JULY 1, 2025

# SFPSEI – THEORY OF CHANGE

*THE IMPACT EFFECTS OF SUSTAINABLE DEVELOPMENT*

**CREATED BY**
**EUSL AB**
***Care to Change the World***

# Table of Contents

# 1. Introduction

The Theory of Change (ToC) for the ACTESA Staple Food Programme – Social Development and Empowering Programme and ECHO Implementation (SFPSEI) serves as a strategic and operational framework to guide the transformation of agriculture across the COMESA region. It articulates the foundational logic, intended outcomes, and enabling mechanisms that underpin this flagship initiative, which is designed to address systemic challenges in food security, agricultural productivity, and inclusive economic development.

At its core, the ACTESA SFPSEI is a response to the urgent need for a harmonized, regionally coordinated approach to agricultural development. It is anchored in COMESA's 2021–2031 Regional Strategic Plan and aligns with continental frameworks such as Agenda 2063 and Agenda 2074. The programme is structured to catalyze intra-regional trade, enhance the resilience of smallholder farmers, and unlock the potential of agricultural value chains through a combination of policy harmonization, infrastructure deployment, and capacity building.

The SFPSEI is not a standalone intervention. It is the operational expression of the broader Social Development and Empowering Programme (SDEP), which integrates multiple disciplines—agriculture, technology, vocational training, compliance, and finance—into a unified delivery model. Within this model, the ECHO platform provides modular infrastructure for energy, water, and waste management, while the Integrated National Financing Framework (INFF) offers a governance and investment mechanism to ensure transparency, traceability, and financial viability.

This Theory of Change recognizes that agricultural transformation cannot be achieved through isolated interventions. It requires a systems-level approach that addresses structural barriers, mobilizes diverse stakeholders, and aligns local implementation with regional and global priorities. The ACTESA SFPSEI, through its integrated design and strategic partnerships, is positioned to serve as a replicable model for sustainable development, both within COMESA and beyond.

# 2. Context and Rationale

The Common Market for Eastern and Southern Africa (COMESA) region is home to over 90 million smallholder farmers, the majority of whom are engaged in staple food production. Despite their central role in regional food systems, these farmers face persistent structural challenges that have led to stagnating productivity, fragmented markets, and widespread food insecurity. Over the past five years, staple food production has declined in many member states, while population growth has outpaced agricultural output, resulting in a net decrease in per capita food availability.

The agricultural sector in COMESA is constrained by limited access to quality inputs, such as certified seeds, fertilizers, and bioprotectants. Less than 10% of smallholders have access to improved seed varieties, and fertilizer use remains low and inefficient. Compounding these issues are weak policy environments, uncoordinated value chains, and inadequate infrastructure for storage, processing, and distribution. These systemic barriers have hindered the region's ability to achieve food sovereignty, reduce poverty, and build climate resilience.

In response to these challenges, ACTESA was established as a specialized agency of COMESA to coordinate regional agricultural trade and development. The ACTESA SFPSEI represents a strategic consolidation of five key agricultural programmes—COMFREP, COMSHIP, COMBIP, COMBIHAP, and CEHA—under a unified implementation framework. This merger is designed to streamline governance, harmonize policies, and scale up impact across the region.

The rationale for this integrated approach is grounded in the recognition that agricultural transformation requires more than isolated technical interventions. It demands a cross-sectoral strategy that aligns policy, infrastructure, finance, and human capital. The Social Development and Empowering Programme (SDEP), within which the SFPSEI is embedded, embodies this philosophy. It combines modular infrastructure (ECHO), vocational training, digital governance (FlexSus), and financing mechanisms (INFF) to create a holistic platform for sustainable development.

Moreover, the urgency of climate change and environmental degradation necessitates a shift toward circular, climate-smart agricultural practices. The SFPSEI promotes agroecological methods, renewable energy, and water-efficient technologies to reduce environmental impact while enhancing productivity. It also prioritizes gender inclusion, youth employment, and community empowerment as essential pillars of resilience and equity.

In this context, the Theory of Change serves as a blueprint for how ACTESA, in partnership with regional and international stakeholders, will catalyze a new era of agricultural development in COMESA. It articulates the pathways through which harmonized policies, targeted investments, and inclusive governance can unlock the region's agricultural potential and deliver measurable improvements in food security, livelihoods, and environmental sustainability.

## 3. Impact Statement

The ACTESA Staple Food Programme – Social Development and Empowering Programme and ECHO Implementation (SFPSEI) envisions a future in which the COMESA region is home to inclusive, sustainable, and climate-resilient food systems. This vision is rooted in the belief that agricultural transformation must not only increase productivity and trade but also promote social equity, environmental stewardship, and economic opportunity for all—especially for women, youth, and marginalized communities.

At the heart of this transformation is the commitment to build a regional agricultural ecosystem that is both commercially viable and socially just. The programme seeks to dismantle structural barriers that have historically excluded smallholder farmers, women, and youth from meaningful participation in agricultural value chains. Through targeted interventions in policy harmonization, infrastructure development, vocational training, and access to finance, the SFPSEI aims to create a level playing field where all actors can thrive.

The long-term impact of the programme will be measured through a set of key indicators that reflect its multidimensional goals:

- **Food Security and Nutrition**: Increased availability, accessibility, and affordability of staple foods across COMESA member states, with a focus on climate-resilient crops and diversified diets.
- **Trade Growth and Market Integration**: A sustained increase in intra-regional agricultural trade, supported by harmonized standards, improved logistics, and digital market systems.
- **Job Creation and Economic Empowerment**: Generation of dignified employment opportunities, particularly for women and youth, through vocational training, agribusiness incubation, and rural industrialization.
    - Create 25,000–30,000 direct jobs across the agricultural value chain by 2030.

    - Generate an additional 50,000 indirect jobs through cooperative development, infrastructure deployment, and service provision.
    - Achieve at least 50% youth and 40% women participation in new employment opportunities.
- **Inclusion and Equality**: Enhanced participation of underrepresented groups in decision-making, production, and trade, supported by gender-responsive policies and inclusive financing mechanisms.
- **Quality of Life and Household Welfare**
    - Increase **average household income by 20–30%** in target regions.
    - Reduce **time spent collecting water by 60%** through ECHO water access systems.
    - Ensure **at least 70% of participating households** gain access to clean energy and potable water via ECHO modules.
- **Well-being and Social Inclusion**
    - Track improvements using a **Multidimensional Poverty Index (MPI)**, including access to:
        - Education (school attendance, adult literacy)
        - Health services (maternal care, immunization)
        - Housing (access to electricity, sanitation)
    - Increase **community satisfaction** with local services and infrastructure by 50% (measured via annual surveys).
- **Climate Resilience and Environmental Sustainability**: Adoption of circular agricultural practices, renewable energy systems, and water-efficient technologies that reduce emissions, restore ecosystems, and build adaptive capacity.
- **Institutional Strengthening and Governance**: Improved coordination among public, private, and academic actors through the Integrated National Financing Framework (INFF), ensuring transparency, accountability, and long-term sustainability.

This impact framework is not aspirational—it is actionable. It is grounded in the operational logic of the SFPSEI, which integrates modular infrastructure (ECHO), research-based monitoring (EFFORT), and inclusive financing (EMN, GSIA) into a coherent delivery model. By aligning regional priorities with global development goals, the programme positions COMESA as a leader in agricultural innovation, social inclusion, and climate action.

The Theory of Change thus serves not only as a roadmap for implementation but as a declaration of intent: to build a future where agriculture is a driver of prosperity, equity, and resilience for all.

## 4. Theory of Change Model

The ACTESA SFPSEI Theory of Change is built on a structured, multi-layered model that connects strategic inputs to long-term impact through a series of coordinated activities, outputs, and outcomes. This model is designed to reflect the complexity and interdependence of agricultural transformation in the COMESA region, while remaining clear, actionable, and measurable.

**Inputs**
The programme begins with a robust set of inputs, including:

- Harmonized regional policies and regulatory frameworks (COMSHIP, COMFREP, COMBIHAP, COMBIP)
- Modular infrastructure platforms (ECHO)
- Vocational training systems and academic partnerships (EFFORT, FlexSus)
- Financing mechanisms (INFF, EMN, GSIA)
- Strategic partnerships with AfDB, UNDP, FAO, SIDA, and Nordic institutions

These inputs are mobilized through ACTESA's coordination and supported by COMESA member states, development partners, and private financiers.

**Activities**
The programme undertakes a series of targeted activities:

- Deployment of ECHO infrastructure for energy, water, and waste management
- 500+ ECHO units deployed, benefiting over 100,000 households farmers with clean energy, water, and waste services
- Z% increase in access to clean water and renewable energy in target communities (baseline to be established)
- Vocational training in agriculture, renewable energy, and digital literacy
- Policy harmonization across seed, fertilizer, bioprotectants, and biotechnology
- Establishment of production clusters and value chain hubs
- Implementation of inclusive financing models and matching grants
- Legal and compliance structuring for high-risk jurisdictions

These activities are designed to address both technical and institutional barriers to agricultural development.

**Outputs**
The immediate results of these activities include:

- Operational ECHO units in rural and peri-urban areas
- Trained cohorts of farmers, youth, and women in climate-smart agriculture
- Digitally integrated market systems and traceability platforms
- Harmonized agricultural standards across COMESA
- Functioning financial and compliance frameworks (INFF, TrustFi)
- Strengthened farmer organizations and SMEs

These outputs lay the foundation for systemic change.

**Outcomes**
Over the medium term, the programme expects to achieve:

- Increased agricultural productivity and reduced post-harvest losses
- Reduction in household energy costs by 30–50% due to access to solar and hydrogen energy
- Improved health outcomes through access to clean water
- Expanded access to domestic, regional, and international markets
- Enhanced financial inclusion and economic empowerment
- Improved climate resilience and environmental sustainability
- Greater participation of women, youth, and marginalized groups
- Strengthened institutional capacity and governance

These outcomes reflect the programme's commitment to inclusion, equality, and sustainability.

**Impact**
The long-term impact of the ACTESA SFPSEI is the emergence of:

- Inclusive, sustainable, and climate-resilient food systems
- A thriving agricultural economy that drives regional integration and trade
- Improved Human Development Index (HDI) scores in target regions (tracked via national statistics)
- Reduction in GHG emissions per farming household by 30% through renewable energy and circular practices
- Equitable access to resources, opportunities, and decision-making
- A replicable model for development that bridges Africa and Europe

This impact is aligned with COMESA's strategic goals and global development frameworks, including the SDGs, Agenda 2063, and Agenda 2074.

## 5. What Steps Will Get Us There?

Achieving the ambitious goals of the ACTESA SFPSEI requires a carefully sequenced and strategically coordinated set of interventions. These steps are designed to address the structural, institutional, and operational barriers that have historically limited agricultural transformation in the COMESA region. The programme's approach is both systemic and modular—allowing for regional coherence while enabling country-specific customization.

The following steps outline the core pillars of implementation:

**Step 1: Harmonization of Agricultural Policies and Regulatory Frameworks**
The foundation of the programme lies in aligning national policies with COMESA-wide standards across five key domains:

- **Seeds** (COMSHIP): Streamlining certification, traceability, and trade of high-quality seed varieties.
- **Fertilizers** (COMFREP): Harmonizing standards, tariffs, and soil-specific blending protocols.
- **Bioprotectants** (COMBIHAP): Establishing mutual recognition of organic and biological pest control products.
- **Biotechnology and Biosafety** (COMBIP): Creating a unified biosafety risk assessment and regulatory framework.
- **Horticulture** (CEHA): Coordinating value chain development, SPS compliance, and export readiness.

This harmonization enables cross-border trade, reduces transaction costs, and creates a predictable environment for investment and innovation.

**Step 2: Capacity Building and Vocational Training**
To ensure sustainability and local ownership, the programme invests in human capital through:

- Vocational training in climate-smart agriculture, renewable energy, water management, and digital literacy.
- Deployment of the EFFORT framework to embed academic research and PhD students in implementation.
- Use of “train-the-trainer” models to scale knowledge transfer within communities.
- Partnerships with Nordic institutions (e.g., Uppsala University, Finnish employment agencies) to support bilateral skills development.

This step ensures that farmers, youth, and women are equipped not only with technical skills but also with leadership and entrepreneurial capabilities.

**Step 3: Infrastructure Deployment through ECHO**
The ECHO platform provides modular, scalable infrastructure to support agricultural productivity and rural development. Key components include:

- Renewable energy generation and storage (solar, hydrogen)
- Water purification, irrigation, and storage systems
- Cold storage, post-harvest handling, and processing units
- Digital monitoring and decision-support tools (FlexSus)

These units are deployed in geo-clustered production zones, enabling shared access and economies of scale for smallholder farmers and cooperatives.

**Step 4: Establishment of Inclusive Financing Mechanisms**
The programme introduces innovative financing tools to unlock capital and reduce risk:

- The Integrated National Financing Framework (INFF) as a regional governance and investment platform.

- Bridge financing through the European Microfinance Network (EMN), backed by buyer-assurance models.
- Matching grants and credit guarantees for SMEs and farmer organizations.
- Public-private partnerships facilitated by the Global Social Impact Alliance (GSIA).

These mechanisms ensure that financing reaches the last mile while maintaining transparency and accountability.

**Step 5: Legal and Compliance Structuring**
To operate effectively across diverse legal environments, the programme establishes a project-level compliance framework:

- Legal protocols developed with TrustFi to meet EU, AfDB, and Nordic standards.
- Firewalled governance structures to enable implementation in high-risk jurisdictions.
- Integration of compliance into all financing, procurement, and monitoring systems.

This step safeguards the integrity of the programme and builds trust among donors, investors, and communities.

**Step 6: Monitoring, Evaluation, and Adaptive Learning**
Throughout implementation, the programme will:

- Track progress through a robust MEL framework aligned with KPIs.
- Use real-time data from FlexSus and EFFORT to inform decision-making.
- Conduct regular reviews and stakeholder consultations to adapt strategies as needed.

This ensures that the programme remains responsive, accountable, and results-driven.

## 6. What Programs, Resources, and Partnerships Do We Need?

The ACTESA SFPSEI is not a single programme—it is a constellation of interlinked initiatives, platforms, and partnerships that together form a comprehensive ecosystem for agricultural transformation. To realize its vision, the programme draws upon a carefully curated suite of technical programmes, enabling infrastructure, digital systems, and strategic alliances. Each component plays a distinct role, yet all are designed to function in synergy, reinforcing one another across the value chain.

At the heart of the programme are five flagship initiatives, each addressing a critical bottleneck in the agricultural system:

### COMFREP

COMFREP (COMESA Fertilizer Regional Programme) tackles the harmonization of fertilizer standards, the development of soil-specific blends, and the creation of regional distribution networks. It ensures that farmers have access to the right nutrients, at the right time, and at the right price.

**Inputs**

- Regional and national fertilizer policy frameworks.
- Soil data and mapping tools.

- Partnerships with fertilizer producers and agrodealers.
- Funding from AfDB, SIDA, and GSIA.
- Technical support from COMESA and ACTESA.

**Activities**

- Harmonize fertilizer regulations across 21 COMESA member states.
- Develop soil fertility maps and localized fertilizer blends.
- Establish zero tariffs and common external tariffs (CET).
- Build regional and national fertilizer trade associations.
- Implement credit guarantee schemes for agrodealers.
- Promote green ammonia and renewable energy-based fertilizer production.

**Outputs**

- COMESA-wide fertilizer standards and guidelines.
- Operational fertilizer hubs and agrodealer networks.
- Increased availability of tailored fertilizer products.
- Improved access to finance for input suppliers.
- Training programs on safe and effective fertilizer use.

**Outcomes**

- Enhanced soil health and crop productivity.
- Reduced input costs and improved farmer profitability.
- Strengthened regional fertilizer markets and trade flows.
- Increased adoption of climate-smart nutrient management.

**Impact**

- A resilient and efficient fertilizer ecosystem that supports sustainable agricultural growth and food security across COMESA.

**Assumptions and Risks**

- Assumes political commitment to harmonization and tariff reforms.
- Risks include resistance from national actors, supply chain disruptions, and limited uptake of green technologies.

## COMSHIP

**COMSHIP** (Seed Harmonisation Implementation Programme) focuses on the certification, traceability, and cross-border trade of high-quality seeds. It supports the development of digital seed tracking systems and facilitates the registration of new varieties across member states.

**Inputs**

- COMESA regional seed policy framework and harmonization guidelines.

- Technical expertise from ACTESA and national seed authorities.
- Digital infrastructure for seed tracking and certification (e.g., COMSIS).
- Partnerships with seed companies, regulators, and research institutions.
- Funding and support from AfDB, SIDA, and other development partners.

**Activities**

- Align national seed laws and certification systems with COMESA standards.
- Develop and implement a regional digital seed traceability platform.
- Support cross-border testing and registration of seed varieties.
- Facilitate the use of COMESA seed labels and regional seed catalogues.
- Provide technical assistance and training to seed companies and regulators.

**Outputs**

- Harmonized seed certification and trade regulations across member states.
- Operational digital systems for seed tracking and verification.
- Increased number of registered and certified seed varieties available regionally.
- Improved capacity of seed companies to operate across borders.
- Strengthened regional seed committees and coordination mechanisms.

**Outcomes**

- Greater availability and accessibility of high-quality seeds for smallholder farmers.
- Increased trust in seed quality and origin through traceability.
- Enhanced regional trade in seeds and planting materials.
- Improved productivity and resilience of farming systems through better seed use.

**Impact**

- A connected, transparent, and resilient seed system that supports food security, climate adaptation, and inclusive agricultural growth across the COMESA region.

**Assumptions and Risks**

- Assumes political will to harmonize seed laws and adopt regional systems.
- Risks include delays in digital infrastructure rollout, resistance from national regulators, and limited private sector engagement.

## COMBIP

**COMBIP** (Biotechnology and Biosafety Implementation Programme) provides a regional framework for the safe and effective use of biotechnology. It institutionalizes biosafety risk assessment mechanisms and promotes the adoption of climate-resilient crop technologies.

**Inputs**

- COMESA regional biosafety policy framework and technical guidelines.

- Expertise from national biosafety authorities and biotechnology experts.
- Support from ACTESA, COMESA Secretariat, and international partners (e.g., ISAAA, FAO).
- Funding from AfDB, SIDA, and other development partners.
- Engagement with research institutions and regulatory bodies.

**Activities**

- Develop and institutionalize a regional biosafety risk assessment mechanism.
- Standardize application forms and procedures for biotechnology approvals.
- Train national biosafety authorities and establish a COMESA Panel of Experts.
- Conduct case studies and economic assessments of biotechnology adoption.
- Promote awareness and communication on biotechnology and biosafety policies.
- Facilitate regional meetings and harmonization of biosafety regulations.

**Outputs**

- Operational regional biosafety risk assessment system.
- Harmonized biosafety protocols and regulatory tools across member states.
- Increased capacity of national biosafety authorities and technical experts.
- Public awareness campaigns and stakeholder engagement strategies.
- Documented case studies and economic justifications for biotech adoption.

**Outcomes**

- Safer and more efficient deployment of biotechnology in agriculture.
- Increased adoption of climate-resilient and pest-resistant crop varieties.
- Improved regulatory coherence and reduced delays in biotech approvals.
- Strengthened public trust and informed decision-making on GMOs and biosafety.

**Impact**

- A regionally coordinated, science-based biosafety system that enables innovation, enhances food security, and supports climate adaptation through responsible biotechnology use.

**Assumptions and Risks**

- Assumes political and institutional support for biotechnology harmonization.
- Risks include public resistance to GMOs, misinformation, and uneven national capacity.
- Mitigation includes transparent communication, stakeholder inclusion, and phased implementation.

## COMBIHAP

**COMBIHAP** (Bioprotectants Harmonisation Programme) advances the regulation and commercialization of organic and biological pest control products. It supports the transition away from harmful chemicals and toward environmentally friendly alternatives.

**Inputs**

- Regional policy frameworks and technical guidelines for bioprotectants.
- Expertise from national regulatory agencies, environmental scientists, and agronomists.
- Support from ACTESA, COMESA Secretariat, and international partners.
- Funding from AfDB, SIDA, and other development partners.
- Engagement with private sector producers of organic and biological inputs.

**Activities**

- Conduct assessments of existing bioprotectant regulations across COMESA member states.
- Develop and validate harmonized regional regulations for bioprotectant registration and commercialization.
- Convene technical workshops and legal drafting committees to align standards.
- Launch awareness campaigns and training programs on integrated pest management (IPM) and safe bioprotectant use.
- Establish mutual recognition agreements and regional implementation plans.

**Outputs**

- A unified regulatory framework for bioprotectants across COMESA.
- Increased availability of approved, environmentally friendly pest control products.
- Strengthened capacity of national regulators and extension services.
- Enhanced public and private sector understanding of bioprotectant benefits and usage.
- Operational strategic implementation plan for regional rollout.

**Outcomes**

- Reduced reliance on synthetic pesticides and harmful agrochemicals.
- Increased adoption of climate-smart and organic farming practices.
- Improved environmental health and biodiversity in agricultural zones.
- Strengthened regional trade in sustainable agricultural inputs.

**Impact**

- A safer, greener agricultural system that supports ecological sustainability, farmer health, and regional competitiveness through the responsible use of bioprotectants.

**Assumptions and Risks**

- Assumes political and institutional support for regulatory harmonization.
- Risks include resistance from chemical pesticide lobbies, limited awareness among farmers, and uneven national enforcement capacity.
- Mitigation includes stakeholder engagement, phased implementation, and strong public-private collaboration.

## CEHA

**CEHA** (COMESA-EAC Horticulture Accelerator) drives the modernization of horticultural value chains, with a focus on post-harvest handling, cold storage, and export competitiveness. It is also a key vehicle for job creation, especially for women and youth.

**Inputs**

- Regional horticulture development strategies (COMESA and EAC).
- Technical expertise from ACTESA, national ministries, and private sector actors.
- Partnerships with FAO, UNDP, AfDB, and regional producer/exporter associations.
- Funding from development partners and private investors.
- Infrastructure platforms (ECHO), digital systems (FlexSus), and academic support (EFFORT).
- Policy frameworks for SPS compliance, trade harmonization, and investment incentives.

**Activities**

- Establish regional coordination platforms and national CEHA chapters.
- Develop and implement production clusters and aggregation hubs.
- Facilitate access to cold storage, logistics, and post-harvest infrastructure.
- Promote adoption of climate-smart horticultural practices and technologies.
- Support SMEs and cooperatives with technical assistance, market linkages, and financing.
- Harmonize food safety, quality, and phytosanitary standards across borders.
- Deliver vocational training and capacity building for women, youth, and smallholders.
- Launch digital platforms for traceability, market intelligence, and trade facilitation.

**Outputs**

- Operational horticulture clusters with integrated infrastructure and services.
- Increased availability of certified, high-quality horticultural inputs.
- Strengthened capacity of SMEs, cooperatives, and producer groups.
- Improved compliance with SPS and export standards.
- Enhanced digital systems for value chain coordination and traceability.
- Expanded access to finance and investment for horticulture actors.

**Outcomes**

- Increased productivity and profitability in fruit and vegetable value chains.
- Reduced post-harvest losses and improved product quality.
- Greater intra-regional and international trade in horticultural products.
- Enhanced resilience to climate change through sustainable practices.
- More inclusive participation of women and youth in horticulture.

- Strengthened public-private partnerships and regional policy alignment.

**Impact**

- A modern, competitive, and inclusive horticulture sector that drives rural income growth, job creation, and improved nutrition across Eastern and Southern Africa.

**Assumptions and Risks**

- Assumes sustained political support and regional cooperation.
- Relies on private sector engagement and access to finance.
- Risks include infrastructure delays, market volatility, and regulatory fragmentation.
- Mitigation includes phased implementation, blended financing, and strong stakeholder coordination.

## Other Items

These programmes are not implemented in isolation. They are embedded within a broader delivery platform that includes:

- **ECHO**, a modular infrastructure system that provides renewable energy, clean water, waste recycling, and cold storage. ECHO units are designed to be deployed in rural production clusters, enabling smallholder farmers to access essential services that are otherwise unavailable or unreliable.
- **FlexSus**, a university-developed decision-support system that integrates real-time data from sensors, satellites, and field reports. It enables evidence-based planning, resource optimization, and climate risk mitigation at both local and regional levels.
- **The Global Social Impact Alliance (GSIA)**, which facilitates public-private partnerships and blended financing. GSIA plays a critical role in mobilizing capital, structuring investment vehicles, and ensuring that private sector participation aligns with social and environmental goals.
- **The Integrated National Financing Framework (INFF)**, which serves as the programme's financial and governance backbone. Coordinated by ACTESA, the INFF provides a transparent, compliant, and regionally harmonized mechanism for mobilizing and managing funds across multiple jurisdictions.
- **Academic and research institutions**, including Uppsala University and other Nordic and African universities, which contribute through the EFFORT framework. These institutions embed PhD students and researchers into implementation teams, ensuring that the programme is continuously informed by scientific evidence and global best practices.
- **Multilateral partners**, such as the African Development Bank (AfDB), UNDP, FAO, and SIDA, which provide technical expertise, policy alignment, and catalytic funding. Their involvement lends credibility, scale, and strategic coherence to the programme.

Together, these programmes, platforms, and partnerships form the operational architecture of the ACTESA SFPSEI. They represent not only the tools required to achieve impact, but also the values that underpin the initiative: collaboration, innovation, inclusion, and sustainability.

# 7. What Assumptions Are We Making?

The success of the ACTESA SFPSEI is contingent upon a series of foundational assumptions—conditions that are expected to hold true throughout the programme's lifecycle. These assumptions reflect both the enabling environment and the operational realities within which the programme is designed to function. While they are informed by current trends and stakeholder commitments, they also represent areas of potential vulnerability that require ongoing attention and mitigation.

## Key Assumptions

1. **Political Will and Regional Alignment**
    - Member states will continue to support ACTESA's mandate and actively participate in policy harmonization efforts.
    - Governments will prioritize agricultural transformation within their national development agendas and allocate resources accordingly.
    - Regional institutions such as COMESA, EAC, and AfDB will maintain their commitment to collaborative implementation.
2. **Availability and Continuity of Funding**
    - Development partners, including AfDB, SIDA, UNDP, and FAO, will provide sustained financial and technical support.
    - Private financiers engaged through GSIA and DVGuilford will uphold their investment commitments.
    - The Integrated National Financing Framework (INFF) will be accepted and operationalized as a credible mechanism for resource mobilization.
3. **Institutional Capacity and Coordination**
    - ACTESA and COMESA will maintain the technical and administrative capacity to coordinate multi-country, multi-sectoral implementation.
    - National ministries and local institutions will be able to absorb and execute programme components effectively.
    - Academic and research partners will remain engaged and responsive to implementation needs.
4. **Community Engagement and Local Ownership**
    - Smallholder farmers, cooperatives, and SMEs will be willing and able to participate in training, financing, and infrastructure deployment.
    - Local communities will embrace the programme's inclusive and circular development principles.
    - Gender and youth inclusion strategies will be culturally appropriate and locally supported.

5. **Technological Feasibility and Scalability**
    - ECHO infrastructure modules will be technically viable and adaptable to diverse agro-ecological zones.
    - FlexSus and other digital systems will be interoperable across regions and accessible to local users.
    - Data collection and monitoring tools will function reliably in low-connectivity environments.
6. **Legal and Regulatory Stability**
    - Member states will uphold legal agreements and regulatory reforms initiated under COMSHIP, COMFREP, COMBIHAP, COMBIP, and CEHA.
    - TrustFi's compliance protocols will be recognized and respected across jurisdictions.
    - Project-level governance structures will be sufficient to mitigate risks in high-corruption or fragile states.

## Risks and Mitigation Strategies

While these assumptions provide a foundation for planning, the programme also acknowledges several risks that could undermine progress:

- **Risk: Political instability or policy reversal in member states.**
  *Mitigation:* Strengthen regional coordination through COMESA and ACTESA; embed programme components in national strategies.
- **Risk: Delays or shortfalls in funding.**
  *Mitigation:* Diversify funding sources; activate INFF early; use phased implementation to manage cash flow.
- **Risk: Limited institutional capacity at local levels.**
  *Mitigation:* Invest in capacity building; deploy technical assistance; use train-the-trainer models.
- **Risk: Resistance to change or low community uptake.**
  *Mitigation:* Conduct participatory planning; tailor interventions to local contexts; ensure early wins and visible benefits.
- **Risk: Technological failure or incompatibility.**
  *Mitigation:* Pilot ECHO modules in diverse settings; maintain technical support teams; adapt systems based on feedback.
- **Risk: Legal disputes or non-compliance.**
  *Mitigation:* Use TrustFi protocols; establish clear contracts and dispute resolution mechanisms; maintain third-party oversight.

By proactively identifying these assumptions and risks, the ACTESA SFPSEI positions itself to navigate complexity with resilience and foresight. The Theory of Change remains a living framework—one that evolves in response to real-world conditions while staying anchored in its core vision of inclusive, sustainable, and climate-resilient agricultural development.

## 8. Outreach and Intake

For the ACTESA SFPSEI to succeed, it must not only be technically sound and institutionally supported—it must also be deeply rooted in the communities it seeks to serve. Outreach and intake are therefore not peripheral activities; they are central to the programme's legitimacy, inclusivity, and long-term sustainability. This chapter outlines how the programme will engage stakeholders, build trust, and ensure that participation is broad-based, equitable, and responsive to local realities.

The outreach strategy begins with a commitment to community engagement at every stage of implementation. From the initial identification of production clusters to the deployment of ECHO infrastructure and the delivery of vocational training, local voices will be actively involved in shaping priorities, identifying needs, and co-designing solutions. This participatory approach ensures that interventions are not only contextually appropriate but also owned by the people they are meant to benefit.

To support this, the programme will conduct stakeholder mapping in each target region. This process will identify key actors across the agricultural value chain—smallholder farmers, cooperatives, women's groups, youth networks, local authorities, traditional leaders, and private sector partners. By understanding the roles, interests, and capacities of these stakeholders, the programme can tailor its engagement strategies and ensure that no group is left behind.

Special attention will be given to inclusion and accessibility. Outreach materials will be translated into local languages and adapted for different literacy levels. Community meetings will be held at times and locations that are convenient for women and marginalized groups. Digital tools will be complemented by in-person facilitation to ensure that those without internet access are not excluded.

The intake process will be supported by a suite of digital platforms and tools, including mobile applications, SMS-based registration systems, and online portals. These tools will allow individuals and organizations to express interest, apply for training or financing, and receive updates about programme activities. They will also serve as feedback channels, enabling real-time communication between implementers and participants.

To ensure transparency and accountability, all outreach and intake activities will be documented and monitored. Participation data will be disaggregated by gender, age, and location, allowing the programme to track progress toward its inclusion targets and adjust strategies as needed.

Ultimately, the goal of outreach and intake is not just to inform or recruit—it is to build a shared sense of purpose and partnership. By placing communities at the center of the programme, ACTESA SFPSEI affirms its belief that sustainable development is not something done to people, but something done with them.

## 9. Workforce Training

Vocational training is not a peripheral component of the ACTESA SFPSEI—it is one of its most vital engines. It is through the development of human capital that the programme transforms infrastructure into opportunity, policy into practice, and ambition into impact. This chapter outlines how ACTESA, in partnership with EUSL and other institutions, will build a skilled, empowered, and future-ready workforce across the COMESA region and its Nordic collaborators.

At the heart of this effort is the recognition that agricultural transformation requires more than access to inputs and markets—it demands a workforce equipped with the knowledge, tools, and confidence

to lead change. The programme's vocational training strategy is therefore designed to be inclusive, modular, and deeply embedded in local contexts, while also drawing on global expertise and innovation.

**Training will be delivered across multiple domains, including:**

- **Climate-smart agriculture**, with a focus on sustainable practices, soil health, and crop diversification.
- **Renewable energy systems**, particularly solar and hydrogen technologies deployed through the ECHO platform.
- **Water management**, including purification, irrigation, and conservation techniques.
- **Post-harvest handling and circularity**, such as composting, cold storage, and waste-to-value systems.
- **Digital literacy and decision-support**, using tools like FlexSus to enable data-driven farming and resource optimization.

These programmes will be delivered through a combination of classroom instruction, field-based learning, and digital platforms. Importantly, they will be tailored to the needs of different groups—women, youth, smallholder farmers, and agro-entrepreneurs—ensuring that training is not only accessible but also relevant and empowering.

**Delivery Model**

- Classroom instruction, field-based learning, and digital platforms
- Tailored modules for women, youth, smallholder farmers, and agro-entrepreneurs
- Nordic-African collaboration via EUSL, embedding PhD and master's students as community trainers through the EFFORT framework

A unique feature of the ACTESA SFPSEI training model is its **Nordic-African collaboration**, led by the European Social Label (EUSL). Drawing on its founding mission to advance vocational education, EUSL will facilitate partnerships between African institutions and Nordic universities, employment agencies, and technical schools. This includes the deployment of **PhD and master's students** as community trainers, embedded within local projects through the EFFORT framework. These students will serve as knowledge bridges, translating academic research into practical solutions and building capacity from the ground up.

Training will also be linked to employment pathways. Participants will be connected to job placement support, agribusiness incubation, and cooperative development. In Finland, for example, vocational training will be integrated into the ECHO Factory initiative in Kotka, creating jobs in green technology, logistics, and modular production—while also addressing demographic challenges in rural Nordic regions.

Monitoring and evaluation will be embedded in all training programmes, with data collected on participation, learning outcomes, and employment impact. This will allow for continuous improvement and ensure that training remains aligned with market needs and development goals.

To ensure accountability and continuous improvement, the following KPIs will be tracked:

- **Number of individuals trained**, disaggregated by:
    - Gender (target: ≥50% women)
    - Age (target: ≥60% youth under 35)
    - Region and training domain
- **Employment outcomes**:
    - **≥70% of trainees employed or self-employed** within 6 months of completing training
    - **≥25% increase in average income** among trainees within 12 months
- **Entrepreneurship outcomes**:
    - Number of new enterprises or cooperatives launched by graduates
    - % of trainees accessing EMN financing or ECHO starter packages

In sum, workforce training under the ACTESA SFPSEI is not just about skills—it is about dignity, agency, and transformation. It is about equipping individuals to become leaders in their communities, innovators in their fields, and contributors to a more inclusive and resilient agricultural future.

## 10. Job Placement Support

Job creation is not a byproduct of the ACTESA SFPSEI—it is a deliberate outcome. The programme is designed to generate meaningful, dignified employment across the agricultural value chain, particularly for youth, women, and rural communities. This chapter outlines the mechanisms through which the programme will support job placement, enterprise development, and long-term economic empowerment.

At the core of this strategy is the understanding that employment in agriculture must go beyond subsistence. It must offer pathways to entrepreneurship, innovation, and upward mobility. To that end, the programme integrates job placement support into every stage of its implementation—from vocational training and cooperative development to infrastructure deployment and market access.

**Key Job Creation Targets**

- 25,000 direct jobs created through vocational training, ECHO deployment, agribusiness incubation, and cooperative development.
- 50,000 indirect jobs generated through value chain expansion, logistics, maintenance, and service provision.
- 60% of jobs targeted for youth (under 35) and at least 40% for women, with a focus on inclusive hiring practices.

One of the most powerful tools in this effort is the European Microfinance Network (EMN) bridge financing model. This mechanism enables agricultural cooperatives and producer organizations to access flexible, low-risk loans that are triggered by confirmed purchase agreements. Known as the "buyer-assurance" model, it ensures that financing is only activated when there is a guaranteed market for the product—thereby reducing risk for both lenders and borrowers.

**Economic Impact Indicators**

- Average income increase of 25–40% among individuals placed in jobs through the programme.
- At least 50% of new jobs created in green sectors, including:
    - Renewable energy (solar, hydrogen)
    - Water purification and irrigation
    - Circular economy services (waste-to-value, composting)
- Job retention rate of 80% after 12 months, supported by mentorship and follow-up systems.

Through this model, cooperatives can secure financing to invest in shared tools, technologies, and infrastructure—such as ECHO modules, cold storage units, or irrigation systems. These assets are not only critical for productivity; they also create jobs in installation, maintenance, logistics, and processing. Moreover, the shared ownership model fosters collaboration, accountability, and equitable benefit-sharing among cooperative members.

To complement this, the programme will offer matching grants to de-risk early-stage investments and incentivize innovation. These grants will be targeted at youth-led enterprises, women's cooperatives, and SMEs that demonstrate potential for job creation and value addition. Technical assistance will be provided to help applicants develop bankable business plans, navigate regulatory requirements, and access markets.

The programme will also establish agribusiness incubators and mentorship networks to support new entrepreneurs. These platforms will connect emerging businesses with experienced professionals, investors, and technical experts, creating a supportive ecosystem for growth. In Finland, for example, job placement will be integrated into the ECHO Factory initiative in Kotka, where vocational training will lead directly to employment in green manufacturing, logistics, and export operations.

Digital tools will play a key role in matching trained individuals with job opportunities. Online platforms and mobile applications will be used to advertise vacancies, facilitate applications, and track employment outcomes. These systems will be linked to the programme's monitoring and evaluation framework, allowing for real-time data collection and adaptive management.

**Placement Mechanisms**

- Buyer-assurance model via EMN: Financing is activated only when market demand is confirmed, reducing risk and ensuring sustainability.
- Matching grants for youth- and women-led enterprises to stimulate early-stage job creation.
- Digital job-matching platforms to connect trained individuals with employers, cooperatives, and public sector opportunities.
- ECHO Factory in Finland as a transcontinental job hub, linking Nordic green manufacturing with African deployment and training.

Ultimately, job placement support under the ACTESA SFPSEI is about more than employment—it is about building livelihoods, strengthening communities, and creating a new generation of agricultural leaders. By combining financing, training, infrastructure, and mentorship, the programme offers a comprehensive model for inclusive and sustainable job creation across the region.

# 11. Follow-Up and Mentorship

Training alone is not enough. The true measure of success lies in what happens after the training ends—when individuals return to their farms, cooperatives, or enterprises and begin the difficult work of applying what they've learned. It is in this critical transition from learning to doing that many fall through the cracks. For this reason, the ACTESA SFPSEI places a strong emphasis on follow-up and mentorship, recognizing it as a pillar of long-term impact and inclusion.

The programme envisions a robust, multi-tiered mentorship ecosystem that supports participants beyond the classroom. This begins with the creation of mentorship networks—structured relationships between experienced professionals, technical experts, and newly trained individuals. These networks will be organized at both national and regional levels, with mentors drawn from academia, the private sector, and successful alumni of previous programmes. Mentors will provide guidance on technical challenges, business development, and personal growth, offering a steady hand as participants navigate the complexities of implementation.

To ensure continuity, the programme will establish an alumni tracking system that follows each participant's journey after training. This system will collect data on employment status, enterprise development, income changes, and ongoing support needs. It will also serve as a platform for peer-to-peer learning, enabling alumni to share experiences, troubleshoot challenges, and celebrate successes. Over time, this network will evolve into a community of practice—a living repository of knowledge, innovation, and solidarity.

**Monitoring and Feedback**

- Employment outcomes tracked through the MEL and EFFORT frameworks.
- Disaggregated data on job type, sector, gender, age, and income change.
- Quarterly satisfaction surveys with placed individuals to assess job quality, income stability, and career progression.

The follow-up strategy also includes targeted interventions for at-risk individuals—those who, despite completing training, struggle to find employment, access finance, or integrate into cooperatives. These individuals will be identified through regular check-ins and data monitoring, and offered tailored support such as refresher training, business coaching, or re-placement into alternative opportunities. The goal is to ensure that no one is left behind, and that every participant has a fair chance to succeed.

Digital tools will play a key role in enabling this system. Mobile applications and SMS platforms will be used to maintain contact, deliver updates, and collect feedback. These tools will be integrated into the programme's broader monitoring and evaluation (M&E) framework, allowing for real-time insights into

# 12. Circularity and Climate Resilience

Agricultural transformation in the COMESA region cannot be achieved without confronting the dual challenges of environmental degradation and climate vulnerability. The ACTESA SFPSEI responds to these challenges not with isolated mitigation efforts, but with a systemic approach rooted in circularity, regeneration, and resilience. This chapter outlines how the programme integrates climate-smart practices and circular economy principles into its core design—ensuring that growth is not only sustainable, but restorative.

At the center of this strategy is the ECHO platform, a modular infrastructure system that delivers renewable energy, clean water, and waste recycling to agricultural communities. ECHO units are designed to operate off-grid, using solar panels and hydrogen electrolysers to generate power, and advanced purification systems to treat and store water. These technologies reduce dependence on fossil fuels, mitigate water scarcity, and enable year-round irrigation—especially critical in drought-prone regions.

Waste is not treated as a byproduct, but as a resource. Organic agricultural waste is repurposed into compost and bioenergy, closing the nutrient loop and reducing environmental impact. Post-harvest residues are processed into value-added products, such as packaging materials or soil enhancers. This circular model not only reduces pollution and greenhouse gas emissions, but also creates new income streams and employment opportunities.

**Quantified Environmental Benefits**

- Up to 50,000 tons of $CO_2$ emissions avoided annually through the replacement of diesel generators and reduction in deforestation.
- Over 10 million liters of water purified and reused per year, with each ECHO unit capable of processing 20,000–30,000 liters/month.
- 30–50% reduction in fuelwood use among participating households due to access to solar energy.
- 40% reduction in agricultural waste through composting and waste-to-value systems.

**Household-Level Impact**

- 70% of households in ECHO-supported zones report improved access to clean water within the first year of deployment.
- 60% of households experience improved energy reliability and reduced costs.
- Improved health outcomes, including a 30–40% reduction in waterborne diseases, due to access to safe drinking water and sanitation.
- New income streams created through recycling, composting, and maintenance of ECHO systems.

**Climate-Smart Agriculture and Ecosystem Restoration**

- Promotion of agroecological practices such as intercropping, agroforestry, and reduced tillage.
- Deployment of drought-tolerant crop varieties and early warning systems for climate risk mitigation.
- Restoration of 10,000 hectares of degraded land through regenerative farming and reforestation.

**Monitoring and Optimization**

To monitor and optimize these systems, the programme deploys FlexSus, a decision-support tool developed in collaboration with Nordic universities. FlexSus integrates real-time data from sensors, satellites, and field reports to track resource use, emissions, and climate risks. It enables farmers, cooperatives, and policymakers to make informed decisions about irrigation schedules, energy consumption, and crop selection—thereby enhancing both efficiency and resilience.

Use of FlexSus, a decision-support tool integrating real-time data from sensors, satellites, and field reports to:

- Track emissions, water use, and energy efficiency
- Optimize irrigation and crop planning
- Support adaptive responses to climate shocks

Training in circular practices is embedded in the vocational curriculum. Farmers learn how to compost, recycle, and manage resources sustainably. Youth are trained in the installation and maintenance of solar panels, biogas units, and water systems. Women's groups are supported to lead local recycling initiatives and manage community-based energy hubs.

The programme also promotes the adoption of climate-smart agriculture, including intercropping, agroforestry, reduced tillage, and the use of drought-tolerant crop varieties. These practices are tailored to local agro-ecological zones and supported by early warning systems that help communities anticipate and respond to climate shocks.

Circularity and climate resilience are not treated as technical add-ons—they are embedded in the programme's logic, infrastructure, and culture. By integrating environmental stewardship into every layer of implementation, ACTESA SFPSEI ensures that agricultural development strengthens ecosystems rather than depleting them. It builds communities that are not only productive, but prepared—able to adapt, recover, and thrive in the face of a changing climate.

## 13. Implementation in Sweden/Finland

The ACTESA SFPSEI is not only a regional African initiative—it is also a bridge between continents. The programme's implementation in Sweden and Finland represents a bold and strategic extension of its vision: to create a transcontinental ecosystem of innovation, production, and skills development that links African agricultural transformation with European industrial capacity and vocational excellence.

At the heart of this European implementation is the ECHO Factory in Kotka, Finland. Positioned in a coastal logistics hub with direct access to global shipping routes, the Kotka site is envisioned as a modular production and training center for ECHO infrastructure. Here, renewable energy systems, water purification units, cold storage modules, and other components will be manufactured, assembled, and prepared for export to COMESA countries. This facility will serve as a physical anchor for the programme's northern corridor—connecting Nordic engineering and green technology with African agricultural needs.

But the Kotka factory is more than a production site. It is also a vocational training hub, designed to address Finland's rural labor market challenges while contributing to Africa's skills development agenda. Through partnerships with Finnish public employment agencies, local authorities, and Nordic universities, the factory will offer training in green manufacturing, logistics, and modular construction. These programmes will be inclusive, targeting underemployed populations in Finland while also preparing trainers and technicians for deployment in Africa.

This dual-purpose model—production and training—embodies the EUSL philosophy of "Charity as a Business." It creates jobs, builds capacity, and generates value on both sides of the partnership. It also ensures that the ECHO systems deployed in Africa are not only technically sound but socially embedded, with a workforce that understands their design, function, and purpose.

Logistically, the Kotka port offers a strategic advantage. From this hub, ECHO modules can be shipped directly to African ports or routed through intra-EU logistics networks for further customization. This streamlines deployment, reduces costs, and enhances traceability. It also allows for the integration of European quality standards and compliance protocols into every unit produced.

The implementation in Sweden and Finland is further supported by institutional partnerships with the African Development Bank, the Finnish Ministry for Foreign Affairs, and private investors such as DVGuilford. These actors have expressed strong support for the Kotka model, recognizing its potential to demonstrate best practices in cross-border cooperation, blended financing, and circular economy principles.

In sum, the Sweden/Finland implementation is not a side project—it is a strategic pillar of the ACTESA SFPSEI. It brings together infrastructure, education, logistics, and diplomacy in a single, coherent model. It shows what is possible when development is approached not as a transaction, but as a shared journey—one that begins in the ports and classrooms of the north and finds its purpose in the fields and communities of the south.

## 14. Strategic Governance and Financing Architecture

The ACTESA SFPSEI is not only a technical programme—it is a governance innovation. Its ambition to transform agriculture across the COMESA region is matched by an equally ambitious effort to reimagine how development is financed, coordinated, and held accountable. This chapter introduces the strategic architecture that underpins the programme's implementation, with a focus on the Integrated National Financing Framework (INFF), the Eight-Party Agreement, and the ACTESA Power Play.

At the center of this architecture is the Integrated National Financing Framework (INFF)—a regionally coordinated, compliance-based financing mechanism designed to unlock and manage capital for agricultural transformation. Developed in response to the funding constraints faced by many COMESA member states, the INFF provides a structured pathway for investment that is transparent, traceable, and aligned with both national and regional priorities. It enables countries to access blended finance, coordinate donor contributions, and de-risk private sector participation through shared governance and legal safeguards.

The INFF is not a theoretical construct—it is already being operationalized through the Eight-Party Agreement, a multilateral cooperation framework that brings together COMESA, EUSL, AfDB, SIDA, EAC, FAO, UNDP, and private financiers. This agreement formalizes the roles and responsibilities of each actor, ensuring that implementation is politically legitimate, financially viable, and developmentally relevant. It also provides a diplomatic platform for coordination, advocacy, and resource mobilization at the highest levels.

Within this framework, ACTESA plays a dual role: as both a regional coordinator and a programme holder. Through the ACTESA Power Play, the institution is being structurally upgraded to serve not only as a policy body but also as a trusted implementation partner capable of managing large-scale, multi-country investments. This includes the authority to oversee INFF operations, manage compliance protocols, and interface with both public and private financiers.

The Global Social Impact Alliance (GSIA) supports this architecture by facilitating public-private partnerships and structuring investment vehicles. GSIA acts as a bridge between development goals and commercial capital, ensuring that private sector engagement is aligned with social and

environmental outcomes. It also supports the design of tiered funding models, matching grants, and guarantee instruments that reduce risk and incentivize innovation.

Key development partners such as SIDA, AfDB, UNDP, and FAO play critical roles in this ecosystem. SIDA is positioned to provide guarantees and concessional finance, particularly for EMN-backed bridge financing. AfDB is expected to anchor the programme within its Advanced Procurement Process (APP), unlocking access to sovereign and non-sovereign lending. UNDP and FAO contribute technical expertise, policy alignment, and institutional legitimacy, particularly in areas of climate resilience, food systems, and inclusive governance.

Together, these elements form a governance and financing architecture that is as integrated as the programme itself. It is designed not only to fund development, but to structure it—to ensure that every dollar invested is aligned with measurable outcomes, every actor is accountable, and every community has a voice. In doing so, the ACTESA SFPSEI sets a new standard for how agricultural transformation can be financed and governed at scale.

## 15. Academic and Monitoring Integration (EFFORT)

In a programme as complex and cross-sectoral as the ACTESA SFPSEI, the ability to measure, validate, and continuously improve is not a luxury—it is a necessity. To meet this need, the programme integrates a unique academic and monitoring framework known as EFFORT (Evidence Framework for Field-Oriented Research and Traceability), developed in partnership with Uppsala University and other Nordic institutions.

EFFORT is not a standalone project. It is a methodological backbone that supports the entire SFPSEI ecosystem by embedding academic rigor, traceability, and real-time learning into every stage of implementation. Its purpose is to ensure that the programme is not only delivering results, but also generating evidence, building knowledge, and adapting to changing realities on the ground.

At its core, EFFORT enables quantifiable, traceable, and academically validated impact. It does this by embedding PhD and master's students—referred to as "sandwich researchers"—into programme activities across Africa and Europe. These students work directly with implementing partners, cooperatives, and local institutions, collecting data, conducting field research, and feeding insights back into programme design. Their work bridges the gap between theory and practice, ensuring that implementation is grounded in evidence and that research is informed by real-world challenges.

EFFORT also provides a framework for monitoring and evaluation (M&E) that goes beyond traditional reporting. It integrates with digital tools like FlexSus to collect real-time data on resource use, emissions, productivity, and social outcomes. This data is then analyzed through academic lenses to assess effectiveness, identify bottlenecks, and recommend course corrections. The result is a dynamic, learning-oriented system that evolves with the programme.

Importantly, EFFORT is designed to be inclusive and participatory. It recognizes that knowledge does not only reside in universities, but also in communities, cooperatives, and local institutions. As such, it promotes co-creation of research agendas, participatory data collection, and shared ownership of findings. This approach builds trust, enhances relevance, and ensures that monitoring is not extractive but empowering.

The framework also plays a critical role in de-risking investment. By providing independent, academically validated evidence of impact, EFFORT strengthens the credibility of the programme in the

eyes of donors, financiers, and regulators. It supports compliance with international standards and provides a transparent basis for results-based financing and performance-linked disbursements.

In short, EFFORT transforms monitoring from a bureaucratic obligation into a strategic asset. It turns data into insight, insight into action, and action into learning. It ensures that the ACTESA SFPSEI is not only doing things right, but also doing the right things—and doing them better over time.

## 16. Smallholder Integration and Financing

At the heart of the ACTESA SFPSEI lies a simple but urgent truth: smallholder farmers are the backbone of agriculture in the COMESA region, yet they remain largely excluded from the financial systems that could unlock their potential. Without access to affordable credit, insurance, or investment capital, millions of farmers are unable to adopt modern technologies, scale their operations, or withstand climate shocks. This financing gap is one of the most persistent barriers to agricultural transformation—and one that the ACTESA–EMN collaboration is designed to overcome.

The partnership between ACTESA and the European Microfinance Network (EMN) introduces a powerful, community-centered financing model into the SFPSEI framework. EMN, with its network of over 150 microfinance institutions and experience in inclusive finance across Europe, brings the tools, expertise, and investor networks needed to reach the last mile. ACTESA, in turn, provides the regional mandate, policy alignment, and access to cooperatives and commodity networks across 21 COMESA member states.

Together, they propose a joint microfinance and trade financing mechanism that channels capital directly to smallholder cooperatives, vocationally trained entrepreneurs, and value chain hubs. This mechanism is built on a purchase-guaranteed microcredit model, where loans are only activated once a buyer contract is secured—dramatically reducing risk for both lenders and borrowers. It also enables shared ownership of tools and infrastructure, such as ECHO modules, through group-based lending and cooperative structures.

The financing model is embedded within EUSL's Public-Private Partnership (PPP) System, ensuring that all transactions are governed by robust compliance protocols, co-signatory mechanisms, and harmonized reporting standards. This guarantees transparency, fiduciary integrity, and alignment with both African and European regulatory frameworks, including GDPR and AfCFTA protocols.

**Key Financial Inclusion Metrics**

- ≥60% of smallholders accessing credit for the first time through EMN-backed microfinance.
- Loan repayment rate target: ≥85% within 24 months.
- Business survival rate: ≥70% of financed enterprises still operational after 2 years.
- ≥50% of loans disbursed to women-led enterprises.
- ≥65% of financed projects leading to direct job creation within cooperatives or SMEs.

The collaboration also prioritizes entrepreneurial empowerment. Graduates of SDEP's vocational training programmes become eligible for starter packages—comprising tools, micro-loans, and mentorship—while being registered within the ECHO system for traceability and support. Women and youth are explicitly targeted, with financing tailored to their needs and realities.

**Inclusive Financing Mechanism**

- Purchase-guaranteed microcredit model: Loans are activated only upon confirmed buyer contracts, reducing risk and ensuring market alignment.
- Group-based lending: Encourages shared ownership of ECHO modules and cooperative infrastructure.
- Starter packages for vocational training graduates: Tools, micro-loans, and mentorship bundled with traceability via the ECHO system.

A strategic pilot phase will be launched in selected COMESA countries where ACTESA and SDEP are already active. This will allow for real-time learning, impact evaluation, and refinement of the model before full-scale rollout. The goal is to reach over 50,000 smallholder farmers and micro-entrepreneurs within five years, creating a replicable EU–Africa funding mechanism that can be scaled across the continent.

To operationalize this collaboration, a dedicated budget line of $500,000 is proposed within the existing SFPSEI framework—potentially embedded in CEHA or COMFREP. This funding will cover programme design, stakeholder onboarding, instrument development, and pilot implementation.

Ultimately, this chapter is not just about finance—it is about empowerment. It is about giving farmers the tools to invest in their futures, cooperatives the means to grow, and communities the confidence to lead. By bridging the last-mile financing gap, the ACTESA–EMN partnership transforms smallholders from beneficiaries into builders of Africa's agricultural future.

**Social and Economic Impact**

- Increased household income by 25–40% among financed smallholders.
- Improved resilience to climate shocks through access to irrigation, storage, and renewable energy.
- Enhanced gender equity in rural finance and enterprise development.
- Strengthened cooperative governance and financial literacy through embedded training.

## EU-Side Theory of Change: Driving Business and Innovation

The ACTESA SFPSEI is not only transforming African agriculture—it is also catalyzing innovation, job creation, and industrial revitalization in Europe, particularly in rural and coastal regions.

**Inputs**

- Nordic engineering expertise and green technology (solar, hydrogen, water purification)
- EU-based manufacturing and logistics infrastructure (e.g., ECHO Factory in Kotka, Finland)
- Public-private partnerships and vocational institutions (e.g., Uppsala University, Finnish employment agencies)

**Activities**

- Production and assembly of ECHO modules and green tech components in Europe
- Vocational training in modular construction, logistics, and green manufacturing
- Export of infrastructure to COMESA countries via EU-Africa trade corridors

**Outputs**

- New jobs created in Europe: Green manufacturing, logistics, compliance, and training
- Upskilled workforce in rural Nordic regions, addressing demographic and employment challenges
- Increased exports of EU-certified green technologies and services
- Strengthened EU-Africa trade and diplomatic ties

**Outcomes**

- Revitalized rural economies in Europe through sustainable industrial activity
- Enhanced EU leadership in global green innovation and development finance
- Creation of a transcontinental circular economy ecosystem

**Impact**

- A replicable EU–Africa development model that aligns business growth with social impact
- Strengthened geopolitical and economic cooperation between the EU and COMESA
- Demonstrated success of "Charity as a Business" as a scalable development philosophy

## 17. Legal and Compliance Safeguards

As the ACTESA SFPSEI expands across jurisdictions with varying legal systems, regulatory capacities, and risk profiles, the need for a robust, transparent, and interoperable compliance framework becomes paramount. To meet this need, the programme integrates a dedicated legal and compliance architecture developed in partnership with TrustFi, a Helsinki-based legal advisory firm specializing in cross-border governance and financial integrity.

TrustFi's role is to ensure that the programme can operate effectively—even in high-risk or low-capacity jurisdictions—without compromising on fiduciary standards, legal accountability, or investor confidence. This is achieved by constructing a project-level compliance envelope: a legal framework that operates independently of sovereign governance systems, yet remains fully aligned with national laws, EU regulations, and African Union protocols.

At the core of this framework is a minimum compliance stack, which includes:

- GDPR-aligned data protection and traceability protocols.
- Transparent procurement and due diligence procedures.
- Tiered legal safeguards for financial flows, asset ownership, and reporting.
- Third-party audit mechanisms and dispute resolution pathways.

These protocols are embedded into the programme's operational systems and financial instruments, ensuring that every transaction, contract, and disbursement is legally sound and traceable. This is particularly critical for the INFF and EMN financing mechanisms, which rely on multi-party coordination and cross-border fund flows.

TrustFi works closely with the Global Social Impact Alliance (GSIA) to integrate these safeguards into the broader governance architecture. GSIA provides the institutional interface for public-private

partnerships, while TrustFi ensures that all legal instruments—MoUs, contracts, guarantees, and compliance protocols—are harmonized, enforceable, and aligned with international standards. Together, they create a seamless legal foundation for implementation, investment, and oversight.

Importantly, this framework is not static. It is designed to evolve with the programme, adapting to new risks, regulatory changes, and operational realities. TrustFi remains engaged as a long-term legal advisor, supporting the development of a SDEP Legal Protocol—a standardized compliance toolkit that can be deployed across all programme zones, regardless of national context.

This approach allows the ACTESA SFPSEI to operate in fragile or high-risk environments without exposing partners to undue legal or reputational risk. It also enhances the programme's credibility with donors, financiers, and regulators, making it easier to attract funding, secure guarantees, and scale operations.

In essence, the TrustFi framework transforms compliance from a constraint into a strategic enabler. It ensures that the programme is not only ambitious in its goals, but also disciplined in its execution—building trust, protecting stakeholders, and laying the legal groundwork for sustainable, cross-continental impact.

## 18. Monitoring, Evaluation, and Learning (MEL)

The ACTESA SFPSEI is a complex, multi-country programme that demands more than traditional monitoring—it requires a dynamic, learning-oriented system that can track progress, validate impact, and adapt to changing realities. The Monitoring, Evaluation, and Learning (MEL) framework is designed to meet this need, ensuring that the programme remains accountable, inclusive, and continuously improving.

At its core, the MEL system is built around a set of Key Performance Indicators (KPIs) that reflect the programme's strategic goals. These include metrics on agricultural productivity, trade volumes, job creation, financial inclusion, and environmental sustainability. All indicators are disaggregated by gender, age, and geography, allowing for targeted analysis and ensuring that the programme delivers equitable benefits to women, youth, and marginalized communities.

Data is collected through a combination of digital tools (e.g. FlexSus), field surveys, and academic research embedded through the EFFORT framework. This multi-source approach ensures both breadth and depth of insight. Real-time dashboards allow implementers to monitor progress, while periodic evaluations provide space for reflection, learning, and course correction.

Importantly, MEL is not just about accountability—it is about adaptive learning. Findings are shared across partners, communities, and institutions, creating feedback loops that inform decision-making at every level. This ensures that the programme remains responsive to local needs, emerging risks, and new opportunities.

## 19. Risk Management and Mitigation

Every transformative programme carries risk. The ACTESA SFPSEI acknowledges this reality and embeds a proactive, structured approach to risk management across its design and implementation.

**Risks are categorized into four primary domains:**

- Environmental risks, such as droughts, floods, and climate variability, which may disrupt agricultural production or infrastructure deployment.

- Social risks, including exclusion of vulnerable groups, community resistance, or unintended gender disparities.
- Financial risks, such as funding shortfalls, currency volatility, or repayment defaults in microfinance schemes.
- Political and institutional risks, including policy reversals, regulatory delays, or governance breakdowns in fragile states.

**To address these, the programme employs a suite of mitigation strategies:**

- Environmental risks are managed through climate-smart agriculture, early warning systems, and resilient infrastructure (e.g. solar-powered irrigation, modular ECHO units).
- Social risks are mitigated through inclusive design, participatory planning, and gender/youth-targeted interventions.
- Financial risks are reduced through blended finance, guarantees (e.g. from SIDA), and the buyer-assurance model used in EMN bridge financing.
- Political risks are addressed through regional coordination (via COMESA and ACTESA), legal safeguards (via TrustFi), and project-level governance structures that can operate independently of national volatility.

Institutional safeguards are further reinforced by the INFF and GSIA frameworks, which ensure transparency, compliance, and multi-stakeholder oversight. Regular risk assessments are conducted as part of the MEL cycle, allowing for early detection and rapid response.

Together, these systems ensure that the ACTESA SFPSEI is not only ambitious in its goals, but resilient in its execution—capable of navigating complexity, managing uncertainty, and delivering impact at scale.

## Summary: Theory of Change – ACTESA SFPSEI

The ACTESA Staple Food Programme for SDEP and ECHO Implementation (SFPSEI) is a flagship initiative designed to transform agriculture across the COMESA region through a systems-based, inclusive, and climate-resilient approach. Anchored in COMESA's regional strategy and aligned with Agenda 2063 and 2074, the programme integrates five core agricultural components—seeds, fertilizers, biotechnology, bioprotectants, and horticulture—into a unified framework supported by modular infrastructure (ECHO), vocational training, and innovative financing.

The Theory of Change outlines a clear pathway from inputs to impact, emphasizing harmonized policy, capacity building, infrastructure deployment, and inclusive financing. It introduces the Integrated National Financing Framework (INFF) as a governance and investment backbone, supported by the Eight-Party Agreement and ACTESA Power Play. Strategic partnerships with AfDB, SIDA, UNDP, FAO, and private financiers ensure both legitimacy and scalability.

Key innovations include:

- Vocational training linked to job placement and entrepreneurship.
- Bridge financing through EMN to empower cooperatives and smallholders.
- Circular economy practices and climate-smart agriculture.

- Academic integration via the EFFORT framework for monitoring and learning.
- Legal safeguards through TrustFi to ensure compliance and risk mitigation.

The programme is transcontinental in scope, with a European implementation hub in Kotka, Finland, serving as a production and training center for ECHO modules and green technology. This EU-Africa bridge reinforces the programme's commitment to shared value, mutual learning, and sustainable development.

Through its integrated design, the ACTESA SFPSEI aims to deliver measurable improvements in food security, trade, employment, and environmental resilience—while building a replicable model for agricultural transformation across Africa and beyond.