Governor of the NBE and the Minister of Agriculture. This mechanism will convene the key institutional actors supporting agri-finance in Ethiopia and is intended to drive a whole-of-government approach. A technical sub-committee would sit under the steering committee. The steering committee would also oversee a project management unit housed initially within the NBE to facilitate implementation. A NAFIR consultative body would comprise demand- and supply-side stakeholders, development partners, and experts from academia and technical institutions. It would meet with the steering committee on a regular basis to review the progress of NAFIR and identify enhancements.

Governance of NAFIR implementation is recommended to take place through a steering committee comprising NBE, MoA, MoF, MoTRI, ATI, and National ID⁴⁵. This mechanism convenes the key institutional actors supporting agri-finance in Ethiopia and is intended to drive a whole-of-government approach. The steering committee would oversee a project management unit that would be housed initially within the NBE to undertake pre-implementation technical feasibility studies and determine the institutional framework and technical design for implementation. A NAFIR consultative body would comprise demand- and supply-side stakeholders, development partners and experts from academia and technical institutions, meeting with the steering committee on a regular basis to review the progress of NAFIR and identify enhancements.

The vision which emerges aligns closely with national policy frameworks. These include the financial deepening agenda under NFIS and NBE Strategy, the MoA TYAPP, and key objectives articulated in HGER, TYDP, and NAIP, in turn contributing to the SDGs and AU Agenda 2063.

The remainder of this section outlines the vision and rationale for each of the three NAFIR pillars.

⁴⁴ This would take note that, while there is a 5% minimum requirement for lending against movable assets already in place, less than 1% of assets registered in Ethiopia's Movable Property Security Registry (MPSR) are agricultural assets. Learning lessons from international experience, it is recommended that a minimum agri-credit lending requirement, if introduced, would create maximum flexibility in how Fls could fulfil the requirement. Fls may on-lend through other Fls. They may provide credit that is intermediated via, for example, cooperatives, offtakers, agrodealers, aggregators, warehouse operators, commodity exchanges, mobile money and agfintech platforms. They may purchase loans from other Fls whose loan value exceeds the requirement and have surplus. This would create a market-based incentive for Fls to aim as high as possible with their agri-loans and not stop once they reach the minimum requirement, spurring some Fls to specialise in agri-finance and boost rural presence, knowing these investments would be rewarded.

⁴⁵ Additional participants may include the NFIS Council, Ministry of Education, and the electricity networks.

PILLAR I: NATIONAL AGRI-FINANCE ACCELERATOR (NAFA)

NAFA will make available more loanable funds specifically earmarked for agriculture and lower the risks of financing the sector. It will provide both the resources (new funds) and the positive incentives (risk-sharing) for FIs to supply more agricredit.

The refinancing component of NAFA is designed to make available a new source of loanable funds for FIs under an inclusive targeting framework. NAFA would act as a conduit for pooling resources from government, development partners and private sources. It would channel the pooled resources to ensure not only that they reach agriculture, but also that credit is available where it is needed the most — agri-borrower types, use cases, value chains, regions, gender, and insurance — to make sure that no-one gets left behind. Agri-lending would be strengthened by application of consistent definitions and tagging of loans by identified sub-segments.

PILLAR I: NAFA

Refinancing and Risk-Sharing Mechanism

- Increase loanable funds for agriculture
- Reduce risk of financing agriculture
- Creates incentives for agri-lending
- Ensure credit gets where it is needed and no-one gets left behind

NAFA will implement and scale incrementally based on 'test and learn' cycles targeting identified agricultural sub-sectors and regions meeting defined readiness criteria.

This approach is structured to crowd in and scale up private sector funding for agriculture, in line with the HGER policy emphasis for Ethiopia's transition to a private sector-led growth model. When a FI originates an agri-loan that qualifies for refinancing and risk-sharing incentives through NAFA by addressing under-served segments defined in the inclusive targeting framework, the FI refinances that loan by selling a portion of it to NAFA. That portion of the loan capital is then received back by the FI and becomes available for originating new loans. The result is a risk-sharing arrangement in which NAFA bears the risk for the portion of the loan that it refinances, and potentially more. Selective pre-financing (credit lines) may also be offered as an additional incentive to reach under-served segments, subject to an organised and ready pipeline of validated borrowers (e.g. a contract farming scheme)⁴⁶. NAFA refinancing will be issued on a first-come, first-served basis. As NAFA-backed loans are repaid, the funds will revolve to become available for refinancing new loans.

It is proposed that NAFA may also take a first loss position for loans provided to high priority and under-served segments through credit guarantee. This means that if losses arise from the loan, NAFA would bear those losses alone up to a defined amount. For loans that do not automatically qualify for first-loss risk-sharing, the option may be provided for the FI to pay a premium in return for NAFA taking on first loss risk up to a defined amount. In line with well-established practice, the premium amount would be calculated scientifically based on a quantification of the underlying risk. Overall, this flexible approach to risk-sharing would give FIs the opportunity to carefully tailor how they mitigate risk across their agri-finance portfolios.

NAFA uses a data-driven, incentives-based approach for increasing the flow of credit not merely to agriculture overall, but also to ensure it reaches the under-served segments where it is needed the most.

⁴⁶ A key risk with pre-financing is that funds allocated under credit line may not be utilised or may be utilised slowly. In the context of Ethiopia's high systemic credit constraints, it is essential every Birr of additional funding for agriculture is put to work. It is therefore recommended that credit lines are provided on an exceptional basis for particularly under-served segments, not as the norm, and only when the pipeline is already in place to allow for rapid disbursement.

'Levers' that may incentivise distribution of agri-finance to under-served segments include⁴⁷:

- Higher proportion of total loan amount refinanced;
- Lower cost of refinancing;
- Full or part prefinancing through credit lines:
- Lower cost of prefinancing;
- Higher level of risk sharing; and
- First loss versus pari passu (equal sharing) risk position.

Box 13:

Hypothetical Examples — How incentive levers may be used to stimulate the flow of agrifinance to under-served segments

Hypothetical Example 1:

Commercial cash crop farmer near Addis Ababa: 10 percent refinancing at refinancing base interest rate, with no risk sharing.

Hypothetical Example 2:

Smallholder grain farmer in rural center (e.g., Arsi): 50 percent refinancing at refinancing base rate minus 20 percent, with 75 percent risk share.

Hypothetical Example 3:

Lowland pastoralist: 75 percent refinancing at refinancing base rate minus 50 percent, with 80 percent first loss"

As agri-finance ecosystems mature, the proportion of credit provided direct by FIs to farmers tends to reduce as FIs use innovative channels to reach the farmer and overcome rural infrastructure gaps. Therefore, while loans refinanced by NAFA may be originated by FIs directly to the farmer, they will also be encouraged to be provided indirectly through on-lending or pass-through arrangements via available channels such as:

- **Offtakers** linked to contract farming arrangements which enable the financing of the farmer through their value chain relationships;
- **Digital platforms** e.g. the ATI Input e-Voucher System (IVS), mobile money (e.g. TeleBirr/MPESA), and agfintech and digital platforms (e.g. Kifiya/Lersha/Farm Pass);
- **Input distributors** such as cooperatives, agro-dealers or ATI agricultural one stop shops (AOSS) which may provide famers with crop inputs, animal feed and health products on credit;
- **Equipment vendors** or mechanisation service providers which may provide goods and services to the farmers on credit: and
- Warehouse operators which may disburse credit to the farmer on behalf of the FI, secured against the farmer's outputs stored in a professionally-managed warehouse.

The combination of refinancing with risk-sharing through NAFA has been recommended over other possible approaches.

⁴⁷ The levers may be adjusted to optimise agri-finance distribution based on continuous analysis of the elasticities and cross-elasticities of agri-credit provision in response to changes in one or more levers for a given borrower type.

Table 10: Comparison of NAFIR versus Alternative Approached for Scaling-Up Agri-Finance

| Model | Description | Comparison versus NAFA |
|---|--|--|
| Agri Policy Bank | A public institution that resolves the loanable fund resource constraints by directly providing agri-loans to producers, rather than refinancing agri-loans originated by other Fls. | An agri policy bank may result in the centralization of agri-credit supply, crowding out the private sector, and dampening the dynamism and innovation that results from competition. Under NAFA, loan origination — and the customer relationship — stays with the FIs so that NAFA crowds in private sector credit. This is especially important for aligning NAFA with the HGER objective for Ethiopia to "transition from a public to a private sector-led growth model". It also creates competition among FIs for the farmer's busines to create a more dynamic, innovative and farmer-responsive landscape. An agri policy bank will also experience sectoral concentration which may challenge risk management and prudent operation best practices, whereas a refinancing mechanism diversifies through the range of FIs that originate loans. However, there is scope over time for a specialised agri-bank to be introduced on a fully commercial basis, including as a public-private partnership blending government and private sector investment. |
| Risk-sharing only | This is the approach in countries such as Nigeria and Ghana through a national vehicle that provides risk-sharing but not refinancing. | A national risk-sharing facility, as a standalone approach, would not address the constraint in loanable fund access that holds back the scaling up of FI credit flow to agriculture. NAFA complements risk-sharing with a refinancing component. This is necessary to bridge the resources gap which has been identified as a key constraint in the Ethiopian context by stakeholders (see Chart 18 above). |
| FI-specific Credit Lines and Risk Sharing Facilities (RSF) | Relying on FIs to source their own credit lines and RSFs to resolve their own resource constraints. | Relying on FIs to source their own credit lines and risk-sharing facilities is important and will be supported through NAFIR. However, it would not — as a short-term standalone measure — result in a systematic and coordinated solution to ensure sufficient capital is raised to meet national policy targets or that credit reaches where it is needed to make sure that no one gets left behind. |

NAFA would be integrated closely with the existing components of Ethiopia's agri-finance landscape for a coordinated scale-up of credit to meet policy ambitions. NAFA Integration and Scalability Plans would be developed by the 'landscape enablers' — registries, initiatives, programmes, etc — across both the financial and real sectors which drive fulfilment of each agrifinance use case. These would set out the actions required from each landscape enabler to build the necessary capacity so that the landscape can support more farmers, more transactions, more locations and more value chains.

Three additional incentives for scaling-up agri-finance are proposed under NAFA:

Additional Incentive 1: NAFA Eligibility Requirements

Fls benefiting from NAFA refinancing and risk sharing would meet distributional and qualitative eligibility requirements:

- **Distributional eligibility requirements** would apply at the level of the loan. To qualify, agriloans would need to be provided for an eligible agri-finance use case, value chain, borrower type, region, gender, or for agro- and livestock insurance, linked to FAST (see below).
- Qualitative eligibility requirements would apply at the level of the FI. FIs would need to meet
 minimum requirements for specialised agri-finance product design, emphasis on promoting
 agricultural assets as movable collateral as well as use of alternative data, robust loan lifecycle
 procedures, and the application of fair commercially-based interest rates and fees to assure the
 affordability of credit for the farmer.

These distributional and qualitative eligibility requirements would create incentives for FIs to improve the distribution and quality of agri-finance offered in the country. These requirements would create incentives for FIs to design specialised, farmer-inclusive and competitive agri-finance products backed by dedicated in-house agri-finance capability, supported with the provision of capacity-building services by the CoE (see below).

Additional Incentive 2: League Tables, Awards and Preferences

FI agri-finance performance would be closely monitored. High-performing FIs, and innovators would be recognised in an annual awards ceremony. Preferences would be established for high performing FIs — e.g. through government and development partner financing and project opportunities — to reward good performance.

Additional Incentive 3: Contract Farming and IAIPs

It is recommended to make a special provision under NAFA to support loans provided by Fls to offtakers that enter into contract farming arrangements and participate in Ethiopia's IAIPs. This would incentivise the uptake of both initiatives, linked to their respective policy frameworks, and help achieve national policy objectives of strengthening sectoral linkages between agriculture and industry, value addition and export growth.

These form part of a comprehensive package of incentives for demand- and supply-side actors under NAFIR overall.

Diagram 2: Comprehensive Incentives Framework within the NAFIR Framework

NAFIR

Scaling up Agri-Finance in Ethiopia

DEMAND SIDE INCENTIVES

- FAST usage enables farmer access to affordable credit and insurance
- FAST usage and good performance leads to higher credit allowance for the farmer
- High performing 'champion farmers' receive extra traning and rewards
- Offtakers engaged in contract farming and IAIPs receive affordable credit through NAFA to strengthen sectoral linkages

SUPPLY SIDE INCENTIVES

- NAFA refinances FI agri-loans to quickly access more funds
- NAFA shares risk on agri-loans, with higher risk through first loss position on high priority and under served segments
- NAFA refinance and risk sharing is subject to good product and process design
- Recognition on FI high-performers and innovators through annual awards
- Performances for high-performers through access to government and development project opportunities
- Rating system unlocks credit line access for high performers

NAFA is intended as a time-bound approach to catalyse the initial scale up while accompanied by longer-term measures that further increase loanable funds availability for agriculture over time.

Building Readiness for Credit Lines:
 NBE, in consultation with relevant stakeholders, would co-design and implement a framework for a ratings system covering commercial banks, MFIs, and capital goods financing companies.

A separate set of ratings would be introduced for RuSACCOs and APCs, leveraging global cooperative sector assessment methodologies such as SCOPEinsight⁴⁸.

Diagram 3: NAFIR Funds Availability Framework



The ratings system would serve to create transparency on FI creditworthiness for the benefit of credit line providers to assess potential partnerships and transactions. To achieve higher credit ratings, FIs and cooperatives would need to improve their financial and operational performance. Achieving high credit ratings would facilitate stronger institutional linkages, building improved access for Ethiopian FIs to credit lines from international sources, and for MFIs, RuSACCOs to credit lines and on-lending facilities from banks. This intervention would be complemented by a dedicated 'linkages' hub within the CoE to facilitate partnerships, disseminate information, study and share best practices, and monitor progress.

- Inter-Bank Markets: Inter-bank markets would enable the trading of available loanable funds
 for agri-credit among Fls so these funds reach those institutions best placed to originate new
 agri-loans.
- Agro-Securitisation: Over time, NAFA would sell on a portion of its loans into the capital
 markets via agro-securities listed on ESX. This would achieve two objectives: firstly, to unlock an
 additional scalable funding source for NAFA itself; and secondly, to catalyse the development
 of Ethiopia's agro-securitisation market to enable wider access by Ethiopia's Fls to the capital
 markets for overcoming their own resourcing constraints.

PILLAR II: FARMER ACCESS TO STREAMLINED FINANCIAL SERVICES (FAST)

FAST is a mechanism for rapid farmer access to financial services via a mix of mediums that may include physical or digital credit cards, QR codes, agent-based and other offline solutions applicable to context. It is proposed that all farmers with a land-holding registered in the MoA's NRLAIS registry, and pastoralists with an animal registered in the MoA's EthLITS registry, would be eligible for FAST. A FAST unique identifier would be linked to a named farmer, Fayda ID number, farm plot and/or tagged livestock in MoA databases, cellphone number where available, and provide a digital wallet for the farmer to facilitate digital payments for goods and services, receive sales proceeds, and make savings. The use of agent-

PILLAR II: FAST

Farmer Access to Credit, Saving and Payment

- Streamline FI Farmer Loan Compliance
- Reduces the costs of financing agriculture
- Build comprehensive farmer profile
- Integrates and makes traceable the value chain

⁴⁸ http://www.scopeinsight.com

based access models would overcome digital literacy gaps, combined with an extensive financial and digital literacy training framework to accompany rollout.

All necessary data to approve a farmer loan, per the proposed NBE Directive, would be integrated from relevant systems and databases⁴⁹ and consolidated within FAST.

This would mean that presentation of the FAST identifier by a farmer to a FI would allow the FI immediate access to all relevant information it requires to issue a loan to that farmer, per NBE regulatory frameworks to be updated. The aim is to cut out entirely the need for farmers to submit compliance documentation to the FI, eliminating large amounts of paperwork, processing effort, and time delay.

The implementation of FAST would be managed in partnership with the National ID, MoA, ATI and ECC, closely linked to the imminent rural roll-out of National ID. National ID is responsible for issuance of the Fayda unique identifier along with physical and digital cards. It will shortly commence its rural rollout, reaching millions of farmers during 2025 itself and tens of millions in 2026 and subsequent years. National ID has already integrated its systems with the MoA's land registry database, which is understood to cover 18 million farmers. This links the Fayda unique identifier with essential farm data such as geolocation, plot size and crop mix. National ID is also shortly to introduce a digital credentials wallet which will allow for a farmer's FAST unique identifier credential to sit alongside the Fayda identifier and others (e.g. driving licenses, social protection programmes) offering a readily accessible and interoperable technology backbone for implementation of FAST. The MoA, through its Rural Finance Unit and Agri-Stack Project, will also play an important role building the real sector enabling environment for scaling-up agri-finance, while ATI, through its key initiatives⁵⁰, as well as ECC will help integrate FAST with efficient 'last mile' delivery systems for inputs, equipment and mechanisation services that reach the farmer even in remote rural areas.

An automated, centrally developed credit-scoring algorithm would generate a personalised seasonal credit allowance for each farmer, linked to their FAST identifier. The algorithm would be jointly developed by the FIs under NBE auspices, similar to how FIs collaborated with mobile money platforms to develop credit-scoring algorithms embedded in those platforms to support digital micro-lending. The algorithm would calculate each farmer's seasonal credit allowance according to the farmer's need — based on factors such as farm plot size, crop mix, and production cost — as well as market price to assess the affordability of credit, and past performance. The credit allowance would be sub-allocated to different use case 'windows' for crop inputs, irrigation, mechanisation, livestock, outputs and insurance, and would be pre-cleared for NAFA refinancing and risk-sharing to closely link farmer access with FI incentive. A credit allocation for non-farm and household purposes may also be provided, recognising that many producer households engage in non-agricultural activities. Gender-intentionality would be incorporated into the credit allocations, recognising the specific needs and challenges facing women farmers.

The credit allowance would evolve over time. It would be raised for those farmers that provide timely repayment, as well as for farmers that meet specified performance targets, e.g. yield gain, PHL reduction, CSA uptake, etc. This would act not only as an incentive for good performance but also to catalyse increased on-farm investment by the higher-performing farmers into, e.g. diversification, farm expansion, sustainable land management, advanced farm equipment, aggregation and storage systems, and would enable every farmer to advance at their own pace. This incentive will be supplemented by recognition of 'champion farmers' — those farmers best able to take, repay

⁴⁹ Likely to include NRLAIS, EthLITS, the CRB and woreda-level systems.

⁵⁰ Including agricultural commercialisation clusers (ACC), agricultural one-stop shops (AOSS), the input e-voucher system (IVS) and the 8028 farmer hotline.

and convert agri-credit into farm-level investment and performance improvement — and offer them additional training, goods and services that will facilitate further advancements.

All credit allocations to the farmer would be pre-cleared as eligible for NAFA refinancing and risk-sharing to closely link farmer access with FI incentive. Any FI may provide credit to the farmer and receive NAFA refinancing and risk-sharing, subject to meeting qualitative eligibility requirements (see above). This means that FIs would need to compete for the farmer's business, with the intent that competition can stimulate dynamism and innovation, and lead to the reduction of rates and fees.

As a condition of access to credit through FAST, crop or livestock insurance would automatically be taken. This would enable insurance to be bundled with credit, refinanced by NAFA on a risk-sharing basis, and repaid out of the farmer's sales proceeds along with other credit the farmer takes via FAST. As a result, crop and livestock insurance would become more affordable for the farmer and create the conditions for significant growth in farmer uptake, with the economies of scale and efficiencies of distribution driving prospective reduction in insurance premium cost, and with a strategy in place to systematically raise awareness and provide education to farmers.

Also as a condition of access to credit through FAST, the farmer would need to use their FAST identifier when making or receiving digital payments related to agro-input, mechanisation and output transactions.

- The use of FAST for procuring agro-inputs and mechanisation equipment or services would provide assurance that the farmer is using credit for the intended purposes and create an audit trail of the farmer's input and equipment use over time.
- The use of FAST to receive the sales proceeds from the farmer's output marketing would enable loan repayments to be deducted from the farmer's sales proceeds and create an audit trail of the farmer's marketable surplus and income over time.

Those farmers that use the FAST consistently for digital payments linked to input, mechanisation and output transactions would be rewarded through higher credit limits, while those that do not comply would see their credit limits reduced and, in the event of loan default or persistent non-compliance, withdrawn. In so doing, the FAST would also serve to deter and detect side-selling against contract farming commitments, providing a stimulus for contract farming and related VCF lending.

With the farmer's output marketing transactions systematically recorded, FAST would create traceability of the flow of goods along the value chain. In so doing, FAST would also serve to deter and detect 'side-selling' against contract farming commitments, providing a stimulus for contract farming and related value chain finance (VCF)-based lending. This would help to strengthen value chain relationships, integrate farmers into the formal economy, and provide opportunities for digitalising revenue collection by government linked to the 'Digital Ethiopia 2025' national digital transformation strategy. To strengthen sectoral linkages between agriculture and industry and create the absorptive capacity for the offtake of increased farm-level output, a special provision for NAFA refinancing and risk-sharing would be made for loans to offtakers that participate in contract farming arrangements and IAIPs. This would create incentives for closer relationships between producers and offtakers and create a stimulus for value addition and export growth.

Data from FAST would feed into a National Agri-Finance Database (NAFID), building a comprehensive profile for each farmer to drive bankability and a surge in farm-level investment. The farmer profile would comprise:

Farmer identity

- Farm data
- Marketing track record
- Financial history.

FAST-collected transactional data may be supplemented over time by on-farm monitoring, for example by extension officers, agfintech platform agents or remote monitoring technologies, to measure farm performance (e.g. productivity, water efficiency, PHL), enabling comprehensive tracking of progress towards agricultural modernisation by value chain and region. Importantly, the NAFID database, and the data-sharing protocols linked to it, would be protected by best practice data security and consumer protection frameworks.

The operations of FAST would become self-sustaining. Usage of FAST would generate fees incurred by the FI set at a minute proportion of the transaction value.

PILLAR III: AGRI-FINANCE CENTRE OF EXCELLENCE (CoE)

The CoE is intended as a hub for stakeholder coordination, implementation and monitoring in the areas of financial literacy, FI and regulatory capacity development, agricultural risk management and FI linkages.

Its purpose is to supersede approaches which in the past may have been fragmented, small-scale and programspecific with strategic and coherent frameworks which are systematic, coordinated and have long-term continuity, backed by a Technical Assistance Facility (TAF).

The CoE would be structured to have regional outreach to cover the country as a whole, and would be tasked with four action areas:

PILLAR III: CoE

Coordinates Strategic Long-Term Frameworks

- Builds finacial literacy of agri-borrowers
- Builds institutional capacity of Fls
- Facilitates institutional linkages
- Strengthens agriculture risk management

CoE Action Area One: National Agri-Finance Literacy (NAFIL) Framework

The CoE would oversee development and delivery of a national framework for agri-financial literacy, and related digital literacy, under the National Financial Education Strategy (NFES).

NAFIL would include, among others, a segmented stakeholder needs assessment, a gap analysis, and the scoping and development of relevant content necessary to build the financial and digital literacy of producers and cooperatives to successfully absorb and put to effective use agri-finance across the different use cases and value chains.

NAFIL would be delivered smartly to farmers and cooperatives by integrating it with the roll-out of NAFA and FAST, to improve efficiency, inclusivity and cost-effectiveness. It may be delivered through the following proposed structure:

- Inception Workshops: farmers would participate in a kebele-level workshop at the time of collecting their FAST identifier. The workshop would carefully explain how FAST works, the conditions associated with its usage, and provide financial and digital literacy training customised according to the kebele's agricultural profile. Financial and digital literacy training may be delivered by the CoE in collaboration with National ID, MoA, ATI and ECC. Fls having presence or coverage in the area would be invited to participate.
- Annual update workshops ahead of the season in which farmers would be individually informed of their updated FAST credit allowance, high-performing agri-finance 'champion farmers' would be recognised and rewarded, refresher information would be provided on FAST,

and follow-on financial and digital literacy training would be provided.

- Push Messages & Helpdesk: Farmers would receive customised financial and digital literacy messages by SMS and/or interactive voice response (IVR), in association with the ATI's 8028 Hotline, with message content tailored to the farmers' crop selection, agro-ecological zone, and the time of the season, and integrated with a wider set of messages containing agro-climatic advisory information. The helpdesk functionality under the 8028 Hotline would be reinforced so that farmers can access financial and digital literacy experts and ask questions about FAST, and agri-finance opportunities more generally.
- Advanced Workshops: farmers would qualify for additional training through special 'agrifinance champion farmer' workshops according to their achievement of performance targets. This will further help to recognise good performance, enable those farmers with capacity and readiness to advance further, and thereby encourage farm-level investment.

CoE Action Area Two: Fl and Regulatory Capacity Development

The CoE would support FIs to introduce specialised agri-finance products and build up their inhouse specialised agri-finance capability by developing best practice principles, guidelines and templates, backed by training and capacity-building services. It would also support FI development of Interest Free Banking (IFB) equivalent agri-finance products to address the needs of Muslim borrowers. The CoE would run competitions to stimulate agri-finance and agfintech innovations, providing technical support for early implementation and related capacity-building. Importantly, the CoE would offer differentiated approaches by FI type, and enable a renewed focus on agri-finance by the MFI sector, as well as the converted MFIs now licensed as banks, so the proportion of MFI credit provided to agriculture may reverse its current downward trajectory. Special provision would be made for capacity-building to financial sector regulatory authorities to ensure adequate knowledge, understanding and skills are in place to effectively regulate the new environment.

CoE Action Area Three: Institutional linkages

The CoE would serve as a **Hub for Agri-Finance Institutional Linkages (HAFIL)**, building improved access for Ethiopian FIs to credit lines from international sources, and for MFIs and RuSACCOs to credit lines and on-lending facilities from banks. A further linkage facilitated by HAFIL would be between FIs and DFS solutions providers, including mobile money and agfintech platforms, to drive forward digital transformation in agriculture. The CoE's role would be to facilitate partnerships, disseminate information, study and share best practices, and monitor progress. The CoE would synergise with the proposed ratings system covering FIs and cooperatives noted above.

Institutional linkages would also be incentivised through NAFA and the FAST in the following ways:

- Firstly, credit to agriculture delivered by Fls through indirect channels e.g. mobile money and agfintech platforms⁵¹, ATI-supported ACCs, AOSS and the IVS would not only be eligible but also may be rewarded through higher levels of NAFA refinancing and risk-sharing, based on the efficiencies these channels create⁵².
- Secondly, intermediated financing i.e. finance that reaches a producer via offtakers, cooperatives, agro dealers and warehouse operators would also be eligible and may be similarly rewarded with higher levels of NAFA refinancing and risk-sharing, based on the risk reduction these approaches offer to the lender.

⁵¹ Including both FI proprietary platforms as well as third party platforms.

⁵² Farmers would use the FAST to access this credit, but the credit would come through the indirect channel or intermediary.

CoE Action Area Four: Agriculture Risk Management

An Agriculture Risk Management Permanent Working Group under the CoE would be formed which would cohesively address the range of challenges facing the scale-up of agricultural insurance in the country, including policy, regulation, strategy, capacity, product design, distribution and cost: The Working Group would have two broad objectives:

- □ To integrate crop and livestock insurance within the NAFA/FAST framework. This would enable insurance to be bundled with credit, refinanced by NAFA, and repaid out of the farmer's sales proceeds along with other credit the farmer takes via FAST. As a result, crop and livestock insurance would become more affordable for the farmer and create the conditions for improved farmer uptake.
- To develop and implement a national policy framework and strategy for agricultural risk management, including components on crop and livestock insurance and price risk management:
 - o **Initial focus crop and livestock insurance:** The objective will be to support scaling up of crop and livestock insurance, building on the four Dialogue Platform Meetings that took place under the JICA ICIP project between May 2022 and January 2024, while linking to ongoing initiatives such as the MoA/UNDP-led IRFF and the ATI/WFP partnership linked to the ARC, and addressing new developments including the prospective establishment of an insurance regulator, and enhancing the institutional distribution arrangements for insurance in the country.
 - o Medium-term focus price risk management: Price risk management solutions are not yet available in Ethiopia today, even though Fls cite price volatility as a significant risk that constrains agri-lending. An agricultural price risk management strategy would be developed under which solutions would be gradually introduced, such as hedging tools offered by domestic and international commodity exchanges, and actuarial solutions. Based on these experiences, a national programme framework for price risk management would be developed before the end of the first NAFIR period in 2030.



ANNEX I — NAFIR IN PRACTICE

This section sets out an illustration of how NAFIR could work in practice, looking at three prospective financing scenarios.

Scenario 1: Direct FI-Provided Credit

In this scenario, a bank, MFI or RuSACCO provides credit direct to the farmer via FAST and receives refinancing and risk-sharing from NAFA. The financing is secured against the farmer's land via the SLLC registered in NRLAIS or a pastoralist's animal(s) registered in EthLITS, with these assets in turn being registered in the MPSR collateral registry. Crop or livestock insurance is taken automatically after the first draw-down by the farmer. If the farmer stores goods in the warehouse and takes WRF against the stored goods, the WRF proceeds may be used to repay the input and equipment loan, and the transaction is secured against the warehouse receipt issued either by the NWRS or ECX and registered in the MPSR collateral registry.

Table 11: Activity Flow under Direct-FI Provided Credit via FAST and NAFA

| No | Activity | Description | | | |
|----|--------------|--|--|--|--|
| 1 | Credit-Score | FAST algorithm sets farmer credit allowance based on farmer needs and track record | | | |
| 2 | Approach | The farmer approaches an FI $-$ a bank, MFI, or RuSACCO $-$ for credit | | | |
| 3 | Presentation | The farmer presents their FAST identifier to the FI at the branch, to a field agent, or online | | | |
| 4 | Validation | The FI validates the cardholder's identity via Fayda National ID | | | |
| 5 | Access | The FI uses the FAST identifier to access the farmer's information ⁵³ | | | |
| 6 | Approval | The FI approves the credit same day, against the FAST-defined credit allowance | | | |
| 7 | Allocation | Credit is loaded onto the FAST wallet and allocated to different 'use case' windows ⁵⁴ | | | |
| 8 | Recordal | The loan is recorded in NAFID, and specified as the Direct FI-Provided modality | | | |
| 9 | Lien | A lien is registered in MPSR, NRLAIS and EthLITS over the farmer's SLLC and animals | | | |
| 10 | Insurance | Crop or livestock insurance ⁵⁵ is automatically taken to cover the farmer's production | | | |
| 11 | Draw-down | The farmer uses the FAST wallet, at the appropriate time of the season, to: Pay for crop inputs / feed / animal health products at approved ⁵⁶ agro-dealers Pay for equipment ⁵⁷ (e.g irrigation, farm implements) with approved providers Pay for mechanisation services with approved providers Use storage at an WRS-approved warehouse and receive output finance Pay for miscellaneous items for non-farm and household purposes up to a limit | | | |

⁵³ This includes all farmer profile necessary for loan approval per updated NBE regulations (i.e. national ID number, NRLAIS farm data, EthLITS livestock data, required Woreda-level systems data), plus data extracted from NAFID including farmer identity, farm plot, marketing track record, and financial history.

⁵⁴ l.e. inputs, irrigation, mechanisation, outputs, insurance, non-farm purposes

⁵⁵ Subject to FI preferences, other insurance — e.g. life and health cover — may also be applied

⁵⁶ Each use case window would only be permitted to be spent with an approved provider of the relevant services

⁵⁷ Equipment would not be purchased each year but for the expected lifetime of the asset

| 12 | Refinancing | Each draw-down is recorded in NAFID. The applicable refinancing ratio is applied, returning the equivalent portion of loan principal from NAFA to the originating FI. | | | |
|----|--------------|--|--|--|--|
| 13 | Risk-Sharing | Once refinancing takes place, risk sharing starts to apply | | | |
| 14 | Sale | The farmer markets their produce and receives payment into their FAST wallet | | | |
| 15 | Claim | If the insurance conditions are triggered, the payout is received in the farmer's FAST wallet | | | |
| 16 | Repayment | The repayment amount due to the originating FI and NAFA is deducted from the FAST wallet, before the farmer has use of the funds, and transferred to the originating FI and NAFA | | | |
| 17 | Recovery | If sales proceeds are not received or insufficient, initial recovery efforts are made via Woreda-level authorities through direct engagement with the farmer | | | |
| 18 | Enforcement | If initial recovery efforts fail, NAFA sends notice of enforcement on behalf of itself and the originating FI to applicable registries and agencies | | | |

Scenario 2: FAST-Based Value Chain Finance via Offtaker linked to Contract Farming Arrangement

In this scenario, the FI provides credit to a contracted farmer via the offtaker based on the value chain relationship, a specialised agri-finance product known as value chain finance (VCF). As above, the FI receives refinancing and risk-sharing via NAFA; the loan would be secured against the farmer's land via the SLLC registered in NRLAIS or a pastoralist's animal(s) registered in EthLITS, with these assets in turn being registered in the MPSR collateral registry; and crop or livestock insurance is automatically taken with the first draw down.

If the offtaker permits deferred delivery, then the farmer may store the goods in a warehouse and take WRF against the stored goods. As above, the WRF proceeds may then be used to repay the input and equipment loan, and the transaction is secured against the warehouse receipt issued either by the NWRS or ECX and registered in the MPSR collateral registry, pending sale and delivery of the goods to the offtaker.

Table 12: Activity Flow under FAST-Based Value Chain Finance linked to Contract Farming

| No | Activity | Description | | | |
|----|--------------|---|--|--|--|
| 1 | Credit-Score | FAST algorithm sets farmer credit allowance based on farmer needs and track record | | | |
| 2 | Agreement | An offtaker enters into agreement with an FI prior to contracting with farmers | | | |
| 3 | Disbursement | The FI disburses funds to the offtaker. | | | |
| 4 | Presentation | The farmer presents their FAST identifier to the offtaker at the depot, to a field agent, or online | | | |
| 5 | Validation | The offtaker validates the cardholder's identity via Fayda National ID | | | |
| 6 | Access | The offtaker uses the FAST identifier to access the farmer's information | | | |
| 7 | Contracting | The offtaker enters into a contract with the farmer, specifying the goods and services to be financed and their value, and the farmer's obligation to deliver outputs | | | |

| 8 | Recordal | The contract is recorded in NAFID, and specified as the Offtaker-Provided modality | | | |
|----|--------------|---|--|--|--|
| 9 | Purchase | The offtaker purchases inputs and equipment at the appropriate time of the season | | | |
| 10 | Provision | The offtaker provides the farmer, at the appropriate time of the season, with: Inputs / feed / animal health products Equipment Services Miscellaneous items for non-farm and household purposes up to a limit | | | |
| 11 | Insurance | Crop or livestock insurance ⁵⁸ is automatically taken to cover the farmer's production | | | |
| 12 | Lien | A lien is registered in MPSR, NRLAIS and EthLITS over the farmer's SLLC and animals | | | |
| 13 | Draw Down | The farmer's receipt of goods and services, and their value, is deducted from the FAST wallet against the farmer's credit allocation under each 'use case' window | | | |
| 14 | Refinancing | Each draw-down is recorded in NAFID. The applicable refinancing ratio is applied, returning the equivalent portion of loan principal from NAFA to the originating FI. | | | |
| 16 | Risk-Sharing | Once refinancing takes place, risk sharing starts to apply | | | |
| 17 | Sale | The farmer delivers outputs to the offtaker and receives payment into their FAST wallet | | | |
| 18 | Claim | If the insurance conditions are triggered, the payout is received in the farmer's FAST wallet | | | |
| 19 | Repayment | The repayment amount due to the originating FI and NAFA is deducted from the FAST wallet, before the farmer has use of the funds, and transferred to the originating FI and NAFA | | | |
| 20 | Recovery | If sales proceeds are not received or insufficient, initial recovery efforts are made via the offtaker through direct engagement with the farmer | | | |
| 21 | Enforcement | If initial recovery efforts fail, NAFA sends notice of enforcement on behalf of itself and the originating FI to applicable registries and agencies | | | |

Scenario 3: FAST-Based Intermediated Credit

In this scenario, the FI provides credit to a farmer via one or more intermediating entities. Variants of this arrangement could include:

- A digital platform (e.g. mobile money, agfintech) which provides various financial products and services to the farmer;
- A cooperative, agro-dealer or AOSS (ATI) which provides famers with crop inputs, feed or animal health products on credit;
- An equipment vendor or mechanisation service provider which provides goods and services to the farmers on credit; and
- A warehouse operator which disburses WRF to the farmer on behalf of the FI, secured against the farmer's outputs stored in a professionally-managed warehouse.

In some cases, all the agri-finance use cases may be fulfilled by agri-finance products and services provided through one intermediating entity.

In other cases — for example, through an agro-dealer, equipment vendor, mechanisation service provider or warehouse operator — one or several but not all the use cases may be fulfilled by agrifinance products and services provided through that intermediating entity. Accordingly, it may be that the farmer receives finance via multiple intermediating entities.

In the table below, these entities are referred to as intermediaries, as they are intermediating the provision of agri-finance. However, this terminology is not intended to imply they are intermediating the purchase of outputs from the farmer.

Table 13: Activity Flow under FAST-Based Intermediated Credit

| No | Activity | Description | | | |
|----|---|---|--|--|--|
| 1 | Credit-Score | FAST algorithm sets farmer credit allowance based on farmer needs and track record | | | |
| 2 | Agreement | The intermediary enters into agreement with an FI | | | |
| 3 | Disbursement | The FI disburses funds to the intermediary to purchase stock/equipment/ services | | | |
| 4 | Presentation | The farmer presents their FAST identifier to the intermediary | | | |
| 5 | Validation | The intermediary entity validates the cardholder's identity via Fayda National ID | | | |
| 6 | Access | The intermediary uses the FAST identifier to access the farmer's information | | | |
| 7 | Contracting | The intermediary enters into a contract with the farmer, specifying the goods and services to be financed and their value | | | |
| 8 | Recordal | The contract is recorded in NAFID, and specified as the Intermediary-Provided modality | | | |
| 9 | Purchase | The intermediary purchases applicable inputs, equipment and/or services at the appropriate time of the season | | | |
| 10 | Provision The intermediary provides the farmer, at the appropriate time of the seaso with goods or services on credit: Inputs / feed / animal health products Equipment Services Miscellaneous items for non-farm or household purposes up to a maxilimit | | | | |
| 11 | Insurance | Crop or livestock insurance ⁵⁹ is automatically taken to cover the farmer's production | | | |
| 12 | Lien | A lien is registered in MPSR, NRLAIS and EthLITS over the farmer's SLLC and animals | | | |

| No | Activity | Description | | | |
|----|--------------|--|--|--|--|
| 13 | Draw Down | The farmer's receipt of goods and services, and their value, is deducted from the FAST wallet against the farmer's credit allocation under each 'use case' window | | | |
| 14 | Refinancing | Each draw-down is recorded in NAFID. The applicable refinancing ratio is applied, returning the equivalent portion of loan principal from NAFA to the originating FI. | | | |
| 16 | Risk-Sharing | Once refinancing takes place, risk sharing starts to apply | | | |
| 17 | Sale | The farmer markets their produce and receives payment into their FAST wallet | | | |
| 18 | Claim | If the insurance conditions are triggered, the payout is received in the farmer's FAST wallet | | | |
| 19 | Repayment | The repayment amount due to the originating FI and NAFA is deducted from the FAST wallet, before the farmer has use of the funds, and transferred to the originating FI and NAFA | | | |
| 20 | Recovery | If sales proceeds are not received or insufficient, initial recovery efforts are made via the intermediary through direct engagement with the farmer | | | |
| 21 | Enforcement | If initial recovery efforts fail, NAFA sends notice of enforcement on behalf of itself and the originating FI to applicable registries and agencies | | | |

ANNEX II — STAKEHOLDER ENGAGEMENT

| Session |
|--|
| National Bank Ethiopia |
| DBE |
| Siinqee Bank |
| FSD Ethiopia |
| Cooperative Bank of Oromia/Rabo Bank |
| Vision Fund MFI |
| Wasasa MFI |
| Farmers and Cooperatives |
| Mastercard |
| African Development Bank |
| Nyala Insurance |
| Kifiya Financial Technology |
| Dashen Bank |
| IFAD |
| Lersha |
| CBE |
| Ministry of Agriculture |
| ATI |
| Roundtable discussion with Ethiopian Millers Association and Oromia Federation |
| World Bank |
| Ethiopia Cooperatives Commission |
| Safaricom MPESA |
| Ethio Telecom TeleBirr |
| Ethiopian Stock Exchange |
| Fayda National ID |

ANNEX III — SURVEY RESPONDENTS

| / IIIII Z | I — SURVEY | ILDFONE | LIVIS | | |
|--|--|--|--|---|---|
| Banks | MFIs | Other Fls | APCs | | Unions |
| Abay Addis Intl Awash Berhan Bunna CBE CBO Dashen DBE Enat Gadaa Goh Betoch Hibret Lion Nib Shabelle Sidama Siinqee Siket Tsedey Tsehay Wegagen Zamzam Zemen | Aggar Amal Amba Awra Busa Gonofa Debo DECSI Dynamic Elsabi Eshet Harar Harbu Lefayda Lideta Liyu Meftihe Metamamen Nisir Success Tana Vision Fund Wasasa Yegna Yemisrach Yeshewabirhan | Kaza CGF Awash Insurance Lion Insurance Nyala Insurance Oromia Insurance | Amhara Abasem Abchkli Alefa Awuramba Bagunan Banetu Barekat Denebe Fakuwa Fana Gerba Gulawenz Hamus Gebeya Kilaj Liben Sendeka Shendena Shumata Siya Denba Yimali SNNP Dagmawi Tewodros Sidama Bisetam & Akebabi Hudana Galo Somali Wacays Tigray Debre Harnet Debry Selam Shewit Alamata Shimta Temesgen Werie | Oromia Abdii Gudina Arrabbi Bekie Bucha Danbaa Bura Adalee Buriqitu Alkasa Cilaaloo Dabala Adaree Galama Genata Gonda Fincaama Haxee Ondoode J Qullensa Jammo Galamaa Lensho Wabbee Qacama Qona Mara Alaltu Bucho Qona Mara Danaba Qona Mara Booru Jaawii Qona Mara Danaba Qona Mara Booru Jaawii Qona Mara Codaajilaa Qona Mara Bulchaana Sanyi Bayiftu Lencho Wabe Segni Bayistu Tulu Deneba Sero Anketo Shaaqi Shararaa Tokkuma Sagure Molee Tullu Dannabaa Wirtu Qacama Xamasaa | Amhara Admas Merkeb Union 4 Wedera Dromia Berke Alelitu Hetosa Reya Kajawa Reya Wekana SNNP Malik Sidama Nuli Kolite Sidama Chalal Tawakal Tigray Enderta Jira Medebay Mereb |

| SACCOs | | Agro-Processor |
|---------------|-----------------|--------------------|
| | | |
| <u>Amhara</u> | | <u>Amhara</u> |
| Abeba Dulecha | Tashoma | Tsehay Edible Oil |
| Abebech | Tokuma | Unison Edible Oil |
| Andinet | Wagee | |
| Dirmara | Walii | <u>Oromia</u> |
| Fikir | Wasasa | MuluRata |
| Gojjam Ber | | Dina |
| Tadila | <u>SNNP</u> | Geda |
| Wena Birhan | Alah Yashnan | Kebie Flour |
| Wenjetta | Ashabe Women | Milki |
| Wuha Sahy | Selem | Shari Kik Sra |
| Yemisrach | Tgagezut | |
| Yesanqa Edget | | <u>SNNP</u> |
| | <u>Sidama</u> | Aste Fayen |
| <u>Oromia</u> | Tesfa Edget | Kedja na Betesebwa |
| Ababo | _ | Lindet |
| Abdi Waqa | <u>Somali</u> | Zeman |
| Biftu Ganama | Bilan | |
| Boki | Halgan | <u>Sidama</u> |
| Bonsu Boqona | Horseed | Hayat |
| Boonsa | | MK |
| Burkitu | <u>Tigray</u> | Yamlak Sra |
| Busa Gonofe | Debri Deremeyti | |
| Care Walkite | Dedebit | Somali |
| Faaya Boru | Enderta | Durdur Flour |
| Gudeta | Fana | Liban Food Complex |
| Gudetu | Fana Mekelle | |
| Hawi Gudina | Hibret Hade | |
| lfa Boru | Mekelle | |
| Iteya | Meseret | |
| Jitu | Mizan | |
| Lalistuu | Quiha Adeday | |
| Lelise | Wegahta | |
| Liqqi | Wukiro Maray | |
| Metemamen | | |
| Misoma Toora | | |
| Raya Waligala | | |
| Shala Chubete | | |
| Sokoru | | |
| | | |

ANNEX IV — VALIDATION

| Institution and Development Partner Workshop Participants | Financial Institution Workshop Participants | Bilateral Meetings |
|---|--|---|
| Accion African Development Bank AGRA ATI ECC ESX FSD Ethiopia KfW IFAD IFC JICA Lersha Mastercard MoA MoTRI National ID NBE Precise UNDP World Bank | Abay Bank Abay Insurance Addis International Bank Africa Insurance Company Akufada MFI Bank of Abyssinia Berhan Bank Bunna Bank Cooperative Bank of Oromia Dashen Bank DBE DECSI MFI Dire MFI Enat Bank EIC FSD Ethiopia Gada Bank GohBetoch Bank Harbu MFI Hibret Bank Liyu MFI KAAFI MFI NBE NIB International Bank Nisir MFI Nyala Insurance Oromia Bank Oromia Insurance Rammis Bank Safaricom Shabelle Bank Sidama Bank Siinqee Bank Tsehay Bank Vision Fund Wasasa MFI Wegagen Bank Yegna MFI Zamzam Bank Zemen Bank | ATI MoA Rural Finance MoA Agri-Stack NBE National ID African Development Bank World Bank FSD Ethiopia Mastercard IFAD |

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ANNEXES VI - X — PROJECT IMPLEMENTATION

Annex VI Objectives and Theory of Change

Annex VII Results Framework

Annex VIII Budget

Annex IX Resource Mobilisation Framework

Annex X Implementation Roadmap

Annexes to be updated during pre-implementation readiness assessments





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