

Project Proposal Title:

Agricultural Extension Leadership Development and Improved Climate-Resilient Livelihoods in Ethiopia.

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1. Executive Summary

The International Federation of Red Cross and Red Crescent Societies (IFRC) has positioned nature-based solutions (NBS) as a core pillar of its 2030 Strategy, recognising healthy ecosystems as foundational to climate resilience and community wellbeing (IFRC, 2018). Building on this commitment, the Pan-African Tree Planting and Care Initiative mobilises 49 African National Societies to plant five billion trees by 2030, combining robust nursery systems with community-led agroforestry and continuous monitoring (IFRC, 2024b).

However, field experience in Ethiopia's Arsi Zone has revealed persistent gaps in implementation, such as overstretched technical teams, siloed mandates, and insufficient real-time data flows, which have contributed to irrigation canal failures and declining crop yields (Ayuda en Acción, 2023). These challenges expose a leadership deficit: while extension agents possess solid technical knowledge, many lack the adaptive management, collaborative problem-solving, and digital fluency needed to address complex rural development contexts effectively (Ministry of Agriculture, 2017; OECD, 2020).

This project proposes an integrated leadership development programme for Ethiopia's agricultural extension system to tackle these barriers. By 2031, the initiative aims to strengthen the leadership capacity of 15,000 extension agents and build climate-resilient livelihoods for two million smallholder farming households. The programme's design draws on proven strategies, including Five Whys and fishbone analysis for root-cause diagnosis (Conn, 2019), gender-transformative quotas and youth councils to ensure inclusive governance (OECD, 2020), and Lynch's (2018) strategic management cycle combined with PESTLE-SWOT for adaptive planning.

We will embed operational excellence through Lean Six Sigma methods, Kaizen sprints, and balanced scorecards, complemented by a mobile-first digital ecosystem anchored in the READY ERP platform and real-time GIS-enabled dashboards (Marr, 2015). By merging "thick data" from community insights with quantitative sensor feeds, the project ensures evidence-based decision-making at every level (Wang, 2016).

Together, this four-pillar framework—technical skill enhancement, leadership and decision-making, operational excellence, and digital fluency—will create a resilient, data-driven extension system capable of responding to Ethiopia's diverse agro-ecological challenges. Ultimately, the project aligns local innovation with global climate goals, transforming extension services from fragmented advisory bodies into agile co-creation platforms that drive sustainable, inclusive rural development (FAO, 2023; World Bank, 2022).

List of Abbreviations

AI—Artificial Intelligence

AAR—After-Action Review

BI—Business Intelligence

CA—Conservation Agriculture

CAM—Continuous Adaptive Management

CEO—Chief Executive Officer

CODA—CODA Financials accounting suite (ERP module mentioned alongside READY ERP)

CPD—Continuing Professional Development

CRGE—Climate-Resilient Green Economy

DMAIC—Define—Measure—Analyse—Improve—Control

ERP—Enterprise Resource Planning

ETL—Extract, Transform and Load

ETTO—Efficiency-Thoroughness Trade-Off

FAO—Food and Agriculture Organisation of the UN

FTC—Farmers' Training Centre

GIS—Geographic Information System

GRC—Governance, Risk and Compliance (context: agile project-governance stack)

HR—Human Resources

ICT—Information and Communication Technology

IFRC—International Federation of Red Cross and Red Crescent Societies

IWUA—Irrigation Water Users Association

KPI—Key Performance Indicator

M&E—Monitoring and Evaluation

MEL—Monitoring, Evaluation and Learning

OHI—Organisational Health Index

OECD—Organisation for Economic Co-operation and Development

PDCA—Plan—Do—Check—Act

PESTLE—Political, Economic, Social, Technological, Legal and Environmental analysis

PESTLE-SWOT—Combined PESTLE and SWOT strategic analysis

PMBOK—Project Management Body of Knowledge (PMI standard)

PMER—Planning, Monitoring, Evaluation and Reporting

PMI—Project Management Institute

PPME—Planning, Programming, Monitoring and Evaluation

PPP—Public-Private Partnership

RACI—Responsible, Accountable, Consulted and Informed

READY—READY ERP (IFRC's cloud-first ERP platform; acronym used as a product name)

RELMA—Regional Land Management Unit

RELP—Resilient Environment and Livelihoods Project

SAP—Systems, Applications and Products (enterprise software suite)

SDG—Sustainable Development Goal

SMART—Specific, Measurable, Achievable, Relevant, Time-bound targets

SMS—subject Specialist

SOP—Standard Operating Procedure

SWOT—Strengths, Weaknesses, Opportunities and Threats

TED—Technology, Entertainment and Design (TED Talks reference)

VUCA—Volatile, Uncertain, Complex and Ambiguous

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2. Professional Track

My professional journey in agricultural extension and climate-resilient livelihoods began in Ethiopia's highlands, where I first observed the intricate balance between indigenous farming practices and ecological stewardship. From an early age, I learned traditional seed selection and composting alongside my grandfather, whose adaptive cultivation methods often safeguarded our harvests during drought years—an early demonstration of incremental innovation later documented by Critchley (1999) and Wettasinha et al. (2009). These formative experiences echoed Gladwell's (2000) insight that small, deliberate interventions can yield transformative results in complex systems.

This foundation instilled a respect for community-led solutions and a keen interest in integrating local knowledge with scientific methods. At Jimma College of Agriculture, I deepened my understanding of Rural Sociology and Agricultural Extension, reinforcing Descola's (2013) and Caldwell's (2018) argument that sustainable development hinges on participatory engagement rather than top-down directives. Early fieldwork in diverse agro-ecological zones confirmed this principle: extension efforts disconnected from community contexts often failed to gain traction, whereas locally co-designed initiatives flourished.

Over the past two decades, I have applied these lessons across multiple contexts—including Pakistan, Sudan, Nigeria, Sierra Leone, and Ethiopia—working alongside national Ministries of Agriculture and the Red Cross Red Crescent Movement. Projects ranged from promoting farmer-led irrigation innovation in Sudan's (Kassala) semi-arid zones to advancing climate-smart watershed management in Sierra Leone's tropical uplands. Across these experiences, I observed a recurring pattern: technically robust interventions stumbled when institutional leadership, stakeholder coordination, and adaptive data systems were weak or fragmented (Filho, 2011; Boltvinik and Mann, 2016).

In Ethiopia specifically, my work in Oromia's irrigation resilience programme revealed how siloed extension mandates led to conflicting guidance for farmers, agronomy teams and natural resource units, which were often operated in parallel rather than in sync. This fragmentation left communities vulnerable to environmental shocks and undermined trust in public extension services (OECD, 2020; Ayuda en Acción, 2023). Building technical capacity alone is insufficient: bridging knowledge gaps requires transformative leadership, integrated data systems, and an operational culture that values iteration and evidence-based problem-solving (Ministry of Agriculture, 2017).

These insights form the backbone of my capstone project for the Swiss School of Business Research: **“Agricultural Extension Leadership Development and Improved Climate-Resilient Livelihoods in Ethiopia.”** The project aims to address the root causes of persistent extension system inefficiencies by weaving together four mutually reinforcing pillars: technical skills for climate-smart livelihoods, adaptive leadership and decision-making, operational excellence with continuous improvement, and digital fluency for data-driven management.

My professional journey and this project share a common thread: the conviction that resilient, inclusive agricultural systems must harmonise indigenous wisdom with modern science, foster collaborative leadership, and adapt continuously through robust data flows. This conviction underpins every aspect of the proposed intervention and defines my commitment to Ethiopia's sustainable rural development.

3. Background and Rationale

Ethiopia's agricultural extension system is pivotal in promoting food security, enhancing rural livelihoods, and advancing the country's Climate-Resilient Green Economy (CRGE) strategy (Ministry of Agriculture, 2017). However, despite decades of technical training and infrastructure investment, recurring gaps in leadership capacity, coordination, and adaptive management continue to limit the system's impact (OECD, 2020).

The International Federation of Red Cross and Red Crescent Societies (IFRC) has recognised the urgency of these challenges and embedded nature-based solutions (NBS) at the centre of its 2030 Corporate Strategy, highlighting healthy ecosystems as fundamental to community resilience (IFRC, 2018). Building on this foundation, the Pan-African Tree Planting and Care Initiative mobilises all 49 African National Societies to plant five billion trees by 2030 through locally managed nurseries, community-led agroforestry corridors, and robust monitoring systems (IFRC, 2024b).

While such initiatives demonstrate remarkable commitment at scale, lessons from the field reveal persistent barriers to effective implementation in contexts like Ethiopia's Arsi Zone. For instance, a three-year irrigation resilience project expanded cultivated land by over 50% yet suffered setbacks when insufficient data flows and limited local decision-making power allowed canal failures and seasonal variability to remain undetected until crop yields declined (Ayuda en Acción, 2023). These incidents underscore the critical need for governance models that combine robust technical protocols with adaptive leadership and timely information systems.

Ethiopia's extension system has historically operated within functional silos—crop production, natural resources, livestock, and irrigation often act independently, resulting in overlapping mandates and conflicting guidance for farmers (Ministry of Agriculture, 2017; OECD, 2020). This fragmentation erodes trust, slows response times, and undermines the system's ability to deliver integrated climate-smart solutions. Moreover, women and youth, who comprise a significant portion of Ethiopia's rural workforce, remain underrepresented in project design and decision-making structures, limiting the inclusiveness and sustainability of interventions (OECD, 2020).

To address these systemic gaps, the proposed project employs a holistic, four-pillar framework designed to:

1. Deep technical capacity in climate-resilient livelihoods.
2. Foster leadership and collaborative decision-making.
3. Embed operational excellence and continuous improvement and
4. Build digital fluency for data-driven, adaptive management.

Pillar 1 responds directly to the urgent need for practical, scalable climate resilience techniques. The project aligns with global best practices in regenerative agriculture and sustainable land management by training 15,000 extension agents in advanced agroforestry, integrated soil and water conservation, and DMAIC-based process optimisation (Rubinstein et al., 2008; FAO, 2023). Field demonstrations at Farmers' Training Centres (FTCs) and community pilot sites will showcase multipurpose tree integration, improved water harvesting, and integrated pest management, promoting widespread adoption through hands-on learning.

Pillar 2 addresses the leadership vacuum within Ethiopia's decentralised extension services. By embedding leadership development modules such as the "CEO Moment" (Dewar et al., 2020) and

the Influence Without Authority framework (Davenport, 2007), the project equips extension agents, local officials, and farmer-union leaders with practical tools for strategic planning, stakeholder negotiation, and change management. Integrating PESTLE-SWOT analyses (Lynch, 2018) and Organisational Health Index dashboards (McKinsey, 2020) ensures that leadership practices remain resilient and evidence-based.

Pillar 3 focuses on operational excellence and continuous improvement. Monthly Kaizen sprints and IDEAL workshops will institutionalise Plan–Do–Check–Act (PDCA) cycles, ensuring that extension teams iterate rapidly, learn from field feedback, and refine processes accordingly (Furterer, 2012). Root-cause analyses using Five Whys and fishbone diagrams will enable systematic problem-solving, while RACI stage gates will clarify roles, streamline approvals, and prevent mission creep (Conn, 2019; IFRC, 2017b).

Pillar 4 aims to bridge the persistent last-mile information gap by deploying a mobile-first digital ecosystem anchored in the READY ERP platform, GIS-enabled mapping, and real-time dashboards (Marr, 2015). By merging ethnographic “thick data” with quantitative sensor feeds, the project ensures that agents can issue timely early-warning advisories and tailor recommendations to local conditions (Wang, 2016). Targeted digital literacy training will ensure that all agents have the skills to navigate these tools effectively.

Collectively, this four-pillar strategy offers a system-level solution to the chronic barriers that have hindered Ethiopia’s extension services. By investing equally in human capacity, governance structures, streamlined processes, and advanced digital tools, the project creates reinforcing feedback loops: robust technical practices benefit from strong leadership; operational efficiency amplifies data-driven insights; and inclusive governance ensures that interventions remain context-appropriate and equitable.

This rationale aligns with Ethiopia’s national commitments under the climate resilience green economy (CRGE) framework and contributes directly to Sustainable Development Goals 1 (No Poverty), 2 (Zero Hunger), and 13 (Climate Action) (FAO, 2023; World Bank, 2022). Furthermore, by embedding continuous learning and participatory governance, the project provides a scalable model for other African National Societies pursuing large-scale NBS programmes under the IFRC’s Pan-African Initiative (IFRC, 2024b).

The project’s background and rationale draw on deep contextual evidence, field-tested best practices, and a clear understanding of Ethiopia’s extension system challenges. By bridging silos, fostering inclusive leadership, and institutionalising adaptive learning, this initiative sets a clear pathway for transforming Ethiopia’s extension landscape into a resilient, data-driven, and community-anchored system capable of withstanding the accelerating impacts of climate change.

4. Overall Goal and Specific Objectives

4.1 Overall Goal

The overarching goal of this initiative is to strengthen the leadership capacity of 15,000 agricultural extension agents and build climate-resilient livelihoods for two million Ethiopian farming households by 2031. By embedding nature-based solutions (NBS) at the core of extension practice, leveraging advanced data systems for adaptive management, and fostering multi-stakeholder collaboration, the project aligns with Ethiopia’s Climate-Resilient Green Economy (CRGE) strategy and the IFRC’s Pan-African Tree Planting and Care Initiative (IFRC, 2024b; Ministry of Agriculture, 2017).

This goal directly supports national and international climate resilience commitments, including Sustainable Development Goals 1 (No Poverty), 2 (Zero Hunger), and 13 (Climate Action) (FAO, 2023; World Bank, 2022). By transforming extension services into agile co-creation platforms, the project ensures that local communities become active designers and stewards of sustainable solutions, reducing vulnerability to climate shocks and economic instability.

4.2 Specific Objectives

To achieve this goal, the project is structured around four mutually reinforcing pillars, each with clear, measurable objectives:

Pillar 1: Technical Skills for Climate-Resilient Livelihoods

- Train 15,000 extension agents and farmer-trainers in advanced agroforestry techniques, regenerative agronomy, and DMAIC-based process optimisation (Rubinstein et al., 2008).
- Demonstrate climate-smart practices, such as multipurpose tree integration, improved water harvesting, and integrated pest management, through Farmer Training Centres and community field days (FAO, 2023).

Pillar 2: Strengthened Leadership and Decision-Making

- Equip 2,000 local officials and 100 farmer-union representatives with advanced leadership and adaptive governance skills via the “CEO Moment” and “Reimagining Leadership” frameworks (Dewar et al., 2020).
- Integrate PESTLE-SWOT analyses and Organisational Health Index dashboards to guide strategic planning and stakeholder negotiation (Lynch, 2018; McKinsey, 2020).

Pillar 3: Operational Excellence and Continuous Improvement

- Institutionalise Lean Six Sigma principles, Kaizen sprints, and IDEAL workshops to embed Plan–Do–Check–Act (PDCA) cycles into daily operations (Furterer, 2012).
- Clarify roles and streamline decision-making through RACI-based stage gates and root-cause analysis using Five Whys and fishbone diagrams (Conn, 2019; IFRC, 2017b).

Pillar 4: Digital Fluency for Data-Driven Adaptive Management

- Deploy the READY ERP platform with mobile offline monitoring tools, GIS-enabled mapping, and real-time dashboards to enable agents to make evidence-based decisions (Marr, 2015).
- Merge qualitative “thick data” from community insights with quantitative sensor data to issue timely advisories and adaptive recommendations (Wang, 2016).

Together, these objectives ensure that gains in technical proficiency are reinforced by strong leadership, operational rigour, and robust digital systems—creating a resilient extension framework capable of transforming climate-vulnerable rural communities into thriving, self-reliant stewards of their natural resources.

5. Theory of Change / Logical Framework

The project’s Theory of Change outlines how targeted investments in capacity building, governance reform, continuous learning, and digital integration will generate measurable improvements in Ethiopia’s extension services and rural livelihoods. It provides a clear pathway

from resources to impact, aligned with evidence-based practices and national climate resilience priorities (PMI, 2017; IFRC GO, 2025).

Inputs:

The initiative mobilises qualified trainers, participatory curricula, robust digital infrastructure (READY ERP), and strategic partnerships with Ministries of Agriculture, local bureaus, farmer unions, and international technical advisors. Resources include tailored modules on Lean Six Sigma, leadership coaching, gender-transformative facilitation, and advanced GIS mapping (Rubinstein et al., 2008; Dewar et al., 2020).

Activities:

- Deliver practical training for 15,000 extension agents and supervisors in climate-smart agronomy, DMAIC optimisation, and agroforestry demonstration plots (FAO, 2023).
- Conduct CEO Moment leadership forums and PESTLE-SWOT scenario planning workshops for 2,000 local officials and farmer-union leaders (Lynch, 2018; McKinsey, 2020).
- Roll out Kaizen sprints, IDEAL workshops, and structured root-cause analyses to embed operational excellence (Furterer, 2012; Conn, 2019).
- Deploy the READY ERP with real-time dashboards and mobile GIS-enabled monitoring tools; merge “thick data” and sensor feeds for actionable insights (Marr, 2015; Wang, 2016).

Outputs:

- 15,000 extension agents certified in technical, leadership, and digital competencies.
- Live ERP and mobile dashboards are accessible across 67 districts.
- Participatory process maps and standard operating procedures (SOPs) co-created with communities.
- Demonstration farms and Farmer Training Centres upgraded as knowledge and microfinance hubs.

Outcomes:

- Enhanced yield stability and household income through the adoption of climate-resilient practices.
- Faster, evidence-based decision cycles enabled by real-time analytics.
- Improved gender and youth representation in local extension governance.
- Strengthened trust between farmers and extension services due to inclusive, data-driven advisories (Ministry of Agriculture, 2017; FAO, 2023).

Impact:

By 2031, two million Ethiopian smallholder households will benefit from diversified, climate-adaptive livelihoods supported by a resilient, decentralised extension system. Community-led watershed restoration will rehabilitate degraded landscapes, while local governance structures embed adaptive management cycles that can respond swiftly to changing climatic and socio-economic conditions (World Bank, 2022; IFRC, 2024b).

The logical framework ensures sustainability through continuous feedback loops: monthly analytics huddles, quarterly after-action reviews, and dynamic updates to SOPs and training content keep the system agile and context-sensitive (Panorama Consulting, 2024). This adaptive governance model positions Ethiopia's extension service as a replicable example for other African National Societies scaling nature-based solutions under the IFRC's Pan-African Tree Planting and Care Initiative (IFRC, 2024b).

In summary, the Theory of Change demonstrates how aligning technical, leadership, operational, and digital enablers within an integrated framework transforms short-term capacity building into long-term, community-owned climate resilience.

6. Intervention Strategy and Activities

The intervention strategy operationalises the project's Theory of Change through a carefully sequenced set of activities, organised under four interlocking pillars. Each pillar translates the project's vision into practical, context-relevant actions that directly address Ethiopia's extension system gaps while ensuring sustainability and scalability (Ministry of Agriculture, 2017; IFRC, 2024b).

6.1 Pillar 1: Specialised Technical Skills for Climate-Resilient Livelihoods

Building on Ethiopia's agro-ecological diversity, this component strengthens extension agents' capacity to deliver context-specific, climate-resilient agronomic solutions.

Key activities:

- **Advanced Agroforestry and Regenerative Agriculture:** Train agents in multipurpose tree integration, soil fertility management, and water harvesting structures (FAO, 2023). Field demonstrations at Farmer Training Centres (FTCs) and model plots showcase practical techniques such as contour bunds, zai pits, and community-managed check dams.
- **DMAIC-based Process Optimisation:** Integrate Lean Six Sigma's Define–Measure–Analyse–Improve–Control framework to streamline extension workflows and on-farm trials (Rubinstein et al., 2008).
- **ERP-Enabled Scenario Planning:** Use the READY ERP to run Monte Carlo simulations for input planning and yield forecasting, enabling agents to provide data-driven advisories on resource allocation and risk mitigation (Marr, 2015).

This pillar transforms extension agents from passive transmitters of top-down advice to active co-creators of locally adapted solutions.

6.2 Pillar 2: Leadership and Authority

Addressing Ethiopia's leadership deficit requires a robust, context-sensitive approach that equips extension professionals and local leaders with adaptive governance skills.

Key activities:

- **CEO Moment and Reimagining Leadership:** Conduct intensive workshops rooted in Dewar et al.'s (2020) "CEO Moment" and Hitendra's (2020) five pillars of new-world leadership—Purpose, Wisdom, Growth, Love, and Self-Realisation—to strengthen authentic, values-driven leadership.

- **Influence Without Authority:** Train agents and local officials in relational leadership, stakeholder mapping, and narrative persuasion to mobilise collective action despite limited formal power (Davenport, 2007).
- **PESTLE-SWOT and Organisational Health Index:** Facilitate regular scenario-planning exercises and OHI assessments to diagnose institutional bottlenecks and measure leadership impact over time (Lynch, 2018; McKinsey, 2020).
- **Communities of Practice and Peer Learning:** Establish digital and in-person leadership circles for local officials, farmer-union representatives, and extension supervisors to exchange strategies and build collective problem-solving capacity (IFRC, 2018).

This layered leadership suite ensures that capable, trusted local stewards champion and sustain technical interventions.

6.3 Pillar 3: Operational Excellence and Continuous Improvement

This pillar institutionalises an agile culture where evidence-based problem-solving, clear accountability, and iterative improvement are embedded in daily workflows.

Key activities:

- **Kaizen Sprints and IDEAL Workshops:** Facilitate monthly Kaizen events and IDEAL (Identify, Define, Explore, Act, Learn) workshops to continuously refine operational bottlenecks, from input distribution to training delivery (Furterer, 2012).
- **Root-Cause Analysis Tools:** Train teams in Five Whys and fishbone diagram techniques to unpack complex problems and develop targeted solutions (Conn, 2019).
- **RACI-Based Stage Gates:** Implement stage gates with defined Responsible, Accountable, Consulted, and Informed (RACI) roles at every pilot phase to prevent role drift and ensure timely escalation (IFRC, 2017b).
- **Participatory Scorecards & Feedback Loops:** Use community scorecards to gather real-time beneficiary feedback, feeding directly into quarterly reviews and policy adjustments (Panorama Consulting, 2024).

This pillar ensures that training, leadership, and digital investments are translated into measurable field performance by systematising operational rigour.

6.4 Pillar 4: Digital Fluency and Data-Driven Adaptive Management

Bridging the “last mile” information gap is critical to make extension services responsive to dynamic environmental and market conditions.

Key activities:

- **READY ERP Rollout:** Deploy the ERP platform nationwide with mobile offline functionality, integrating modules for finance, logistics, monitoring, and planning. This creates a single source of truth for all extension data (Marr, 2015).
- **Mobile M&E and GIS Dashboards:** Equip agents with mobile apps for real-time data capture, geo-referenced mapping, and hotspot identification, even in connectivity-challenged districts (Wang, 2016).

- **Thick Data Integration:** Train agents to blend ethnographic insights (focus groups, participant observation) with sensor feeds and satellite data for richer, context-aware analysis (Wang, 2016).
- **Analytics Huddles and Early-Warning Systems:** Institutionalise bi-weekly analytics huddles where agents and supervisors review live dashboards, validate hypotheses, and issue early warnings to farmers before climatic or pest threats escalate (Denning, 2005).
- **Master Data Governance:** Establish data-quality standards, encryption protocols, and governance councils to ensure integrity and privacy across the digital ecosystem (Brehmer, 1992).

This component transforms agents into frontline analysts, empowering them to deliver timely, precise advisories that align local realities with national policy targets.

Cross-Cutting Activities

To ensure coherence across pillars, the following cross-cutting actions are embedded:

- **Gender-Transformative Quotas:** To address systemic underrepresentation, quotas for women and youth should be embedded in all training cohorts and governance bodies (OECD, 2020).
- **Stakeholder Engagement:** Host regular multi-stakeholder forums bringing together Ministries, NGOs, private sector actors, and community representatives to co-create solutions and review progress (IFRC, 2024b).
- **Continuous Professional Development (CPD):** Establish a competency-based CPD framework with refresher courses, micro-learning modules, and a certification pathway linked to promotion and incentives (Ministry of Agriculture, 2017).
- **Monitoring and Learning Backbone:** Integrate real-time dashboards, meta-evaluation reports, and a dynamic knowledge exchange portal to capture and disseminate lessons learned (Rigby, 2016a).

Sequencing and Integration

We roll out the four pillars sequentially, but they reinforce each other.

- **Phase 1 (Months 1–8):** Baseline assessments, stakeholder onboarding, and digital readiness audits (Hollnagel, 2007).
- **Phase 2 (Months 9–21):** Intensive skills training, leadership workshops, and ERP configuration (Lean Enterprise Institute, 2018).
- **Phase 3 (Months 22–40):** Pilot implementation, analytics huddles, and adaptive refinements based on real-time evidence (Argyris, 1978).
- **Phase 4 (Months 41–54):** Full-scale rollout, local ownership transfer, and sustainability planning through institutionalised CPD and peer champions (Davenport, 2012b).

Expected Results

By strategically sequencing training, governance reform, process improvements, and digital tools, this intervention will deliver:

- Improved yield and income stability for two million households.
- Faster, more accurate extension advisories.
- Inclusive and accountable local leadership.

- A resilient extension ecosystem capable of continuous self-renewal in the face of climate and market shocks (FAO, 2023; World Bank, 2022).

7. Project Governance and Management

A robust governance and management framework anchors the project's success, balancing clear accountability with the agility required to adapt to evolving field realities (PMI, 2017; IFRC, 2017b). The structure aligns with Ethiopia's extension reform priorities and the IFRC's Pan-African Tree Planting and Care Initiative's governance principles (IFRC, 2024b).

7.1 Organisational Structure

The project governance model is structured around three tiers:

- **Strategic Apex:** The Governing Board and General Assembly provide overarching strategic direction and policy endorsement. They validate major milestones and safeguard alignment with national climate resilience objectives (Ministry of Agriculture, 2017).
- **Operational Steering Committee:** This committee, which comprises representatives from the Ministry of Agriculture, IFRC, regional bureaus, farmer unions, and technical partners, oversees implementation progress, risk management, and resource mobilisation.
- **Implementation Units:** Decentralised district and cluster teams coordinate day-to-day activities. Each team includes technical leads, digital officers, and community engagement specialists who adapt standard operating procedures (SOPs) to local contexts (IFRC, 2017b).

7.2 Role Descriptions

Clear, version-controlled SOPs and RACI matrices define who is Responsible, Accountable, consulted, and informed at each stage gate—from pilot design to full-scale rollout (Conn, 2019).

- **Delegation Heads** tailor annual work plans with technical advisors and local stakeholders.
- **Programme Managers** ensure timely execution and compliance with quality standards, supported by Communities of Practice Leads who facilitate knowledge exchange and mentor frontline agents (Panorama Consulting, 2024).
- **Process Champions** embedded within district clusters deliver on-the-job coaching in Lean Six Sigma, Kaizen, and decision-hygiene practices, ensuring that field teams can swiftly escalate issues and apply evidence-based solutions (Furterer, 2012).

7.3 Authority Lines

The governance framework employs a stakeholder-driven escalation taxonomy that calibrates decision-making to issue impact and urgency:

- Routine operational decisions follow pre-approved protocols within district units, ensuring speed and context responsiveness (IFRC, 2017b).
- Moderately consequential matters, such as budget reallocations within thresholds, are deliberated by technical working groups.
- The Steering Committee reviews high-stakes escalations—such as significant financial shifts or strategic realignments—using stage-gate criteria and real-time dashboards for data-informed deliberation (Podolny, 2020).

To safeguard decision quality, teams apply decision-hygiene checklists, run pre-mortems, and assign confidence ratings to all significant recommendations (Kahneman, 2021).

7.4 Coordination Mechanisms

Multiple coordination mechanisms ensure coherence across the four pillars and between governance layers:

- **Communities of Practice and peer-to-peer analytics forums** aggregate frontline insights and feed them back into SOP updates and training modules, ensuring local realities inform system-wide refinements (Harvard Business Review Analytic Services, 2012).
- **Integrated digital dashboards** provide real-time visibility of key performance indicators (KPIs) for extension managers, programme directors, and the Steering Committee (Marr, 2015).
- **Bi-monthly cross-tier governance reviews** serve as structured checkpoints to identify bottlenecks, recalibrate plans, and reallocate resources as needed (PMI, 2017).

This governance and management system ensures that strategic ambitions translate into coordinated, adaptive actions at every level—from federal policymakers to frontline extension agents. By embedding clear authority lines, participatory feedback channels, and rigorous monitoring, the project creates an agile governance ecosystem capable of sustaining Ethiopia’s rural resilience ambitions long after external support phases out.

8. Budget and Resource Mobilisation

The project’s budget framework is designed to align directly with its four strategic pillars, ensuring that financial resources flow efficiently to the frontlines where they generate the most significant impact (PMI, 2021; Ministry of Agriculture, 2017). The total estimated budget for the 54-month implementation period is USD 10 million, sourced through a blended approach combining IFRC programme funding, carbon-credit revenues, and leveraged public-private partnerships.

Budget Allocation

Component	Key Focus Areas	Estimated USD (millions)	% of Total
Pillar 1 — Technical Skills	Specialised agroforestry, regenerative agronomy, DMAIC workshops, field demos	3.0	30%
Pillar 2 — Leadership and Decision-Making	CEO Moment forums, stakeholder negotiation training, PESTLE-SWOT exercises	2.5	25%
Pillar 3 — Operational Excellence	Kaizen sprints, Lean Six Sigma, RACI stage gates, IDEAL workshops	2.5	25%
Pillar 4 — Digital Fluency	READY ERP rollout, mobile M&E tools, GIS dashboards, data governance	1.3	13%
Administration and Compliance	Financial audits, fiduciary controls, and project secretariat	0.7	7%

Component	Key Focus Areas	Estimated USD (millions)	% of Total
Total		10.0	100%

Resource Mobilisation Strategy

To secure and sustain funding, the project employs a multi-pronged resource mobilisation approach:

- **Carbon Market Revenues:** A portion of the costs will be offset through verified carbon credits generated by community-led reforestation and agroforestry activities, directly aligning with IFRC's Pan-African Tree Planting goals (IFRC, 2024b).
- **Public-Private Partnerships:** Strategic alliances with agro-input companies, ICT providers, and local financial institutions will catalyse co-investment in digital tools, training facilities, and farmer financing (World Bank, 2022).
- **Grants and Donor Contributions:** Additional grant funding from development partners and climate resilience funds will complement internal IFRC allocations, ensuring financial stability throughout the project cycle.

Fiscal Oversight

Financial governance is anchored in strong fiduciary risk controls, transparent reporting, and regular independent audits. Clear budget authority lines follow the version-controlled RACI matrices, ensuring spending aligns with each pillar's deliverables and annual milestones (PMI, 2021).

The budget structure reflects the project's commitment to maximising direct investments in community-driven capacity building while ensuring lean administrative overhead. This disciplined resource allocation underpins the project's promise of delivering scalable, sustainable resilience outcomes for Ethiopia's smallholder communities.

9. Risk Analysis and Mitigation

Effective risk management is critical to delivering the project's intended outcomes on time and within budget, especially in a context as climate-sensitive and institutionally diverse as Ethiopia's rural extension landscape (PMI, 2017). The risk framework combines proactive identification, real-time monitoring, and agile response mechanisms, embedded across all four pillars and phases of implementation (IFRC, 2024b).

9.1 Foundational Assumptions

The risk analysis starts by acknowledging five key assumptions:

- **Stable Funding:** Blended financing from IFRC core funds, carbon credits, and partner co-financing is continuously available (FAO, 2023).
- **Stakeholder Commitment:** Sustained buy-in from Ministries, farmer unions, and local communities (Ministry of Agriculture, 2017).
- **ICT Reliability:** Functional connectivity and secure data governance for ERP rollouts, even in remote districts (Marr, 2015).
- **Behavioural Readiness:** Extension staff will adopt new digital tools, leadership practices, and process improvements without prolonged resistance (Panorama Consulting, 2024).
- **Land Tenure Security:** Communities retain secure access to rehabilitated landscapes, supporting long-term NBS benefits (IFRC, 2018).

9.2 Identified Risks and Mitigation Measures

Risk	Potential Impact	Mitigation Strategy
Funding shortfalls	Activity delays, scope reduction	Diversify income streams via carbon credits, stage investments, and maintain contingency reserves (IFRC, 2024b).
Stakeholder disengagement	Project stalling, local resistance	Continuous stakeholder dialogue; participatory governance sprints; community scorecards (OECD, 2020).
ICT breakdowns	Data loss, decision delays	Deploy offline-ready ERP modules; automated data sync; robust cybersecurity protocols (Marr, 2015).
Low tool adoption	Underuse of digital and process tools	Peer champions network, just-in-time e-learning, user helpline, and feedback channels (Panorama Consulting, 2024).
Climate and environmental shocks	Disrupted interventions, reduced resilience gains	Integrate parametric triggers and anticipatory cash transfers; align with National Adaptation Plans (IFRC, 2021).

9.3 Agile Risk Governance

The project embeds risk governance into its core operational routines:

- **Real-time Dashboards:** Governance-alert dashboards monitor funding, engagement metrics, and digital uptake, flagging variances early for corrective action (Rigby, 2016a).
- **RACI-Based Escalation:** Clear thresholds define when issues escalate from district teams to the Steering Committee, ensuring quick resolution without unnecessary bureaucratic delays (Conn, 2019).
- **After-Action Reviews (AARs):** Bi-monthly AARs capture lessons learned from near misses and update SOPs, accordingly, sustaining a culture of continuous improvement (Argyris, 1978).
- **Peer Champions Network:** Local champions mentor staff on new systems, address behavioural barriers, and promote rapid tool adoption (Davenport, 2007).
- **Parametric Forecasting:** The project employs data-driven risk triggers—such as rainfall anomalies or pest outbreaks—to activate anticipatory interventions like pre-positioned relief inputs or cash transfers (IFRC, 2021).

9.4 Alignment with National and Global Standards

The framework complies with Ethiopia's CRGE resilience principles and aligns with IFRC's global risk management guidelines, ensuring mitigation measures remain context-appropriate and scalable (Ministry of Agriculture, 2017; IFRC, 2018).

In summary, this layered risk analysis and mitigation approach transforms risk governance from a reactive compliance task into a dynamic, proactive pillar of operational excellence, ensuring the project remains resilient and adaptive throughout its lifecycle.

10. Monitoring, Evaluation and Learning (MEL)

A robust Monitoring, Evaluation and Learning (MEL) framework ensures that the project's activities translate into measurable, sustainable outcomes (PMI, 2021). By integrating real-time data capture, continuous feedback loops, and participatory reviews, the MEL system creates a self-correcting cycle that keeps the project agile and accountable (Panorama Consulting, 2024).

10.1 Real-Time Review and Rapid Learning

The core of the MEL system is a unified Planning, Monitoring, Evaluation and Reporting (PMER) architecture, underpinned by the READY ERP platform and mobile GIS-enabled dashboards (Marr, 2015). This architecture ensures a seamless data flow from field agents to decision-makers at the regional and national levels.

Key features include:

- **Monthly Analytics Huddles:** Cross-functional teams meet to review dashboards, validate trends, conduct root-cause analyses, and agree on corrective actions (Rigby, 2016a).
- **Diagnostic Alerts:** Automated thresholds flag deviations from key performance indicators (KPIs) such as training completion rates, tool adoption, yield improvements, and gender representation targets (Ministry of Agriculture, 2017).
- **Field-Generated Thick Data:** Agents collect community narratives and qualitative insights to complement quantitative indicators, ensuring a holistic understanding of progress (Wang, 2016).

This real-time system transforms monitoring from static reporting into dynamic learning that drives timely, evidence-based interventions.

10.2 Structured Feedback and Continuous Improvement

To institutionalise learning, the project embeds two proven quality cycles:

- **Plan–Do–Check–Act (PDCA)** loops optimise day-to-day operations and refine field practices (Furterer, 2012).
- **DMAIC (Define–Measure–Analyse–Improve–Control)** cycles drive deeper process innovations and problem-solving for complex bottlenecks (Rubinstein et al., 2008).

Quarterly Learning Workshops bring together agents, local officials, and stakeholders to challenge assumptions, share field-tested insights, and recalibrate targets based on fresh data (Argyris, 1978). All validated lessons feed into an online Knowledge Exchange Platform, accessible across districts to encourage peer-to-peer scaling of what works (IFRC, 2024b).

10.3 Innovative Governance and Portfolio Management

Governance oversight of MEL combines rigorous role clarity and adaptive decision-making:

- **RACI Matrices:** Define clear responsibilities for data collection, validation, escalation, and action at every governance tier (Conn, 2019).
- **Steering Committee Reviews:** Bi-monthly strategic reviews integrate dashboard evidence with scenario planning, enabling rapid resource reallocation when needed (PMI, 2021).
- **Innovation Portfolio Council:** This investor-board-style council manages exploratory pilots, releasing milestone-based funding and applying the 70/20/10 rule—70% for core

activities, 20% for scalable innovations, and 10% for high-risk experiments (McKinsey, 2020).

10.4 External Verification and Impact Evaluation

In addition to continuous internal learning, the project commits to independent mid-term and final evaluations, employing mixed methods to triangulate quantitative impacts (e.g., yield increases, household income gains) and qualitative shifts (e.g., leadership confidence, community trust) (FAO, 2023; World Bank, 2022).

Meta-evaluation reports synthesise findings and benchmark progress against the original baseline, providing recommendations for future IFRC resilience programming in Ethiopia and beyond (Rigby, 2016a).

In summary, this MEL system transforms raw data into actionable intelligence, fosters a culture of reflection and adaptation, and guarantees that Ethiopia's extension service remains responsive, transparent, and future-ready.

11. Sustainability and Exit Strategy

Ensuring sustainability beyond the project's lifespan is central to the design and sequencing of all activities (PMI, 2021). This strategy weaves together institutional anchoring, community ownership, financial resilience, and policy integration to guarantee that the strengthened extension system delivers climate-resilient livelihoods well beyond 2031 (Ministry of Agriculture, 2017; IFRC, 2024b).

11.1 Institutional Anchoring and Capacity Handover

From the outset, the project embeds capacity within Ethiopia's existing extension architecture rather than creating parallel structures.

- **Communities of Practice and Peer Champions:** Each district cluster develops a cohort of certified local trainers and "process champions" who mentor peers in regenerative agriculture, Kaizen, and ERP use (Conn, 2019).
- **Competency-Based Career Ladders:** The Continuous Professional Development (CPD) framework links training completion to promotion pathways, retaining talent within the public extension system (Panorama Consulting, 2024).
- **Standard Operating Procedures (SOPs):** Co-created SOPs, RACI stage gates, and dynamic decision-hygiene checklists become institutional norms, reducing dependency on external advisors (Furterer, 2012; Kahneman, 2021).

11.2 Community Ownership

True sustainability rests on meaningful community buy-in and co-design:

- **Participatory Governance Sprints:** Farmers, women's groups, and youth councils actively shape extension priorities through scenario planning and scorecard feedback (OECD, 2020).
- **Local Resource User Associations:** Watershed user groups manage tree planting corridors, generate carbon credits, and reinvest proceeds into community microfinance and landscape stewardship (IFRC, 2024b).
- **Evidence-Based Accountability:** Public dashboards and quarterly community meetings sustain transparency, trust, and local pressure to maintain good practices (Marr, 2015).

11.3 Financial Resilience

Diversified funding streams secure continuity:

- **Carbon Credits:** Community-managed agroforestry corridors produce verified emission reductions, generating tradable carbon credits that finance local extension activities (IFRC, 2024b).
- **Private Sector Co-Financing:** Local agri-input suppliers and financial institutions co-invest in extension-led value chains, creating revenue streams that persist after project exit (World Bank, 2022).
- **Performance-Based Funding:** District bureaus and farmer unions unlock follow-on funding linked to clear performance milestones, incentivising good governance and accountability (PMI, 2021).

11.4 Planned Handover and Policy Integration

A phased exit roadmap ensures that local institutions gradually assume complete control:

- **MoUs and Local Charters:** Formalised agreements outline roles, cost-sharing, and escalation protocols for post-project operations (Ministry of Agriculture, 2017).
- **Steering Committee Transition:** The multi-stakeholder Steering Committee transitions into a standing Extension Resilience Board embedded within the Ministry's structure (IFRC, 2024b).
- **Alignment with CRGE and National Adaptation Plans:** Lessons learned feed directly into Ethiopia's Climate-Resilient Green Economy strategy and inform broader IFRC Africa Region programming (FAO, 2023).

In summary, this layered sustainability and exit plan ensures that the technical, leadership, operational, and digital gains endure. By anchoring skills in local systems, catalysing community-led revenue streams, and aligning with national policy pathways, the project leaves a self-renewing, resilient extension ecosystem equipped to sustain and scale its impact.

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Appendix 1: (Module 1–Learning Outcome 4)

Summary of Strategic Leadership in Ethiopian Agriculture: Modernising the Extension System and Building Climate Resilience: A Five-Year Strategic Plan

1. Executive Summary

- **Purpose and Context**

A five-year roadmap to reform Ethiopia’s agricultural extension system in the face of structural inefficiencies, climate pressures, and rural poverty. Drawing on indigenous knowledge and modern science, it employs a dual PESTLE–SWOT analysis to diagnose challenges and define interventions that uplift livelihoods, restore ecosystems, and foster inclusive leadership.

- **Core Vision**

Empower rural communities through decentralised decision-making, capacity building, climate-smart technologies, and adaptive learning, aligning national goals with SDGs, the Malabo Declaration, the Paris Agreement, and the Convention on Biological Diversity.

- **Four Strategic Pillars**

1. **Decentralised Leadership and Empowerment**—Shift authority to local bureaus, cooperatives, and farmer groups.
2. **Modernised Service Delivery**—Revitalise Farmers’ Training Centre (FTCs), scale digital advisories, and promote inclusive agronomic experimentation.
3. **Climate-Smart Agriculture & Resilience**—Regenerative soil care, agroforestry corridors, watershed rehabilitation, and risk financing.
4. **Adaptive Learning & Accountability**—Rigorous M&E, real-time feedback loops, phased exit strategies, and annual stakeholder reviews.

- **Key Targets**

- o Train 15,000 extension agents (50% women).
- o Digitise advisory services for 2 million smallholders.
- o Restore 2 million ha of degraded land.

2. Positioning and Professional Lens

- **Author’s Background**

Rooted in rural Ethiopia’s farming traditions and enriched by formal training in agronomy and extension, coupled with roles across Pakistan, Sudan, Nigeria, Sierra Leone, and Ethiopia. Emphasises participatory, culturally sensitive approaches informed by scholarly insights.

- **PhD Investigation**

Focused on bridging institutional silos in Ethiopian extension through leadership training, accountability frameworks, decentralised governance, and co-creative “tipping-point” interventions that spark systemic change.

3. Strategic Vision, Mission and Values

- **Vision**

Resilient, sustainable agricultural systems empower rural communities to eradicate poverty, end hunger, combat climate change, and protect ecosystems.

- **Mission**

Advance leadership, innovation, and climate-adaptive practices via community-led extension, underpinned by global partnerships and equitable resource use.

- **Core Values**

1. **Sustainability and Equity**—Farmer-centred innovation balancing ecology and livelihood.
2. **Collaborative Partnerships**—Trust-based knowledge exchange.
3. **Accountability**—Transparent governance and inclusive decision-making.

4. Environmental and Situational Analysis

4.1 Integrated PESTLE–SWOT Framework

- **PESTLE** identifies external drivers (political volatility, economic constraints, sociocultural norms, tech gaps, legal uncertainties, environmental shocks).
- **SWOT** aligns these with internal capacities and gaps of the Ethiopian Red Cross Society and extension services.

4.2 PESTLE Highlights

- **Political**—Policy U-turns, corruption, uneven decentralisation.
- **Economic**—Budgetary shortfalls, inflation, supply-chain failures, private-sector partnership opportunities.
- **Socio-Cultural**—Literacy gaps, traditional knowledge, gender norms.
- **Technology**—Mobile/digital potential, connectivity challenges.
- **Legal**—Land tenure insecurity, weak IP and safety regulations.
- **Environmental**—Soil erosion (1 billion t annually), droughts, floods, locusts.

4.3 SWOT of Ethiopian Red Cross Society

- **Strengths**: Legal mandate, volunteer network, disaster expertise.
- **Weaknesses**: Communication gaps, hierarchical structure, heavy subsidy reliance.
- **Opportunities**: Digital engagement, private alliances, climate finance.
- **Threats**: Regional instability, funding competition, and climate disasters.

5. Strategic Goals and Objectives

Goal 1: Leadership Capacity Across the System

1. **Enhance Leadership Skills**—Competency-based training in adaptive management, climate resilience, and digital analytics.

2. **Strengthen FTCs**—Upgrade centres into self-financing innovation hubs with demand-driven curricula.
3. **Promote Inclusion**—Recruit and support female and youth agents; implement gender-sensitive tools.
4. **Foster Stakeholder Collaboration**—Cross-functional teams dissolving agronomy, livestock, and natural resource silos.

Key Initiatives

- Train 15,000 agents via modular continuing professional development pathways.
- Establish mentorship networks, pairing specialists and emerging leaders.
- Roll out ICT platforms for real-time advisories and market data.

Goal 2: Environmental Protection and Climate Resilience

1. **Regenerative Agriculture**—Soil stewardship, mulching, conservation agriculture.
2. **Agroforestry and Watersheds**—Corridor planting, contour trenches, community-led rehabilitation.
3. **Innovative Finance**—Carbon credits, climate risk insurance, private co-financing.
4. **Policy Advocacy**—Strengthen tenure rights, biodiversity protection frameworks.

Key Initiatives

- Restore 2 million ha of degraded land.
- Integrate multi-benefit landscape restoration in pilot sites.
- Embed SMART targets in carbon finance projects, ensuring biodiversity and livelihood safeguards.

6. Risk Management Strategy

- **Identification** of hazards: political shifts, funding shortfalls, climate shocks.
- **Assessment and Mitigation**: contingency planning, decentralized reserves, ICT-enabled early warnings.
- **Monitoring and Review**: Annual risk audits linked to SDGs and international frameworks.
- **Integration with M&E** to manage emerging threats adaptively.

7. Strategic Action Plan

- **Phase 1 (Year 1–2)**: Capacity building, ICT infrastructure rollout, pilot participatory governance models.
- **Phase 2 (Year 3–4)**: Scale digital advisories, expand agroforestry corridors, mobilize private partnerships.
- **Phase 3 (Year 5)**: Consolidate gains, community-led management, phased exit of external support.

- **Milestones and Timelines:** Clear by-year targets for training, land restoration, and digital uptake.

8. Monitoring and Evaluation Framework

- **Data-Driven Decision-Making:** Real-time dashboards for yield, adoption rates, resilience metrics.
- **Robust M&E Systems:** Mobile data collection, outcome-focused indicators over input counts.
- **Adaptive Management:** Annual stakeholder reviews recalibrate targets mid-term and final assessments inform the next cycle.
- **Feedback Loops:** Participatory audits, citizen scorecards, peer-learning networks.

9. Resource Mobilisation & Financial Allocation

- **Blended Finance Model:** government budgets, donor grants, private investment, carbon revenues.
- **Transparent Allocation:** Participatory budgeting at the district level; performance-linked disbursements.
- **Revenue-Generating FTCs:** Demonstration farms & micro-enterprises sustaining centre operations.
- **Partnerships:** Engage agribusinesses, research institutions, and CSOs for co-financing and technical support.

10. Exit Strategy and Sustainability

- **Phased Transition:** Gradual handover of operations to local bodies, cooperatives, and farmer associations.
- **Institutionalisation:** Codify successful pilots into government policy and budgets.
- **Capacity Endowment:** Seed funds and digital platforms remain under community stewardship.
- **Long-Term Stewardship:** Annual reviews embedded in local governance cycles to ensure continuous improvement.

11. Case Studies Highlights

1. **Scaling Pan-African Tree Planting**—Lessons on peer learning, data gaps, and transforming pledges into outcomes (2021–2030 initiative).
2. **Irrigation Resilience in Eastern Arsi**—Integrating agronomy and soil conservation to prevent canal erosion (RELP 2021–2023).
3. **Farmer-Led Innovation in Gerba Wetland**—Showcases bottom-up irrigation technology adoption.
4. **Mainstreaming Climate Action in Humanitarian Programs**—Multi-sectoral collaboration models.

5. **Inclusive Tree Planting in Sierra Leone**—Value-chain and tenure challenges in rainforest restoration.

Appendix 2: (Module 2—Learning Outcome 4)

Executive Summary of “Develop a New Process for Collaborative Problem-Solving and Decision-Making,”

1. Purpose and Context

The paper proposes a **unified, five-phase process** to strengthen collaborative problem-solving and decision-making across the International Federation of Red Cross and Red Crescent Societies (IFRC) and its partners. It responds to persistent gaps in innovation diffusion, siloed analytics, and “over-collaboration” that slow action while aligning fully with IFRC’s five federation-wide commitments and Ethiopia’s five-year agricultural extension strategy.

2. Achievements against Prior Learning Objectives

1. **Resilient governance and learning architecture:** Hybrid oversight plus Communities of Practice scaled 75% of pilots into formal guidance.
2. **Advanced digital and analytical capabilities**—The READY ERP platform created a real-time “analytics ecosystem,” enabling Lean Six Sigma and Monte-Carlo modelling.
3. **Human-centred, adaptive analytics**— “thick-data” ethnographic insights and a ten-step Marr framework keep analytical sprints strategic and bias-aware.

3. Strategic Alignment

The process operationalises two strategic objectives from Module 1:

- **SO-1 — Leadership capacity:** competency-based development, mentoring networks and devolved decision rights.
- **SO-2 — Environmental protection & climate resilience:** ecosystem-based approaches backed by rolling cash-flow forecasts and climate-risk hedges.

Apple-style functional governance vests decision rights in domain experts, balancing speed with quality.

4. Five-Phase Collaborative Process

Phase	Core Activities	Key Outputs
1. Problem Identification and Framing	Cross-functional workshops, Five Whys, dashboard triangulation	Unified problem statement, scoped RACI, root-cause log
2. Stakeholder Engagement and Ideation	Design-thinking sprints; integrative-thinking routine	Ranked idea backlog, rapid feasibility briefs
3. Collaborative Analysis and Decision Gate	Scenario modelling; decision-hygiene checklists	Pass / Conditional / Fail verdicts with mitigations
4. Implementation Planning and Execution	Charter & milestone map; resource-mobilisation plan	Approved work plan, steering committee oversight

Phase	Core Activities	Key Outputs
5. Monitoring, Learning and Iteration	KPI dashboards, after-action reviews, PDCA / DMAIC loops	Lessons-learned library; SOP updates.

5. Stakeholder Architecture

- **Internal**—Governing Board → Senior Management → Department managers → Cross-functional teams; all linked by standardised RACI matrices.
- **External**—donors/partners (quarterly roundtables), beneficiary communities (bi-monthly feedback forums), and regulators (semi-annual policy dialogues).

6. Implementation Guidance

- **Operational level:** embed micro-decision checkpoints in weekly stand-ups, use decision-log templates, and build facilitation/data-literacy skills through blended learning.
- **Strategic level:** executive steering committee reviews high-stakes decisions; READY ERP dashboards supply real-time metrics; “process-innovation reserve” funds pilots.

7. Organisational Considerations

- **Structure and Style:** The dual system—formal SOP cascade plus informal Communities of Practice—mirrors Apple’s functional model.
- **Culture and People:** change-readiness assessment, collaboration-linked rewards, and multi-channel communications mitigate resistance.
- **Resources and Capabilities:** integrated collaboration and analytics platforms, plus targeted upskilling in facilitation, data literacy and conflict resolution.

8. Conclusion and Next Steps

The framework offers a **living, data-driven system** that institutionalises rapid learning while safeguarding governance. Immediate priorities are to:

1. **Socialise** the model with executives and departments.
2. **Run change-readiness diagnostics** in pilot delegations.
3. **Launch blended-learning modules** and configure KPI dashboards.
4. **Pilot** in high-readiness sites, then scale through steering committee oversight and iterative PDCA / DMAIC cycles.