



Project Title:	Ghana Staple Food Programme: SDEP and ECHO Implementation (GSFPSEI)
Recipient Region:	Ghana
Government(s)/other counterpart(s):	Ghana, Private Sector, Non-Governmental Organisation
Expected EOD (Starting Date):	1st January, 2026
Expected NTE (End Date):	31 st December, 2036
Environmental and Social Risk Classification	low risk moderate risk high risk
Gender Marker:	G0 G1 G2a ¹ ′ G2b
Total Budget:	USD 43,963,000.00



Ghana Staple Food Programme: SDEP and ECHO ImplementationSent in by

Daniel Bermå *President* EUSL

daniel.berma@eusl.eu | info@eusl.eu

<u>info@eusl.eu</u> +46 10 585 04 59



ACRONYMS AND ABBREVIATIONS

AfDB African Development Bank

CEHA COMESA EAC Horticulture Accelerator

AU African Union

BMGF Bill and Melinda Gates Foundation

CAADP Comprehensive Africa Agricultural Development Programme

CET Common External Tariff

COMESA Common Market for Eastern and Southern Africa
ECOWAS Economic Community of West African States

ECHO Environmental, Circular, Holistic, Optimized (infrastructure platform)

EUSL European Union
EUSL European Social Label

FCDO Foreign Commonwealth Development Office

FOs Farmer Organizations
GDP Gross Domestic Product
GMO Genetically Modified Organisms
GSIA Global Social Impact Alliance

ISAAA International Service for the Acquisition of Agri-biotech Applications

M&E Monitoring and Evaluation
MDG Millennium Development Goals

MG FIAM Matching Grant Facility Implementation and Modality

MOA Ministry of Agriculture

NGO Non-Governmental Organisation

RVCs Regional Value Chains.

SDEP Social Development and Empowering Programme
SFPSEI Staple Food Programme, including SDEP and ECHO

SMEs Small and Medium Enterprises
SPS Sanitary and Phytosanitary

Ghana-BBIP Ghana Biotechnology and Biosafety Implementation Programme

Ghana-BHAP Ghana Bioprotectants Harmonization Programme
Ghana-FAUP Ghana Fertilizer Access and Utilization Programme
Ghana-SHCP Ghana Seed Harmonisation and Certification Programme

GSFPSEI Ghana Staple Food Programme: SDEP and ECHO Implementation



Table of Contents

Ghana Staple Food Programme: SDEP and ECHO Implementation (GSFPSEI)	1
ACRONYMS AND ABBREVIATIONS	2
EXECUTIVE SUMMARY	5
Programme Structure	5
Strategic Components	6
Policy Development and Alignment	6
Key Focus Areas	7
Implementation Approaches	7
Select References (hyperlinked)	7
STAKEHOLDERS (Adapted for Ghana)	8
Key Focus Areas for GSFPSEI	8
Targets and Goals	9
Productivity Gains will be driven by:	9
Contextual Overview: Ghana's Agricultural Landscape	9
REGIONAL INTEGRATION AND LESSONS FROM ECOWAS	9
Mandate and Focus of GSFPSEI in Ghana	10
Strategic Role of GSFPSEI	11
Current Focus Areas	11
Partnership with the European Social Label (EUSL)	11
Key Components of the EUSL Partnership within GSFPSEI	11
Global Social Impact Alliance (GSIA) and Public-Private Partnerships (PPPs)	13
Strategic Goals and Regional Alignment	15
RATIONALE	15
Catalytic Role of GSFPSEI	16
Merging Programmes under SDEP for Greater Impact	16
Flagship Programmes under GSFPSEI	17
Centralised Governance for Unified Progress in Ghana	18
Integrating the Five Programmes through SDEP and ECHO	18
Research Integration and Institutional Alignment	19
PROGRAMME 1: Ghana Fertilizer Access and Utilization Programme (GH-FAUP)	19
PROGRAMME 2: Ghana Bioprotectants Harmonisation Programme (GH-BHAP)	21
PROGRAMME 3: Ghana Biotechnology and Biosafety Implementation Programme (GH-BBIP)	22
PROGRAMME 4: Ghana Seed Harmonisation and Certification Programme (GH-SHCP)	23
PROGRAMME 5: Ghana Horticulture Accelerator (GH-HA)	24



	Development Outcomes / Targets (by 2035)	. 24
	Strategic Objectives	. 25
	Expected Outcomes	. 27
	Strategic Interventions Summary	. 28
	Key Focus Areas and Activities	. 29
	Strategic Interventions and Activities	. 30
	TECHNICAL APPROACH	. 31
Т	HEORY OF CHANGE	. 32
	Agriculture as a Pillar of National Resilience and Social Stability	. 33
	Contribution to State Legitimacy and Social Cohesion	. 34
O	bjective Hierarchy – Ghana Staple Food Programme: SDEP and ECHO Implementation (GSFPSEI) 36
O	utputs and Key Performance Indicators (KPIs) – Ghana Staple Food Programme (GSFPSEI)	. 37
N	lain Activities and Tasks – Ghana Staple Food Programme (GSFPSEI)	. 38
В	udget and use of funds	. 48
	PROJECT 1: Ghana Fertilizer Access and Utilization Programme (Ghana FAUP)	. 48
	PROJECT 2: Ghana Bioprotectants Harmonisation Programme (Ghana BHAP)	. 54
	PROJECT 3: Ghana Biotechnology and Biosafety Implementation Programme (Ghana BBIP)	. 57
	PROJECT 4: Ghana Seed Harmonisation and Certification Programme (Ghana SHCP)	. 61
	PROJECT 5: COMESA ECOWAS Horticulture Accelerator (CEHA)	. 62
	SOCIAL DEVELOPMENT AND EMPOWERING PROGRAMME	. 78
	General items	. 81
S	ECTION 3 – FEASIBILITY	. 83
S	ECTION 4 – IMPLEMENTATION & MANAGEMENT STRUCTURE	. 88
E	nvironmental and Social Screening form	. 89
	PART A: General information	. 89
	PART B: Brief description of the proposed activities	. 90
	PART C: Environmental and social baseline information of the site brief description	. 92
	PART D: Environmental and social screening form	. 93
	PART E: Overall evaluation of screening excercises	. 95
S	TAFF REQUIREMENTS	. 97



Ghana Staple Food Programme: SDEP and ECHO Implementation

EXECUTIVE SUMMARY

The Ghana Staple Food Programme: SDEP and ECHO Implementation (GSFPSEI) is a comprehensive, country-led initiative aligned with the Government of Ghana's Coordinated Programme of Economic and Social Development Policies (CPESDP 2021–2025) and the Medium-Term National Development Policy Framework (MTNDPF 2022–2025), and operationalized through Planting for Food and Jobs Phase II (PFJ 2.0). In concert, these frameworks prioritise value-chain modernisation, private-sector financing, technology-enabled aggregation, and export competitiveness, providing a clear policy mandate for accelerated agricultural transformation. The Programme integrates the European Social Label (EUSL) architecture—specifically the Social Development and Empowering Programme (SDEP) and Agenda for Social Equity 2074—to mobilise capital, technology, and skills in support of Ghana's national goals while strengthening regional market access under ECOWAP and AfCFTA, whose Secretariat is hosted in Accra. It is designed to raise productivity, deepen value addition, and expand intra-African trade by leveraging Ghana's ECOWAS regulatory environment for seeds, fertiliser quality control, SPS management, and biosafety. [NDPC], [GOVERNMENT...ANA - NDPC], [Planting f...II - MOFA] [ECOWAP | Document], [Home to th...ana Invest] [Regulation...erning ...], [Regulation...in the ...], [ECOWAP Sector], [Act and re...Authority]

Drawing from tested regional instruments in ECOWAS and technical platforms such as CORAF and the ECOWAS—UEMOA—CILSS tripartite seed system, the GSFPSEI aims to reinforce Ghana's food systems while advancing inclusive growth, economic diversification, and climate resilience as envisaged by Ghana's Climate-Smart Agriculture and Food Security Action Plan and National Adaptation Plan framework. By contextualising targeted programmes to Ghana's policy landscape—including PFJ 2.0's value-chain, aggregator, and input-credit orientation—the initiative directly supports national priorities in food security, agro-industrial development, employment creation, and export expansion. [Details Coraf Events], [MANUAL OF...DS AND ...], [National C...lan of ...], [Ghana's Na...October 20] [Planting f...II - MOFA]

Programme Structure

The **GSFPSEI** comprises seven strategic programmes, each tailored to Ghana's regulatory and institutional context and to ECOWAS harmonisation regimes:

- 1. Ghana Bioprotectants Harmonisation Programme (GH-BHAP).
 - This programme advances predictable, science-based registration and use of bioprotectants by aligning national plant protection practice with ECOWAS SPS action planning, regional pesticide registration mechanisms (COAHP/WAPRC), and national competent authorities, thereby supporting ecological pest management and export compliance. [ECOWAP Sector]
- 2. Ghana Biotechnology and Biosafety Implementation Programme (GH-BBIP).

 GH-BBIP operationalises safe deployment of modern biotechnology to support yield and resilience gains, anchored in Ghana's Biosafety Act, 2011 (Act 831) and the Biosafety (Management of Biotechnology) Regulations, 2019 (L.I. 2383), and situated within ECOWAS' regional biosafety action plan framework. [Act and re...Authority], [Regulation...or the ...]



3. Ghana Fertilizer Access and Utilization Programme (GH-FAUP).

This component improves affordability, quality assurance, and last-mile distribution—while building domestic blending capacity—under the ECOWAS **Fertilizer Quality Control Regulation C/REG.13/12/12** and PFJ 2.0's smart input-credit and market-linked model. [ECOWAP | Document], [Regulation...in the ...], [Planting f...II - MOFA]

4. Ghana Seed Harmonisation and Certification Programme (GH-SHCP).

GH-SHCP streamlines variety release, certification, and cross-border movement of certified seed by applying the **ECOWAS-UEMOA-CILSS harmonised seed rules**, the Regional Seed Committee procedures, and national implementation pathways, thereby catalysing private seed sector growth and farmer access to improved varieties. [Regulation...erning ...], [MANUAL OF...DS AND ...], [ECOWAS, UE...gional ...]

5. ECOWAS Horticulture Accelerator – Ghana Window (EHA-Ghana).

Anchored in Ghana's fruit and tree-crop potential—and coordinated with **WACOMP** value-chain upgrading and the statutory mandate of the **Tree Crops Development Authority** (**TCDA**)—this programme scales climate-resilient horticulture, quality infrastructure, logistics, and market access for mango, pineapple, and priority tree crops. [WACOMP – W...Programme], [West Afric...COMP Ghana], [TCDA Act 2...Authority]

6. Technology Implementation and Infrastructure Support (SDEP Tech).

SDEP Tech deploys modular rural infrastructure (energy, water, connectivity), digital agriculture solutions, and the **ECHO** platform to enhance operational efficiency, traceability, warehouse certification, and structured market linkages consistent with PFJ 2.0's technology- and aggregator-driven delivery model. [PLANTING F...SE II (PFJ], [Planting f...II - MOFA]

7. Vocational Training and Capacity Building (SDEP-VTCB).

This programme strengthens skills pipelines for farm and agro-industry through competency-based TVET aligned to Ghana's **Education Regulatory Bodies Act, 2020 (Act 1023)** and the Commission for TVET (CTVET), linking technical curricula to PFJ 2.0 value chains and national quality infrastructure (GSA/FDA). [EDUCATION...23 - CTVET], [Planting f...II - MOFA], [Standards...Authority], [THE QUALIT...TY - GHANA]

Strategic Components

The GSFPSEI rests on three interdependent pillars. First, Natural Resource Management promotes regenerative and climate-smart practices that restore soils and water and enhance adaptive capacity, in line with Ghana's Climate-Smart Agriculture Action Plan and the National Adaptation Plan framework. Second, Market and Financial Integration expands access to structured markets and finance under PFJ 2.0, ECOWAP, and AfCFTA arrangements, mobilising private credit, warehousing, insurance, and cooperative finance while reducing transaction costs through standards and SPS compliance. Third, Agricultural Policy Harmonisation aligns national rules with ECOWAS seed, fertiliser, SPS, and biosafety instruments to ensure a coherent, predictable environment that attracts investment and facilitates regional trade. [National C...lan of ...], [Ghana's Na...October 20] [Planting f...II - MOFA], [ECOWAP | Document], [Home to th...ana Invest] [Regulation...erning ...], [Regulation...in the ...], [ECOWAP Sector], [Act and re...Authority]

Policy Development and Alignment

To consolidate an enabling framework, the GSFPSEI will:



(i) update and implement harmonised regulations on seed, fertiliser quality control, biosafety, and agri-inputs with reference to ECOWAS legal acts and tripartite manuals; (ii) strengthen public-sector capacity for policy design, monitoring, and enforcement through NDPC-aligned planning cycles; and (iii) enhance SPS compliance—including risk-based inspection, Codex/International Standards adoption, and notification/enquiry functions—through the Ghana Standards Authority (GSA), Food and Drugs Authority (FDA), and relevant directorates. [Regulation...erning ...], [Regulation...in the ...], [MANUAL OF...DS AND ...], [GOVERNMENT...ANA - NDPC], [Standards...Authority], [THE QUALIT...TY - GHANA]

Key Focus Areas

The Programme will prosecute reforms to enable inclusive agri-sector growth and export competitiveness; deliver capacity-building through institutional training, mentorship, and systems development; scale digitalisation and mechanisation consistent with PFJ 2.0 design; advance climate-smart and regenerative farming; and expand equitable participation of women and youth across value chains, including in WACOMP-supported clusters for fruits and allied processing. [Planting f...II - MOFA], [National C...lan of ...], [West Afric...COMP Ghana]

Implementation Approaches

Implementation is premised on **country ownership**, with full alignment to CPESDP 2021–2025 and the MTNDPF 2022–2025.**Public-Private Partnerships** and blended finance will be mobilised to build resilient value chains and logistics under PFJ 2.0's aggregator and warehouse-certification logic.**Regional integration** will be deepened through ECOWAP instruments and AfCFTA trade facilitation, including standards/SPS cooperation to reduce rejections and improve market access.**Research and innovation** will leverage CORAF networks, national research systems, and programme data tools to drive adaptive management and evidence-based decisions. [NDPC], [GOVERNMENT...ANA - NDPC] [Planting f...II - MOFA], [PLANTING F...SE II (PFJ] [ECOWAP | Document], [Home to th...ana Invest] [Details Coraf Events]

Select References (hyperlinked)

- <u>CPESDP 2021–2025 (NDPC)</u> <u>MTNDPF 2022–2025 (NDPC)</u> <u>PFJ 2.0 (MoFA)</u> <u>PFJ 2.0 overview (USDA/FAS)</u>
- <u>ECOWAS Fertilizer Quality Control Regulation C/REG.13/12/12</u> <u>ECOWAS Seed Regulation</u> C/REG.4/05/2008 ECOWAS—UEMOA—CILSS Seed Import/Export Manual (2023)
- ECOWAP: SPS/Pest Management actions Biosafety Act, 2011 (Act 831) & L.I. 2383
- AfCFTA Secretariat Accra
 WACOMP (ECOWAS/EU/UNIDO)
 Fruits value-chain analysis –
 WACOMP Ghana
- <u>TCDA Act, 2019 (Act 1010) Mandate</u> <u>CTVET/Act 1023</u> <u>GSA Standards/Codex functions</u> <u>FDA – QMS overview</u>
- <u>Climate-Smart Agriculture & Food Security Action Plan (2016–2020)</u> <u>National Adaptation Plan</u> Framework



STAKEHOLDERS (Adapted for Ghana)

The **Ghana Staple Food Programme: SDEP and ECHO Implementation (GSFPSEI)** will engage a broad coalition of actors across the public, private, and development spectrum to ensure effective delivery and sustainability. The principal stakeholder categories include:

Government Entities

The Ministry of Food and Agriculture (MoFA) serves as the lead implementing agency, supported by the Ministry of Trade and Industry (MoTI) for market integration and AfCFTA facilitation, and the Ministry of Finance (MoF) for fiscal alignment and investment frameworks. Strategic oversight will involve the Office of the President through the Economic Management Team, ensuring coherence with the Coordinated Programme of Economic and Social Development Policies (CPESDP) and the Medium-Term National Development Policy Framework (MTNDPF). [MOFA - Home], [MINISTRY O...onomic ...]

Development Partners

Key multilateral and bilateral partners include the African Development Bank (AfDB), World Bank, International Fund for Agricultural Development (IFAD), United Nations Development Programme (UNDP), and technical partners such as the Food and Agriculture Organization (FAO). Philanthropic and private foundations, including the Bill & Melinda Gates Foundation (BMGF) and Alliance for a Green Revolution in Africa (AGRA), will complement financing and innovation streams. [Strengthen...ole of ...], [Improving...s in Ghana]

Private Sector and Industry Bodies

Stakeholders encompass agribusiness firms, commodity boards (e.g., Ghana Cocoa Board and Tree Crops Development Authority), input suppliers, aggregators under PFJ 2.0, financial institutions (including GIRSAL and commercial banks), and technology providers for ECHO-enabled digital platforms. The Ghana Commodity Exchange (GCX) and logistics operators will play a critical role in structured trade and warehousing systems. [MULTI-STAK...PORT - DBG], [TCDA Act 2...Authority]

Research and Academia

The Council for Scientific and Industrial Research (CSIR) and its crop research institutes, universities such as the University of Ghana and Kwame Nkrumah University of Science and Technology, and regional research networks (e.g., CORAF) will provide evidence-based innovations in climate-smart agriculture, biotechnology, and mechanization. [Details Coraf Events]

Civil Society and NGOs

Agricultural advocacy groups such as the Peasant Farmers Association of Ghana (PFAG), farmer-based organizations, and NGOs active in food security, gender equity, and climate adaptation will ensure inclusivity and social accountability. [The Peasan...n of Ghana]

Key Focus Areas for GSFPSEI

Building on ECOWAP and AfCFTA frameworks, the Programme will prioritise:

- Integrated Agricultural Policy Development aligned with ECOWAS harmonisation instruments for seeds, fertilisers, SPS, and biosafety. [Seed Polic...e of Ghana], [ECOWAS Rev...de and ...]
- Agricultural Investment Stimulation to expand irrigation, mechanisation, and value chain infrastructure under PFJ 2.0's aggregator model. [MOFA Pla...s Phase II], [Delivering...lience ...]



- Regional Trade Facilitation through AfCFTA protocols, structured warehousing, and SPS compliance to reduce non-tariff barriers. [NATIONAL A...CTION PLAN], [STRENGTHEN...TOR TO ...]
- Private Sector Mobilisation via PPPs, blended finance, and risk-sharing instruments such as GIRSAL. [MULTI-STAK...PORT - DBG]

Targets and Goals

The GSFPSEI aims to achieve a **10% annual increase in intra-African agricultural trade** over the next decade, leveraging Ghana's AfCFTA leadership role. Priority commodities reflect PFJ 2.0 and national export strategies: [NATIONAL A...CTION PLAN]

- **Staple Crops:** Maize, rice, soybeans, sorghum, and cassava.
- **High-Value Crops:** Mango, pineapple, cashew, coconut, oil palm, and vegetables for domestic and export markets.
- Livestock and Fisheries: Poultry, small ruminants, dairy, and aquaculture species such as tilapia and catfish. [MOFA Pla...s Phase II], [Diversifyi...yond cocoa], [Ghana targ...ps by 2030]

Productivity Gains will be driven by:

- Scaling access to certified seeds, fertilisers, and mechanisation services.
- Expanding irrigation coverage from under 3% to at least 15% by 2035 through public schemes and farmer-led irrigation models. [Delivering...lience ...], [Ghana Irri...ity MOFA]
- Integrating producers into structured value chains linked to GCX and AfCFTA markets. [MULTI-STAK...PORT - DBG]

Contextual Overview: Ghana's Agricultural Landscape

Agriculture contributes approximately **20% of GDP** and employs **35–39% of the national workforce**, with rural employment exceeding 70%. Despite its strategic role, the sector faces persistent challenges: [From The R...ness Group], [Ghana - Em...mployment)]

- Low Productivity: Limited mechanisation, inadequate access to improved inputs, and low irrigation coverage. [Experts wa...production]
- Market Isolation: High post-harvest losses, weak aggregation systems, and poor rural infrastructure. [MULTI-STAK...PORT DBG]
- **Policy and Institutional Gaps:** Fragmented regulatory enforcement and limited investment incentives. [Seed Polic...e of Ghana]
- **Climate Vulnerability:** Increasing frequency of floods, droughts, and erratic rainfall patterns threaten food security. [Climate ch...ral sector]

Revitalising agriculture is central to Ghana's economic diversification and industrialisation agenda, as articulated in PFJ 2.0 and the Tree Crops Development Strategy. [MOFA - Pla...s Phase II], [Ghana targ...ps by 2030]

REGIONAL INTEGRATION AND LESSONS FROM ECOWAS

As a founding member of **ECOWAS** and host of the **AfCFTA Secretariat**, Ghana is strategically positioned to leverage regional trade, research, and harmonisation frameworks to accelerate agricultural



transformation. The **Ghana Staple Food Programme: SDEP and ECHO Implementation (GSFPSEI)** will draw on these regional instruments to ensure policy coherence, operational scalability, and market integration.

Relevant ECOWAS and continental initiatives include:

- **ECOWAP (ECOWAS Agricultural Policy)**, which provides the overarching framework for agricultural development, food security, and trade facilitation in West Africa.
- ACTESA (Alliance for Commodity Trade in Eastern and Southern Africa) has no direct equivalent in ECOWAS, but Ghana benefits from WACOMP (West Africa Competitiveness Programme) and the ECOWAS Agricultural Trade Programme, which promote harmonised trade policies and improved access to regional markets.
- ECOWAS Seed Regulation (C/REG.4/05/2008) and the Tripartite Seed Rules (ECOWAS-UEMOA-CILSS), which enable cross-border movement of certified seeds and harmonised quality standards.
- ECOWAS Fertilizer Quality Control Regulation (C/REG.13/12/12), which ensures quality assurance and traceability in fertiliser trade.
- **ECOWAS Sanitary and Phytosanitary (SPS) Framework**, which strengthens compliance with international standards to boost export competitiveness.

By internalising these regional strategies, GSFPSEI will position Ghana as a catalytic hub for AfCFTA-driven agricultural trade, reinforcing its role as a logistics and agribusiness centre for West Africa.

Mandate and Focus of GSFPSEI in Ghana

GSFPSEI aligns with Ghana's Coordinated Programme of Economic and Social Development Policies (CPESDP), the Medium-Term National Development Policy Framework (MTNDPF), and Planting for Food and Jobs Phase II (PFJ 2.0). It also draws on continental frameworks such as CAADP, Agenda 2063, and the AfCFTA Agreement.

Its core focus areas include:

- **Staple Crops and Market Development:** Enhancing productivity and competitiveness of maize, rice, soybeans, sorghum, and cassava, alongside emerging horticultural crops such as tomatoes, onions, and peppers.
- **Seed and Input Systems:** Strengthening Ghana's seed certification and distribution systems in line with ECOWAS harmonisation protocols, while promoting local seed production and private-sector participation.
- Tree Crops and Horticulture: Scaling high-value crops under the Tree Crops Development Authority (TCDA) mandate—cashew, mango, coconut, oil palm—and horticultural exports such as pineapple and vegetables.
- **Livestock and Fisheries:** Expanding poultry, small ruminants, dairy, and aquaculture (tilapia and catfish) to diversify diets and reduce import dependency.



 Value Chain Enhancement: Developing rural logistics, agro-processing infrastructure, cold storage, and structured trade systems linked to the Ghana Commodity Exchange (GCX) and AfCFTA markets.

Strategic Role of GSFPSEI

GSFPSEI is envisioned as a **national coordination platform** to drive agricultural transformation through:

- 1. **Agricultural Policy Development:** Aligning Ghana's frameworks with ECOWAS regulations, CAADP targets, and AfCFTA trade facilitation measures.
- 2. **Investment and Trade Facilitation:** Creating an enabling environment for agribusiness investment, advancing PPPs, and promoting structured markets for regional and continental trade.
- 3. **Research, Innovation, and Capacity Building:** Leveraging digital tools (e.g., ECHO), national research institutions (CSIR), and regional centres of excellence to modernise extension services and promote climate-smart agriculture.

Current Focus Areas

In its foundational phase, GSFPSEI will prioritise four strategic pillars:

- 1. **Policy Harmonisation:** Implementing ECOWAS-aligned regulations for seeds, fertilisers, SPS, and biosafety to facilitate intra-African trade.
- 2. **Investment Promotion:** Introducing targeted incentives for private-sector participation in mechanisation, irrigation, processing, and rural enterprise development.
- 3. **Trade Facilitation:** Expanding market access under AfCFTA, improving rural infrastructure, and strengthening logistics and market information systems.
- 4. **Sector-Specific Interventions:** Scaling climate-smart agriculture, irrigation schemes, and gender-inclusive value chains, while promoting environmental sustainability.

Partnership with the European Social Label (EUSL)

The implementation of GSFPSEI is reinforced by a strategic partnership with the European Social Label (EUSL), a mission-driven organisation promoting socio-economic transformation through Charity as a Business (CaaB) and innovative PPP models. Through the Social Development and Empowerment Programme (SDEP), EUSL provides a tested framework for aligning government priorities with private-sector capabilities, enabling systemic agricultural reform.

SDEP has demonstrated viability in multiple contexts and is recognised by development partners and impact investors for its ability to integrate **digital infrastructure (ECHO platform)**, inclusive financing models, and institutional reforms. In Ghana, this partnership will accelerate the deployment of modular infrastructure, digital agriculture solutions, and blended finance instruments to support PFJ 2.0 and AfCFTA objectives.

Key Components of the EUSL Partnership within GSFPSEI

Modular Infrastructure Platform: ECHO.

Within Ghana's policy and regulatory architecture, **ECHO** functions as a modular, climate-resilient infrastructure platform capable of delivering decentralised renewable power, safe water and



small-scale irrigation, waste-to-resource systems, and digital connectivity for rural communities and agro-industrial clusters. Its rollout will be sequenced along PFJ 2.0 priority value chains and logistics corridors and procured pursuant to the Public Private Partnership Act, 2020 (Act 1039)—including the use of prescribed feasibility studies, value-for-money tests, and approvals by the PPP Committee—and integrated into the Government's public investment framework under the Public Financial Management Act, 2016 (Act 921). All physical deployments will comply with Ghana's Environmental Assessment Regulations, 1999 (L.I. 1652), including screening, scoping and, where applicable, Environmental Impact Statements (EIS) prior to permitting by the EPA. For connectivity, ECHO sites will be layered onto national broadband and rural telephony initiatives, leveraging policy instruments under the Ministry of Communications and Digitalisation (e.g., the National Broadband Policy) and the universal access investments of GIFEC to close the rural digital gap. [PUBLIC PRI...t of Ghana], [Public Fin...6 - Ghalil] [ARRANGEMEN...MER VALUE-] [NATIONAL B...POLICY AND], [1. The Gha...on Project]

The platform is also an innovation testbed. Each site embeds telemetry for operational and socio-economic metrics, enabling iterative policy calibration by MoFA, MoTI, and NDPC and supporting PFJ 2.0's technology-enabled aggregator and certified-warehouse model for structured markets. By tying infrastructure to monitored outcomes within Ghana's planning and budget cycles, the Programme improves allocative efficiency and strengthens evidence-based reform. [THE QUALIT...TY - GHANA]

Research, Data Systems, and Climate Resilience.

To address rainfall variability, flood and drought risk, and the underutilisation of irrigation potential, the Programme integrates **FlexSus**, a decision-support suite for remote sensing, soil diagnostics, yield modelling, climate forecasting, and early-warning. FlexSus will interoperate with national data stewardship requirements, including **Data Protection Act, 2012 (Act 843)** for personal-data processing and **Cybersecurity Act, 2020 (Act 1038)** for critical information infrastructure and incident reporting. The analytics will guide farmer-led and public-scheme irrigation expansion and climate-smart agronomy in line with World Bank-documented resilience priorities and Ghana's irrigation mandates (GIDA), narrowing the gap from sub-3% irrigated area through targeted schemes and farmer-led solutions over the medium term. [Data Prote...012 - NITA], [Cybersecur...0 - GhaLII] [Ghana's Na...October 20], [Unpacking...o will ...]

Digital Inclusion and Rural Connectivity.

GSFPSEI will establish a community-broadband initiative to extend last-mile access for extension, finance, and market intelligence—prioritising underserved smallholders, women, and youth. Where feasible, sites will backhaul into **GIFEC**-supported Rural Telephony footprints and community ICT centres, and will align with the **National AfCFTA Policy Framework** to support digital trade readiness and cross-border information flows for agri-commodities. The approach is consistent with national broadband policy goals and ongoing government financing tranches for rural connectivity. [1. The Gha...on Project], [Regulation...in the ...] [NATIONAL B...POLICY AND], [Connectivi...Commission]

Vocational Training and Capacity Building.

Capacity-building will be embedded across all components and aligned with Ghana's TVET regime under the **Education Regulatory Bodies Act, 2020 (Act 1023)**, while leveraging MoFA's extension and PFJ 2.0 ecosystem. Programming will include climate-smart agronomy, precision input management, regenerative practices, food-safety/SPS compliance, cooperative governance, and agro-enterprise management. A field-academic integration model will embed postgraduate researchers from Ghanaian universities and CSIR institutes into project zones, enabling translational research and rapid diffusion



of innovations in seeds, soils, water management, and post-harvest systems. [Report Nam...s Phase II], [THE QUALIT...TY - GHANA] [Agricultur...RID - MoFA]

Through these integrated systems—spanning infrastructure, research and data governance, and human capital—GSFPSEI provides a durable foundation for a resilient, equitable, and competitive food system. Its governance conforms to Ghana's PPP, PFM, environmental, data-protection, and cybersecurity laws while advancing PFJ 2.0's private-sector, market-driven implementation logic. [PUBLIC PRI...t of Ghana], [Public Fin...6 - GhaLII], [ARRANGEMEN...MER VALUE-], [Data Prote...012 - NITA], [Cybersecur...0 - GhaLII], [THE QUALIT...TY - GHANA]

Global Social Impact Alliance (GSIA) and Public-Private Partnerships (PPPs) Role and scope.

The Global Social Impact Alliance (GSIA)—as a sister entity to EUSL—mobilises blended capital and technology to deliver catalytic agri-infrastructure and value-chain projects. In Ghana, GSIA will structure investments to comply with Act 1039 from concept to post-award management, including submission of Project Concept Notes, pre-feasibility and feasibility, value-for-money assessments, affordability tests, risk allocation matrices, and approvals by the PPP Committee and the Fiscal Commitment Technical Committee where contingent liabilities may arise. Fiscal risks, commitments, and guarantees will be booked and monitored within the PFM framework under Act 921. [PUBLIC PRI...t of Ghana] [Public Fin...6 - Ghall]

Operational priorities.

Under GSIA's stewardship, GSFPSEI will:

- 1. **Expand access to quality inputs and services** by establishing certified seed laboratories, fertiliser innovation hubs, and biological protection centres, aligned with ECOWAS seed and fertiliser harmonisation rules to enable regional trade in compliant inputs. [ADMINISTRA...ana.gov.gh], [Ghana lead...A benefits]
- 2. **Mobilise private capital for value addition and logistics**—including processing plants, climate-resilient storage, and corridor infrastructure—integrated with structured trade systems such as the **Ghana Commodity Exchange (GCX)** and PFJ 2.0's certified-warehouse architecture. [Ghana St...for Trade], [STDF Regio...0 E LR.pdf]
- 3. Harmonise policy and compliance with ECOWAP/SPS instruments to meet export-market requirements and reduce rejections, working with GSA (standards/Codex), FDA (QMS), and SPS committees. [MOFA Pla...(PFJ 2.0)], [AUC, ECOWA...border ...], [MULTI-STAK...PORT DBG]

Financing architecture and compliance (expanded).

To address the complexity of PPP finance and compliance, GSIA applies a layered structure:

- 1. **Project Preparation & Governance.** GSIA funds pre-feasibility/feasibility, E&S scoping, and market sounding; mandates independent value-for-money and fiscal-risk reviews; and routes approvals through the PPP Office/PPP Committee per **Act 1039**. [PUBLIC PRI...t of Ghana]
- 2. **Procurement & Contracting.** Transactions are tendered under **Act 1039** (and implementing guidelines), with express provisions on transparency, stakeholder consultation, local content, and permitted procurement via the **Ghana Infrastructure Investment Fund (GIIF)** where applicable. [PUBLIC PRI...t of Ghana]



Safeguards & Permitting. All assets comply with L.I. 1652 for environmental permitting/EIA; data systems undergo DPIAs under Act 843; and critical digital infrastructure conforms to Act 1038 for cybersecurity standards and incident obligations. [ARRANGEMEN...MER VALUE-], [Data Prote...012 - NITA], [Cybersecur...0 - GhaLII]

4. Capital Stack.

Senior debt: commercial banks and DFIs (e.g., AfDB/World Bank windows) priced to reflect risk allocation in the PPP agreement and backed by government support measures as permitted under **Act 1039**.

- Blended/Concessional tranches: climate and resilience facilities aligned to irrigation, renewable energy, and storage outcomes documented for Ghana by the World Bank and sector programmes.
- **Risk-sharing & guarantees:** utilisation of **GIRSAL** credit guarantees for agrifinance lines to participating PFIs to lower pricing and increase tenors to SMEs and cooperatives.
- Viability Gap/Performance-based payments: where appropriate, GSIA structures availability- or output-based arrangements consistent with PPP Act affordability and value-for-money thresholds and with MoF reporting via the PPP Annual Report process. [PUBLIC PRI...t of Ghana] [Ghana's Na...October 20] [GIRSAL: Ca...g in Ghana], [Ghana In...ending ...] [PUBLIC PRI...t of Ghana], [2021 ANNUA...c Planning]
- 5. **Revenue & Market Integration.** Offtake is anchored in PFJ 2.0 aggregator networks, certified warehouses, and GCX contracts to reduce counterparty risk and provide transparent pricing and receivables-backed finance instruments. [STDF_Regio...0 E_LR.pdf], [Ghana St...for Trade]
- 6. **Monitoring & Disclosure.** Post-award obligations include service-level reporting, E&S compliance, and fiscal-risk monitoring under Act 921; sensitive data is processed in accordance with Act 843 and cybersecurity standards under Act 1038. [Public Fin...6 GhaLII], [Data Prote...012 NITA], [Cybersecur...0 GhaLII]

Why this mitigates funding and compliance risk.

The PPP Act creates an end-to-end statutory process with institutional checks (PPP Committee, PPP Office, Fiscal Commitment Technical Committee) and explicit requirements on risk allocation, affordability, and transparency; by adhering strictly to these stages, GSIA de-risks regulatory challenge and fiscal slippage. The PFM law ensures commitments are sequenced within budgetary ceilings, contingent liabilities are measured and disclosed, and project cashflows and guarantees are monitored through the MoF architecture. On the private side, GIRSAL's guarantees crowd in local lenders for input finance and working-capital cycles, lowering the Programme's weighted average cost of capital while expanding SME access to credit. For digital systems associated with ECHO/FlexSus, data protection and cybersecurity statutes provide the compliance spine for DPIAs, breach notification, and critical-infrastructure standards, reducing legal and operational exposure. [PUBLIC PRI...t of Ghana] [Public Fin...6 - GhaLII] [GIRSAL: Ca...g in Ghana] [Data Prote...012 - NITA], [Cybersecur...0 - GhaLII]

Illustrative Compliance Pathway for an ECHO-Enabled Agro-Processing Hub (Ghana)

1. **Project identification and PCN** under Act 1039; 2) **Pre-feasibility/feasibility** (technical, E&S scoping under L.I. 1652; affordability and VfM); 3) **PPP Committee approval** and procurement (Act 1039); 4) **EIA/EPA permit** and, where digital services are provided, **DPIA** and cybersecurity



conformance; 5) Financial close with blended capital and GIRSAL guarantees; 6) Construction and commissioning; 7) Performance-based O&M with periodic reporting to MoF and line agencies; 8) AfCFTA-oriented market integration via GCX/certified warehouses and SPS/standards compliance. [PUBLIC PRI...t of Ghana], [ARRANGEMEN...MER VALUE-], [Data Prote...012 - NITA], [Cybersecur...0 - GhaLII], [GIRSAL: Ca...g in Ghana], [STDF Regio...0 E LR.pdf]

References (hyperlinked)

- PPP & PFM: Public Private Partnership Act, 2020 (Act 1039); GhaLII Act 1039; PFM Act, 2016 (Act 921); MoF PPP Annual Report 2021.
- Environment & Safeguards: Environmental Assessment Regulations, 1999 (L.I. 1652).
- Data & Cyber: Data Protection Act, 2012 (Act 843); Cybersecurity Act, 2020 (Act 1038).
- Digital Inclusion: National Broadband Policy; MoCD rural telephony brief / GIFEC.
- **PFJ 2.0 & Market Systems:** MoFA PFJ 2.0; PFJ 2.0 warehouse certification presentation; DBG Value-Chain Report: maize, rice, soya, poultry & GCX linkages.
- Trade & SPS: National AfCFTA Policy Framework; ECOWAS SPS/Quality initiatives; GSA standards/Codex functions; FDA QMS overview.
- Irrigation & Climate Resilience: World Bank irrigation & climate resilience in Ghana; GIDA profile.
- Risk-sharing: [GIRSAL (AfDB project & institution)].

Strategic Goals and Regional Alignment

The **Ghana Staple Food Programme: SDEP and ECHO Implementation (GSFPSEI)** is anchored in a forward-looking vision that integrates **innovation**, **inclusion**, **and integration** to build a resilient, competitive, and climate-smart agricultural economy. The initiative pursues the following strategic outcomes:

- Advancing a Circular Economy: Embedding waste-to-energy systems, regenerative
 agricultural practices, and sustainable resource management across production and
 consumption cycles to reduce environmental footprints and enhance resource efficiency.
- Fostering Resilient Rural Economies: Reducing dependency on imports and social safety nets
 by promoting local entrepreneurship, cooperative ownership, and decentralised value chains
 that empower smallholders and rural enterprises.
- Positioning Ghana as a Regional Agri-Trade Hub: Leveraging its AfCFTA Secretariat status and ECOWAS membership to strengthen food sovereignty, expand intra-African trade, and enhance competitiveness in continental and global markets.

RATIONALE

The rationale for GSFPSEI is rooted in Ghana's imperative to transition from fragmented, low-productivity agriculture to a modern, market-driven, and inclusive sector that underpins industrialisation and export diversification. This transformation aligns with PFJ 2.0, the Coordinated



Programme of Economic and Social Development Policies (CPESDP), and **Agenda 2063**, while drawing on ECOWAS frameworks for harmonisation and trade facilitation.

GSFPSEI is built on three foundational pillars:

1. Restoring and Preserving Natural Capital

The programme prioritises environmental integrity through climate-smart agriculture, regenerative land-use systems, and ecosystem restoration. Integrating resilience strategies across value chains safeguards biodiversity, soil health, and water resources, ensuring long-term sustainability.

2. Creating an Inclusive and Enabling Environment

GSFPSEI empowers smallholders, youth, and women-led enterprises by improving access to finance, strengthening extension systems, and simplifying regulatory frameworks. Financial inclusion and equitable market participation are positioned as core enablers of agricultural modernisation.

3. Expanding Market and Financial Access

The programme dismantles trade barriers, mobilises blended capital, and upgrades infrastructure to connect Ghanaian producers to domestic, regional, and global value chains. Strategic PPPs and incentive-driven investment frameworks will cultivate a responsive financing ecosystem.

Catalytic Role of GSFPSEI

With agriculture central to Ghana's industrialisation and AfCFTA ambitions, GSFPSEI will:

- Scale productivity through mechanisation, digital agriculture, and precision input systems.
- Strengthen trade and logistics capacity via investments in processing, storage, and certified warehousing linked to the Ghana Commodity Exchange (GCX).
- **Build climate resilience** by mainstreaming adaptation measures and regenerative practices into all value chains.

By advancing evidence-based policymaking, cross-sectoral partnerships, and regional integration, GSFPSEI positions Ghana as a **continental leader in sustainable agri-food systems**.

Merging Programmes under SDEP for Greater Impact

To drive systemic transformation, GSFPSEI consolidates five flagship programmes under the Social Development and Empowering Programme (SDEP), operationalised through the ECHO platform. This integration ensures synergy, avoids duplication, and aligns with PFJ 2.0 and ECOWAS harmonisation frameworks. The overarching mission is to achieve:

- Increased productivity and food sovereignty
- Efficient and inclusive trade facilitation
- Research-led policy innovation and institutional development
- Sustainable rural transformation through community ownership and circular economy principles



Where national initiatives already exist, GSFPSEI will harmonise rather than duplicate, optimising resource use and reinforcing Ghana's policy coherence.

Flagship Programmes under GSFPSEI

1. Ghana Bioprotectants Harmonisation Programme (GH-BHAP)

Adapted from COMESA's COMBIHAP, GH-BHAP will:

- Establish a national regulatory framework for sustainable bioprotectants (biopesticides, biofertilisers).
- Promote harmonised ECOWAS standards for organic inputs and trade.
- Reduce reliance on synthetic inputs and foster agroecological approaches that enhance soil health and biodiversity.
- Pilot sites will be launched in major agro-ecological zones (e.g., Northern Savannah, Forest Transition) to demonstrate scalability.

2. Ghana Biotechnology and Biosafety Implementation Programme (GH-BBIP)

Adapted from COMESA's COMBIP, GH-BBIP will:

- Strengthen Ghana's biosafety regulatory framework under Biosafety Act, 2011 (Act 831) and L.I. 2383.
- o Build institutional capacity for biotechnology governance and oversight.
- Enable safe deployment of biotech solutions (e.g., drought-tolerant and pest-resistant varieties) in compliance with ECOWAS and international norms.

3. Ghana Fertilizer Access and Utilization Programme (GH-FAUP)

Adapted from COMESA's COMFREP, GH-FAUP addresses the critical role of fertiliser in achieving yield improvements and soil health restoration. The programme will:

- Facilitate localised blending of fertilisers tailored to Ghana's diverse agro-ecological zones, leveraging existing blending plants and promoting new investments under PPP arrangements.
- Introduce market transparency tools for pricing and quality control, aligned with the ECOWAS Fertilizer Quality Control Regulation (C/REG.13/12/12) and Ghana Standards Authority protocols.
- **Expand logistics and distribution infrastructure** through aggregator networks under PFJ 2.0, ensuring timely delivery to smallholders and reducing transaction costs.

Strategic investment in blending facilities and regional storage hubs will ensure continuity of supply and promote nutrient-sensitive agriculture, particularly in maize, rice, and soybean value chains.

4. Ghana Seed Harmonisation and Certification Programme (GH-SHCP)Adapted from COMESA's COMSHIP, GH-SHCP accelerates seed sector development by:

• **Establishing a robust national seed certification system**, supported by public-private breeding partnerships and CSIR-led research.



- **Aligning Ghana's regulatory frameworks** with ECOWAS-UEMOA-CILSS harmonised seed rules to facilitate cross-border trade and regional integration.
- **Strengthening multiplication and distribution channels** to ensure access to high-quality, climate-resilient seed varieties for smallholders.

This programme will also integrate digital traceability systems via the ECHO platform to enhance transparency and compliance with SPS standards.

5. Ghana Horticulture Accelerator (Ghana-HA)

Adapted from CEHA (COMESA-EAC Horticulture Accelerator), Ghana-HA seeks to unlock the country's horticultural potential by:

- Developing infrastructure for post-harvest handling, cold storage, and logistics, reducing spoilage and improving supply chain efficiency.
- Facilitating trade in high-value horticultural products such as mango, pineapple, vegetables, and emerging tree crops under the Tree Crops Development Authority (TCDA) mandate, targeting AfCFTA and EU markets.
- **Enhancing climate resilience** through precision irrigation, protected cropping systems, and integrated pest management strategies.

Through SDEP and GSIA, EUSL will catalyse investment in processing, storage, and transport infrastructure, positioning Ghana's horticulture sector as a competitive, export-oriented industry.

Centralised Governance for Unified Progress in Ghana

The integration of these flagship programmes under GSFPSEI creates a coherent governance and delivery framework that:

- **Centralises coordination** under MoFA and NDPC, ensuring streamlined decision-making and accountability across stakeholders.
- Aligns policies and infrastructure development with ECOWAS and AfCFTA strategies, guaranteeing regulatory coherence and access to regional trade incentives.
- Enhances scalability and impact, reinforcing Ghana's role as a regional agri-business hub.

Supported by SDEP and implemented in partnership with GSIA, this model ensures that Ghana's agricultural transformation remains evidence-based, climate-aligned, and investment-ready, serving as a replicable blueprint for inclusive agrarian development in Africa.

Integrating the Five Programmes through SDEP and ECHO

GSFPSEI is not a conceptual framework but an **implementation platform**, adaptable to Ghana's agroecological diversity and institutional capacities. Its core enablers include:

- SDEP as the governance and resource mobilisation mechanism, ensuring convergence of financing, policy, and technical support.
- ECHO as the infrastructure and resilience driver, enabling:
 - Irrigated and climate-smart agricultural systems for year-round production.



- Decentralised agro-processing units and cold chain infrastructure to reduce postharvest losses.
- o Community-based empowerment initiatives prioritising smallholders, youth, and women-led agribusinesses.

By leveraging ECHO's modular renewable infrastructure and FlexSus' real-time analytics, GSFPSEI ensures a data-driven, climate-smart transition, fully aligned with Agenda 2063 and Agenda for Social Equity 2074.

Research Integration and Institutional Alignment

Each programme will be embedded within a **Unified Research and Implementation Framework**, in partnership with CSIR, Ghanaian universities, and farmer-based organisations. This ensures **national ownership**, adaptation to local knowledge systems, and sustained long-term impact.

By harmonising interventions under GSFPSEI, Ghana stands to build an agricultural sector that is:

- Evidence-based
- · Regionally harmonised
- Environmentally regenerative
- Socially inclusive
- · Globally competitive

PROGRAMME 1: Ghana Fertilizer Access and Utilization Programme (GH-FAUP)

Outcome 1:

Accelerate the development and harmonisation of regulatory frameworks for mineral and organic fertilisers in Ghana, aligned with ECOWAS Fertilizer Quality Control Regulation (C/REG.13/12/12) and African Union guidelines.

Output 1.1:

Support the development and harmonisation of organic and inorganic fertiliser frameworks within Ghana.

Activities:

- a) Convene an inception workshop on ECOWAS harmonised fertiliser regulations; conduct a national regulatory gap analysis; and prepare technical agreements for harmonisation of inorganic, organic, and biofertiliser standards.
- b) Draft national regulations aligned with ECOWAS and AU frameworks for inorganic and organic fertilisers.
- c) Develop and implement the **Ghana Fertilizer Harmonisation Implementation Plan (GH-FHIP)**, including harmonised labelling and a national accreditation system for hub agro-dealers and input suppliers.
- d) Develop national guidelines for organic and biofertiliser production and use, including best management practices and legislative requirements.
- e) Implement integrated crop, soil health, and water management strategies to stimulate demand, including omission trials, demonstration plots, and farmer field schools.



f) Conduct feasibility studies on renewable energy-based green ammonia production for local blending plants.

Output 1.2:

Establish zero tariffs and harmonised external tariff (ET) for fertiliser trade within ECOWAS.

Activities:

- a) Hold technical meetings with Ghana Revenue Authority and MoTI on zero tariffs and ET for fertilisers.
- b) Draft bilateral and regional agreements on tariff harmonisation.
- c) Adopt Ghana's harmonised external tariff for fertiliser trade under ECOWAS protocols.

Output 1.3:

Develop new soil fertility maps to support blending companies in designing site-specific fertiliser formulations.

Activities:

- a) Conduct national soil analyses and develop agro-ecological fertility maps.
- b) Generate site-specific fertiliser recommendations validated through field trials.
- c) Deploy standardised tools for soil health and nutrient management assessments.
- d) Establish a digital decision-support system for fertiliser, crop, and climate data.
- e) Collaborate with blending companies to produce nutrient-optimised blends from organic and mineral sources.

Output 1.4:

Develop Ghana Fertiliser Subsidy Guidelines with exit strategies.

Activities:

- a) Review existing subsidy programmes (e.g., PFJ input subsidy) to derive principles for smart subsidy design.
- b) Develop guidelines incorporating e-voucher systems, transparent targeting, and time-bound exit strategies.

Outcome 2:

Strengthen agricultural input distribution networks through the **hub-agrodealer model**, including fertiliser trade and agro-dealer associations.

Output 2.1:

Support the establishment and strengthening of fertiliser and agro-dealer associations in Ghana (e.g., Ghana Agri-Input Dealers Association).

Output 2.2:

Implement credit guarantee schemes to address financial bottlenecks in the fertiliser value chain.

Activities:

- a) Deploy trade credit guarantee mechanisms via **GIRSAL** to enable input suppliers to extend credit to hub agro-dealers.
- b) Establish a revolving fund or insurance-based mechanism to mitigate private-sector risk exposure.



PROGRAMME 2: Ghana Bioprotectants Harmonisation Programme (GH-BHAP)

Outcome 3:

Assessment reports on existing bioprotectant registration and commercialisation frameworks in Ghana.

Outputs:

- **Output 3.1:** Convene a national inception workshop with stakeholders (MoFA, EPA, GSA, private sector, NGOs, academia) to develop a roadmap for bioprotectant registration and harmonisation.
- **Output 3.2:** Conduct a comprehensive assessment of Ghana's bioprotectant regulatory frameworks with national and international experts.

Outcome 4:

Development of a national regulatory framework for bioprotectant registration.

Output 4.1:

Develop harmonised bioprotectant registration regulations aligned with ECOWAS and AU standards.

Activities:

- a) Convene technical consultative workshops to draft Ghana's harmonised bioprotectant regulations.
- b) Develop mutual recognition mechanisms for bioprotectant certification across regulatory agencies.
- c) Organise validation workshops for draft regulations.
- d) Engage legal drafting committees to prepare enabling instruments for adoption.
- e) Submit draft regulations for review and approval by MoFA, EPA, and Parliamentary Committees.

Outcome 5:

Strategic Implementation Plan for harmonised bioprotectant registration and commercialisation developed.

Activities:

- a) Draft and validate an implementation plan aligned with national agricultural and environmental policies
- b) Launch and disseminate the regulations through sensitisation campaigns.

Outcome 6:

National biopesticide and biocontrol agent registration and commercialisation regulations institutionalised.

Outcome 7:

Pesticide residue management and biopesticide capacity building initiated.

Activities:

- a) Establish a coordination structure for training and knowledge dissemination.
- b) Identify target groups (regulators, researchers, extension officers, farmers) and develop IPM and bioprotectant curricula.
- c) Set up an in-country training management system for extension officers and smallholders.
- d) Deliver training through demonstration farms, workshops, and digital platforms.



PROGRAMME 3: Ghana Biotechnology and Biosafety Implementation Programme (GH-BBIP)

Outcome 7:

Establish and institutionalise a National Biosafety Risk Assessment Mechanism in Ghana.

Outputs and Activities:

- Output 3.1: Identify and select members for Ghana's Panel of Experts (PoE) on biosafety from MoFA, EPA, GSA, CSIR, academia, and private sector.
- Output 3.2: Convene a technical review meeting to nominate the PoE and define its mandate.
- Output 3.3: Review and update the structure and operations of Ghana's National Biosafety
 Authority (NBA), including standardisation of application forms and SOPs.
- **Output 3.4:** Institutionalise a national biosafety risk assessment mechanism through PoE induction and technical empowerment.
- **Output 3.5:** Deliver induction training for PoE members, including mock dossier assessments for biotech crops relevant to Ghana (e.g., insect-resistant maize, virus-resistant cassava, drought-tolerant varieties).

Outcome 8:

Strengthen biosafety regulatory capacities in Ghana.

Outputs:

- Conduct annual data collection to update national policies and biotech product databases.
- Pilot the national biosafety risk assessment process using case studies (e.g., import applications for GM traits).
- Disseminate PoE findings within regulatory and academic communities.
- Organise technical workshops on data transportability, risk assessment, and economic analysis.
- Conduct an economic assessment of Ghana's harmonised biosafety approach using international best practices.

Outcome 9:

Enhance awareness and communication on Ghana's Biotechnology and Biosafety Policy.

Outputs and Activities:

- Develop a data-driven communication strategy for BBIP.
- Strengthen awareness among government, academia, and civil society.
- Engage media networks, youth platforms, and women's organisations to popularise biosafety policy.
- Publicise farmer and trader experiences with biotech crops in Ghana and comparable contexts.
- Implement targeted awareness campaigns, validation workshops, and strategic study tours for stakeholders.



- Host annual **National Biosafety and Biotechnology Conferences** to review progress and align with global practices.
- Submit annual progress reports to MoFA, EPA, and Parliamentary Committees.

PROGRAMME 4: Ghana Seed Harmonisation and Certification Programme (GH-SHCP)

Activities:

a) Develop a National Seed Digital Tracking and Traceability System

- Design and operationalise a digital platform for seed verification and traceability.
- Include **e-verification mechanisms** for farmers to confirm authenticity.
- Integrate yield-feedback loops supported by inspections, field surveillance, and third-party audits.
- Align with ECOWAS-UEMOA-CILSS seed traceability standards.

b) Implement the Ghana Seed Information System (GH-SIS)

- Build a comprehensive digital platform for seed variety data, certification, and trade documentation.
- Interface with ECOWAS regional platforms for harmonised data exchange.

c) Facilitate Cross-Border Testing for Ghanaian Seed Companies

- Support SMEs to test varieties in at least one ECOWAS Member State.
- Enable inclusion in the Regional Variety Catalogue using streamlined VCU/NPT protocols.

d) Support Domestic Alignment of Regional Seed Trade Regulations

- Fully domesticate ECOWAS seed harmonisation regulations into Ghana's legal framework.
- Ensure coherence between national laws and regional agreements.

e) Provide Technical Assistance for Seed Registration and Regional Trade

• Build capacity for seed companies to register varieties, acquire certification labels, and trade under harmonised ECOWAS protocols.

f) Implement the Regional Seed Labelling System in Ghana

 Operationalise ECOWAS-compliant seed labels in collaboration with GSA, MoFA, and private sector actors.

g) Support National Engagement in the Regional Seed Committee

 Facilitate Ghana's active participation in ECOWAS Seed Committee operations and decisionmaking.



PROGRAMME 5: Ghana Horticulture Accelerator (GH-HA)

Development Outcomes / Targets (by 2035)

1. Market Growth:

- Increase Ghana's horticultural exports to global markets from current levels to USD
 350 million for fruits and USD 950 million for combined horticultural products.
- Expand intra-African trade under AfCFTA and ECOWAS frameworks.

2. Processing Capacity:

 Double the proportion of processed fruits from 8% to 16%, reducing post-harvest losses and increasing value addition.

3. Efficiency:

- o Reduce farm-to-market time by **50%**.
- o Lower market price margins relative to farmgate by 25%.
- Achieve 80% traceability for fruits and vegetables through digital systems.

4. Consumption:

Improve affordability of fruits and vegetables by 25%, enhancing nutrition security.

5. Production Volume:

 Expand fruit cultivation area by 5% and vegetable cultivation by 5%, focusing on mango, pineapple, tomato, onion, and pepper clusters.

6. Farm Productivity:

- o Increase fruit yields by **4%**, vegetable yields by **3%**, and labour productivity by **25%**.
- o Reduce post-harvest losses from 40% to 20%.

7. Farmer Economics:

- o Improve farmer profitability by 25%.
- o Reduce monthly cashflow volatility by **50%**.
- Lower debt-to-asset ratio by 10%.

8. Climate-Smart Practices:

 Mainstream climate-smart agriculture and promote resilient crop varieties adapted to Ghana's agro-ecological zones.

9. **Policy Harmonisation:**

 Remove or harmonise the top five policy-related trade barriers affecting horticulture under ECOWAS and AfCFTA.



10. Value Creation:

- o Generate **USD 500 million** in additional horticultural sales.
- o Create **100,000 new jobs** along the horticulture value chain.

Strategic Objectives

- **Objective 1:** Develop sustainable regional horticulture value chains integrated with ECOWAS and AfCFTA markets.
- **Objective 2:** Ensure adequate and profitable production of quality, safe, and affordable fruits and vegetables.
- **Objective 3:** Stimulate industry growth through enabling policies, infrastructure, and business ecosystems.
- **Objective 4:** Promote research-driven innovation and cross-border collaboration for resilient horticulture systems.

Result Areas

- **Result Area 1:** Enhanced value chain coordination through structured platforms and digital integration.
- **Result Area 2:** Increased productivity and market access via improved inputs, technology adoption, and logistics.
- **Result Area 3:** Improved policy and business ecosystem with harmonised regulations and access to finance.
- **Result Area 4:** Research-driven development through partnerships with CSIR, universities, and private sector actors.

Outputs and Main Activities (Result Area 1: Coordination)

- Establish **multi-stakeholder platforms** for coordination among value chain actors (farmers, aggregators, exporters, processors).
- Develop a **centralised digital platform** for real-time data on market trends, production forecasts, logistics, and quality standards.
- Enable **integrated digital trading systems** to enhance market visibility and connectivity across Ghana and ECOWAS.
- Strengthen **public-private dialogue mechanisms** for policy alignment and investment facilitation.
- Mobilise resources through structured financing frameworks and blended capital instruments under GSIA.

Resource Mobilisation Mechanisms Developed

To ensure sustainable financing and infrastructure development for Ghana's horticulture sector, GH-HA will implement the following actions:



1. Convening Platform for Resource Pooling:

 Establish a multi-stakeholder platform to pool resources from private investors, public sector initiatives, and donor agencies for infrastructure, capacity building, and technology adoption along fruit and vegetable value chains (FVVCs).

2. Cluster Development:

- Conduct a national horticulture cluster assessment to identify high-potential production zones (e.g., mango in Bono/Ahafo, pineapple in Eastern Region, vegetables in Volta and Northern Regions).
- Organise consultative forums with smallholder farmers, cooperatives, agribusinesses, and policymakers to co-design cluster frameworks integrating production, aggregation, processing, and export activities.
- Establish production clusters and aggregation hubs for targeted horticultural value chains, supported by governance structures and legal frameworks.

3. Infrastructure and Logistics:

- Develop cold storage facilities, aggregation centres, and logistics hubs within clusters to reduce post-harvest losses.
- Implement traceability systems to monitor quality and supply chain performance, ensuring compliance with ECOWAS SPS standards and international market requirements.

4. Innovative Financing:

- o Introduce blended finance models, matching grants, and PPP-based investment schemes to de-risk private sector participation.
- Engage financial institutions and guarantee schemes (e.g., GIRSAL) to provide credit enhancements for SMEs and cooperatives.

5. Capacity Building:

- Deliver training on Good Agricultural Practices (GAPs), Integrated Pest Management (IPM), and food safety standards to farmers and SMEs within clusters.
- Develop compliance manuals for producers and SMEs to meet export certification requirements.

Public-Private Dialogue (PPD) Mechanisms Improved

To foster an enabling environment for horticulture value chain transformation:

- Establish a **national horticulture PPD platform** under MoFA and private sector leadership.
- Develop frameworks for aligning work plans and interventions, promoting cross-learning among stakeholders.
- Host **regular forums**, **workshops**, **and consultative meetings** to review progress, share updates, and address emerging challenges.

Addressing Key Value Chain Challenges

• **Supply Chain Fragmentation:** Connect smallholders with processors and exporters through structured aggregation and digital platforms.



- **Post-Harvest Losses:** Invest in shared cold chain systems, storage facilities, and logistics to reduce losses from 40% to 20%.
- Market Access: Improve compliance with SPS standards, certifications, and consumer preferences through training and digital traceability.
- **Policy Harmonisation:** Align national regulations with ECOWAS and AfCFTA frameworks to reduce trade barriers and transaction costs.

Strategic Interventions

• Coordination Platforms:

- Establish multi-stakeholder collaboration mechanisms.
- Create a centralised digital platform for real-time data on markets, production, logistics, and quality standards.
- o Integrate digital trading systems to enhance market visibility and connectivity.

• Resource Mobilisation:

- o Launch a **resource pooling platform** for private, public, and donor investments.
- o Develop **horticulture commercial clusters** based on comparative advantage.

• Public-Private Dialogue:

- o Institutionalise PPD frameworks for policy alignment and investment facilitation.
- Host annual horticulture investment forums to attract capital and partnerships.

Expected Outcomes

- Improved connectivity and reduced fragmentation across FVVCs.
- Streamlined linkages between producers, processors, and markets.
- Strengthened partnerships among private sector, government, and donors.
- Secured financial and technical resources for infrastructure and technology adoption.
- Reduced inefficiencies in production, aggregation, and logistics through cluster-based models.
- Enhanced market visibility via digital platforms and shared infrastructure.

Result Area 2: Increased Productivity and Market Access

This component focuses on strengthening Ghana's horticulture production systems by addressing gaps in **research**, **technology adoption**, **post-harvest management**, **and climate-smart agriculture**. The goal is to ensure efficient, sustainable, and market-driven production systems that enhance profitability and resilience across the value chain.

Key Interventions and Activities

- 1. Research, Innovation, and Technology for Inputs, Data, and Extension Systems
 - **Promote agricultural research initiatives** to deliver climate-smart, high-yielding, and pest-resistant varieties (e.g., mango, pineapple, tomato, onion).



- **Strengthen partnerships** between CSIR, universities, and private sector actors to scale innovative solutions.
- Embed Climate Early Warning Systems to help farmers anticipate and mitigate climate risks.
- **Promote sustainable water management** through drip irrigation and water-efficient practices.
- Facilitate access to high-quality inputs and climate-smart technologies, including improved seeds and biofertilisers.
- **Build capacity** for value chain actors to meet domestic and export market standards.
- **Support market linkages** between producers, aggregators, and buyers through structured trade platforms (e.g., GCX).
- **Organise trade missions and partnerships** to expand domestic, regional, and international market opportunities.

2. Improved Post-Harvest Management and Circularity

Post-harvest losses in Ghana's horticulture sector are estimated at **30–50%**, mainly due to inadequate handling, storage, and logistics. GH-HA will:

- Promote circularity for waste management, converting agricultural waste into compost or bioenergy.
- Support compliance with quality and SPS standards through technical assistance and training.
- Strengthen aggregation centres and cooperatives to improve bargaining power and efficiency.
- Develop and disseminate post-harvest handling protocols to minimise spoilage.
- **Invest in shared infrastructure**, including cold storage, packaging units, and logistics hubs, to enhance value chain efficiency.

3. Accessibility and Adoption of Climate-Smart Agriculture Technologies

- **Promote solar-powered irrigation systems** to ensure sustainable and affordable water access.
- Encourage circular practices such as composting, recycling, and reuse of by-products.
- Conduct awareness campaigns and training to familiarise farmers with climate-smart technologies and mechanisation options.

Strategic Interventions Summary

Intervention	Activities
Strengthen research and	Expand climate-smart research, embed early warning systems, promote
innovation	sustainable water use, and facilitate data exchange among stakeholders.



Intervention	Activities
·	Advocate circularity, support SPS compliance, build aggregation capacity, and invest in shared infrastructure.
	Promote solar irrigation, composting, and awareness of available technologies.

Expected Outcomes

- Increased productivity and reduced post-harvest losses across horticulture value chains.
- Enhanced resilience of production systems through climate-smart practices.
- Improved access to shared infrastructure and modern technologies, boosting farmer profitability.
- Strengthened compliance with quality and SPS standards for regional and global competitiveness.
- Creation of new employment opportunities, especially for women and youth.
- Improved availability of horticulture production data for evidence-based policymaking.

Result Area 3: Improved Policy and Business Ecosystem

This pillar focuses on creating an enabling environment to stimulate growth in Ghana's horticulture sector by addressing access to finance, regulatory bottlenecks, and policy harmonisation. The objective is to foster a resilient, inclusive, and competitive horticulture ecosystem aligned with AfCFTA, ECOWAS, and global trade standards.

Key Focus Areas and Activities

1. Availability of Finance Across the Value Chain

Access to affordable and tailored financing is critical for scaling horticulture. GH-HA will implement the following:

- Strengthen availability of working capital and bridging finance:
 - Collaborate with commercial banks, DFIs, and **GIRSAL** to provide short-term liquidity solutions for farmers, aggregators, and processors to address seasonal cash flow gaps.
- Support SMEs through seed, venture, and growth-stage capital:
 - Facilitate blended finance instruments, including seed capital for startups, venture capital for scaling, and growth-stage funding for expansion. Complement this with technical assistance (TA) to enhance business planning, governance, and compliance with export standards.
- Advocate for targeted finance policy reforms:
 - Engage the Bank of Ghana, MoF, and financial institutions to prioritise horticulture in loan portfolios, introducing incentives for lending to smallholders and agribusinesses.



2. Strengthen Policy, Institutional, and Coordination Frameworks

Robust policies and institutional coherence are essential for investment and trade facilitation. GH-HA will:

• Simplify tariff regimes:

Work with MoTI and ECOWAS to streamline tariff structures for horticultural inputs and exports, reducing unpredictability and transaction costs.

Review and update Mutual Recognition Agreements (MRAs):

Align MRAs with **AfCFTA protocols** to ensure cross-border acceptance of quality certifications and SPS compliance.

Institutional coordination:

Establish a **National Horticulture Coordination Platform** under MoFA, integrating private sector, research institutions, and development partners for policy alignment and joint planning.

3. Facilitate Regional and International Harmonisation of Trade Standards and SPS Regulations

To enhance Ghana's competitiveness in regional and global markets, GH-HA will:

• Reduce or eliminate tariff and non-tariff barriers:

Advocate for the removal of formal tariffs and informal trade barriers (e.g., border delays, redundant inspections) through policy dialogue and AfCFTA implementation committees.

• Harmonise food safety and pesticide regulations:

Collaborate with **GSA**, **FDA**, and ECOWAS technical bodies to align Ghana's SPS and quality standards with regional and international benchmarks, reducing compliance costs for exporters.

Develop simplified compliance manuals and guides:

Provide user-friendly documentation for SMEs and cooperatives to meet SPS and quality requirements for domestic, regional, and global markets.

Strategic Interventions and Activities

Intervention	Activities
finance	Strengthen working capital and bridging finance; support SMEs with seed, venture, and growth-stage capital; advocate for finance policy reforms.
	Simplify tariff regimes; review MRAs; establish coordination platforms for horticulture stakeholders.
	Reduce/eliminate tariff and non-tariff barriers; harmonise food safety and pesticide regulations; develop compliance manuals.



Expected Outcomes

- Improved access to affordable and diverse financing solutions for horticulture value chain actors.
- A simplified and predictable tariff regime that attracts investment and enhances trade.
- Strengthened policy and institutional frameworks for better coordination among stakeholders.
- Harmonised trade standards and SPS regulations, reducing trade barriers and increasing market access.
- Enhanced regional and global competitiveness of Ghana's horticultural products.
- Greater compliance with regional and international trade standards through harmonised policies and regulations.

TECHNICAL APPROACH

The Ghana Staple Food Programme: SDEP and ECHO Implementation (GSFPSEI) adopts a comprehensive three-pronged approach to agricultural transformation, anchored in the interlinked pillars of:

- 1. Agricultural Policy and Regulatory Reform
- 2. Agricultural Productivity Enhancement
- 3. Agricultural Commercialisation through Value Chain Upgrading

Together, these pillars form a unified strategy to modernise Ghana's agricultural sector, addressing both foundational enablers (policy, infrastructure, institutional capacity) and market-facing components (trade facilitation, value addition, and export competitiveness).

Agricultural supply and demand dynamics will be shaped by a cohesive policy environment and a network of empowered institutions, both public and private, equipped to translate strategic ambitions into measurable outcomes. At the heart of this approach lies a commitment to unlocking commercially viable transactions between organised clusters of farmer-based organisations (FBOs) and diverse agrienterprises—ranging from SMEs to large-scale off-takers.

This will require targeted interventions, including:

- Awareness creation and capacity development for farmers and cooperatives.
- Technical assistance and agribusiness incubation through mechanisms such as the Market Gateway Facility for Inclusive Agribusiness Mechanisms (MG-FIAM).
- Digital integration via the ECHO platform for traceability, logistics, and market intelligence.

The programme will forge networks, stimulate business linkages, and deliver customised support based on evolving national and regional priorities. Special attention will be given to aligning Ghana's frameworks with ECOWAS and AfCFTA protocols, particularly in seed systems, biotechnology, bioprotectants, horticulture, and fertiliser policy, ensuring Ghana's leadership in regional harmonisation efforts.



What distinguishes this approach is its systemic orientation. Rather than focusing on isolated outputs, GSFPSEI views agriculture as an ecosystem requiring simultaneous action at structural, institutional, and enterprise levels. From this perspective, agricultural development becomes a driver of socioeconomic transformation, enabling the transition from subsistence farming to commercial viability, while fostering food security, rural employment, and industrialisation.

The programme is forward-looking—less concerned with where farmers are today and more focused on where they, their organisations, and their communities need to be by 2035. By embedding principles of inclusion, gender equity, and regional cohesion, GSFPSEI charts a course toward a resilient and competitive agricultural economy, aligned with Agenda 2063, AfCFTA, and Agenda for Social Equity 2074.

THEORY OF CHANGE

The underlying premise of GSFPSEI's Theory of Change is both bold and pragmatic:

By harmonising agricultural policy frameworks and realigning regulatory systems—particularly for critical inputs such as seeds, planting materials, biotechnology, bioprotectants, horticultural inputs, and fertilisers—Ghana can lay the foundation for a robust, inclusive, and globally competitive agricultural economy.

The programme envisions a transformation driven by value chain clustering and commercialisation, where smallholder farmers are not only producers but integral actors in structured markets, supported by:

- Reliable off-takers and contract farming models
- Access to affordable finance and risk-sharing instruments
- A facilitative ecosystem of digital platforms, logistics, and quality infrastructure

This ecosystem must be inclusive, transparent, and responsive to the needs of all stakeholders—women, youth, cooperatives, and SMEs.

Through these interconnected efforts, GSFPSEI seeks to:

- Catalyse private and public investment in agriculture.
- **Expand intra-African trade** under AfCFTA and ECOWAS frameworks.
- Boost household incomes and rural employment, creating a sustainable and dignified future for farming communities.

At the core of this vision is a policy-first approach:

- National agricultural strategies must align with regional frameworks, respond to global trends, and adapt to climate and market dynamics.
- Only then can Ghana attract the scale of investment required to transform its rural economy and empower its food system actors.

This enabling environment must:

- Reduce barriers to entry for SMEs and cooperatives.
- Mitigate credit risks through blended finance and guarantees.



• **Stimulate innovation** across the sector, especially among farmer organisations, processors, and exporters.

When these conditions are met, agriculture shifts from a high-risk, low-return sector to one of the most promising engines of industrialisation and economic growth.

The development hypothesis acknowledges that fragmentation remains a critical barrier—within Ghana's policy domains and across regional partners. Disjointed policies undermine competitiveness, deter investment, and perpetuate food insecurity—not due to lack of potential, but due to lack of coherence.

Thus, GSFPSEI's Theory of Change recognises that the solution lies not just in growing more food, but in changing how food systems are governed, financed, and connected—both within Ghana and across Africa. By fostering policy coherence, unlocking inclusive finance, and enabling coordinated transformation, the programme aims to create a productive, inclusive, and globally competitive agricultural economy.

Agriculture as a Pillar of National Resilience and Social Stability

GSFPSEI is not merely a technical intervention—it is a structural investment in national resilience, social inclusion, and economic stability. In a context where rural poverty and youth unemployment remain structural challenges, agriculture offers a decentralised platform for inclusive growth, job creation, and social cohesion.

Every certified seed, every hectare cultivated, and every market linkage established under GSFPSEI becomes a micro-intervention against poverty, exclusion, and vulnerability.

Strategic Framing: From Input Markets to Peace Infrastructure

While Ghana is not a post-conflict state, the programme adopts a conflict-sensitive and equity-driven approach, recognising that land, resource allocation, and market access can be sources of tension. By embedding inclusive governance, gender equity, and transparency into seed systems, fertiliser distribution, and market linkages, GSFPSEI ensures that agricultural transformation contributes to social stability and equitable development.

Core Peacebuilding Dimensions

Although Ghana is a stable democracy, the GSFPSEI integrates conflict-sensitive and social cohesion principles to address structural vulnerabilities such as rural poverty, youth unemployment, and regional inequalities. These measures ensure that agricultural transformation contributes to inclusive development, social stability, and equitable growth.

- a) Employment as Prevention: Livelihood Creation Across the Seed and Input Value Chain GSFPSEI prioritises investments that generate inclusive employment opportunities across the seed and input systems, focusing on:
 - Youth-led agribusiness enterprises in high-potential horticulture and staple crop clusters.
 - Women's economic empowerment, positioning women as custodians of seed knowledge, agro-processing, and market access.
 - Support for vulnerable groups, including rural unemployed youth, through certified seed production cooperatives and agro-service hubs.



These interventions aim to reduce economic exclusion, mitigate rural-urban migration pressures, and strengthen social cohesion by creating alternative pathways to income and agency.

b) Agricultural Clusters as Anchors for Local Stability and Growth

GSFPSEI will establish Integrated Agricultural Growth and Resilience Zones—geographic clusters where production, aggregation, training, and infrastructure investments converge. These clusters will serve as:

- Economic anchors in underserved regions (e.g., Northern Savannah, Volta Basin) to reduce regional disparities.
- Platforms for inclusive dialogue among farmer groups, cooperatives, and local authorities to ensure equitable resource allocation.
- Demonstration hubs for climate-smart agriculture, mechanisation, and digital integration, providing evidence for scaling.

c) Data and Early Warning for Systemic Resilience

The digital infrastructure deployed through the ECHO platform and seed traceability systems will integrate early warning indicators for:

- Supply chain disruptions due to climate shocks or market volatility.
- Food system stress signals, such as price spikes or input shortages, which could exacerbate social tensions.
- Market fragmentation risks, enabling proactive interventions by MoFA, NDPC, and regional trade bodies.

This data-driven approach will support real-time mitigation measures, ensuring coordinated responses by government, private sector, and development partners.

Contribution to State Legitimacy and Social Cohesion

By delivering visible services, regulation, and economic opportunities through agriculture, GSFPSEI strengthens the social contract between state and citizens. In rural areas where state presence is limited, functioning seed systems, certified warehouses, and digital platforms become tangible symbols of governance, lawfulness, and opportunity.

This is not merely a sectoral intervention—it is an act of institutional renewal, where food security, rule of law, and inclusive growth are cultivated in parallel.

Continental and Regional Coherence

GSFPSEI reaffirms Ghana's alignment with:

- **African Union Agenda 2063**, particularly its emphasis on economic transformation and inclusive growth.
- AfCFTA protocols, positioning Ghana as a hub for regional agri-trade and value addition.
- **ECOWAS agricultural harmonisation frameworks**, ensuring Ghana's leadership in seed systems, SPS compliance, and input market integration.



If resilience is to be sustainable, it must be rooted in systems that work. GSFPSEI offers Ghana a structured pathway to embed resilience and equity into its agricultural transformation, ensuring that food systems become engines of stability, prosperity, and legitimacy.

Objective Hierarchy – Ghana Staple Food Programme: SDEP and ECHO Implementation (GSFPSEI)

Level	Description		
	Enable the inclusive and sustainable development of food systems across Ghana and the ECOWAS region, contributing to:		
	Improved food security		
	Enhanced agricultural commercialisation		
	Empowerment of smallholder farmers and agribusinesses.		
Impact			
	KPIs:		
	1. ECOWAS agricultural regulations fully harmonised.		
	2. Seamless engagement of SHFs and agribusinesses in ECOWAS markets.		
	3. Commercialisation of agriculture through geo-clustered value chains.		
	Outcome 1: Creation of Enabling Environments Through Policy Harmonisation		
	Alignment of Ghana's agricultural policies with ECOWAS frameworks, including:		
	– GH-SHCP (Seed Harmonisation)		
	– GH-BBIP (Biotechnology & Biosafety)		
	– GH-BHAP (Bioprotectants)		
	– GH-FAUP (Fertiliser Access)		
Outcomes	— GH-HA (Horticulture Accelerator).		
	Outcome 2: Increased Participation of Smallholder Farmers		
	SHFs integrated into structured markets with reduced risk and improved support systems.		
	Outcome 3: Expansion of Commercial Agriculture Through Inclusive Value Chains		
	Growth in SHF-led commercial agriculture via inclusive, sustainable, and territorially relevant value chains.		
Outcomo	Average income of small-scale food producers (disaggregated by gender and vulnerability).		
Outcome KPIs	• Number of smallholders reached through AfDB-supported interventions for sustainable production, market access, and land tenure security.		



Outputs and Key Performance Indicators (KPIs) – Ghana Staple Food Programme (GSFPSEI)

Output Area	KPIs
Capacity Development and Agricultural Commercialisation	KPI 1.1: Number of SHFs and FBOs actively engaged in agricultural activities. KPI 1.2: Number of MSMEs applying climate-smart agriculture practices with AfDB support. KPI 1.3: Number of SHFs and FBOs using certified seeds aligned with ECOWAS standards. KPI 1.4: Number of SHFs and FBOs applying recommended fertiliser blends under ECOWAS guidelines. KPI 1.5: Number of SHFs and FBOs adopting approved bioprotectants. KPI 1.6: Number of SHFs and FBOs implementing recommended biotechnology practices.
2. Value Chain Development	KPI 2.1: Number of value chains developed and strengthened. KPI 2.2: Number of agricultural value chains geo-clustered along regional territories. KPI 2.3: Number of SHFs and FBOs engaged in viable agribusiness within clustered value chains. KPI 2.4: Number of SHFs and FBOs producing goods within geo-clustered value chains. KPI 2.5: Number of value chain products meeting international/global standards. KPI 2.6: Number of value chain actors actively participating in structured markets.
3. Market Facilities for Trade Expansion	KPI 3.1: Volume of trade within geo-clustered value chains. KPI 3.2: Number of trade-climate nexus initiatives promoted. KPI 3.3: Volume of trade transactions coordinated with AfDB support.
4. Policy Development and Implementation	KPI 4.1: Number of ECOWAS Member States aligning national regulations/laws with GSFPSEI objectives. KPI 4.2: Number of Ghanaian policies harmonised with ECOWAS agricultural frameworks. KPI 4.3: Adoption of harmonised SPS, seed, fertiliser, and biotechnology regulations. KPI 4.4: Implementation of national guidelines aligned with AfCFTA trade facilitation measures.
5. Access to Finance	KPI 5.1: Number of agribusiness groups with improved access to finance and financial services through AfDB-supported interventions.



Output Area	KPIs
	KPI 5.2: Number of beneficiaries accessing financial services (disaggregated by gender and youth). KPI 5.3: Number and total value of matching grants disbursed to targeted agribusiness groups.
6. Climate Change Adaptation	KPI 6.1: Number of vulnerable communities with enhanced adaptive capacity to climate impacts. KPI 6.2: Number of climate-resilient livelihood plans developed and implemented. KPI 6.3: Improvement in socio-economic well-being of targeted communities. KPI 6.4: Number of sustainable development practices and environmental stewardship initiatives adopted.
7. SDEP/ECHO & PPP Integration	KPI 7.1: Number of PPP frameworks aligned with global standards and regional priorities. KPI 7.2: Number of farming communities accessing equitable infrastructure through the ECHO platform. KPI 7.3: Number of FlexSus monitoring and decision-support tools integrated into programme operations.

Main Activities and Tasks – Ghana Staple Food Programme (GSFPSEI)

Component	Tasks
1.1 Strengthening Existing Farmer Organisations	T1: Strengthen Farmer-Based Organisations (FBOs) by promoting viable models that provide services such as storage, access to finance, and market linkages for smallholders. T2: Strengthen formal value chain linkages between farmers, FBOs, and national/regional marketing infrastructure (e.g., certified warehouses, Ghana Commodity Exchange). T3: Implement capacity-building programmes to enhance FBO governance, financial literacy, and operational efficiency.



Component	Tasks
1.2 Innovative Linkages to Markets	T1: Develop methodologies to promote increased farmer integration into structured markets. T2: Strengthen public sector capacity (MoFA, MoTI) to review, harmonise, and upgrade digital market information systems to meet agribusiness needs and integrate with AfCFTA trade platforms.
1.3 Productivity and Technology Adoption	T1: Train farmers on climate-smart technologies such as drip irrigation and promote drought-tolerant varieties aligned with Ghana's Climate-Smart Agriculture Action Plan. T2: Support adoption of productivity-enhancing practices such as conservation agriculture, carbon credit schemes, and safe biotechnology applications (e.g., pest-resistant crops under Ghana's Biosafety Act). T3: Strengthen extension services by building FBO capacity and scaling lead farmer models for peer-to-peer knowledge transfer.
2.1 Assessment of Bioprotectant Registration Frameworks	T1: Convene a national inception workshop with stakeholders (MoFA, EPA, GSA, private sector) to develop a roadmap for bioprotectant registration and harmonisation under ECOWAS standards. T2: Conduct a comprehensive assessment of Ghana's bioprotectant regulatory frameworks and gaps.
2.2 Development of Harmonised Bioprotectant Regulations	T1: Organise technical consultative workshops to draft Ghana's harmonised bioprotectant regulations aligned with ECOWAS protocols. T2: Develop mutual recognition mechanisms for bioprotectant certification across ECOWAS Member States. T3: Submit draft regulations for review and adoption by MoFA, EPA, and Parliamentary Committees.
3.1 Strategic Implementation Plan for Bioprotectant Regulations	T1: Draft and validate an implementation plan for harmonised bioprotectant registration and commercialisation. T2: Launch and disseminate the regulations through national sensitisation campaigns and stakeholder workshops.
3.0 Establish and Institutionalise a National Biosafety Risk Assessment Mechanism	T1: Convene technical review meetings to nominate Ghana's Panel of Experts (PoE) on biosafety. T2: Review and update the structure and SOPs of the National Biosafety Authority (NBA).



Component	Tasks
	T3: Institutionalise a biosafety risk assessment mechanism and provide technical training for PoE members. T4: Conduct induction training, including mock dossier reviews for biotech crops relevant to Ghana.
3.2 Strengthen Biosafety Regulatory Capacity	T1: Conduct annual data collection to update policies and biotech product databases. T2: Pilot the national biosafety risk assessment process using case studies (e.g., GM maize, virus-resistant cassava). T3: Disseminate PoE findings and strengthen biosafety capacities through workshops and technical consultations. T4: Conduct economic assessments of harmonised biosafety approaches using data transportability principles.
3.3 Enhance Awareness and Communication on Biotechnology and Biosafety Policy	T1: Develop a data-driven communication strategy for biosafety awareness. T2: Strengthen stakeholder awareness of Ghana's Biotechnology and Biosafety Policy. T3: Build capacity of media, youth, and women's networks to popularise biosafety policy. T4: Publicise farmer and trader experiences with biotech crops in Ghana and comparable contexts. T5: Organise annual National Biosafety and Biotechnology Conferences and report progress to MoFA, EPA, and Parliamentary Committees.

Component	Tasks
2.1 Strengthening Existing Farmer Organisations	T1: Strengthen Farmer-Based Organisations (FBOs) by promoting viable models that provide storage, access to finance, and market linkages for smallholders. T2: Strengthen formal value chain linkages between farmers, FBOs, and national/regional marketing infrastructure (e.g., certified warehouses, Ghana Commodity Exchange).



Component	Tasks
	T3: Implement capacity-building programmes to enhance FBO governance, financial literacy, and operational efficiency.
2.2 Innovative Linkages to Markets	T1: Develop methodologies to promote increased farmer integration into structured markets. T2: Strengthen MoFA and MoTI capacity to review, harmonise, and upgrade digital market information systems, integrating them with AfCFTA trade platforms and Ghana Commodity Exchange systems.
2.3 Productivity and Technology Adoption	T1: Train farmers on climate-smart technologies such as drip irrigation and promote drought-tolerant varieties aligned with Ghana's Climate-Smart Agriculture Action Plan. T2: Support adoption of productivity-enhancing practices such as conservation agriculture, carbon credit schemes, and safe biotechnology applications under Ghana's Biosafety Act. T3: Strengthen extension services by building FBO capacity and scaling lead farmer models for peer-to-peer knowledge transfer.
2.4 Establish National and Regional Coordination Platforms	T1: Facilitate establishment of Ghana Horticulture Accelerator (GH-HA) National Chapter. T2: Conduct stakeholder mapping and organise national forums for horticulture value chain actors. T3: Organise regional workshops to strengthen cross-border trade linkages under ECOWAS. T4: Facilitate multi-stakeholder collaboration platforms for value chain governance. T5: Host at least four national-level workshops annually to align interventions. T6: Convene public-private dialogue (PPD) forums to address policy and investment gaps. T7: Develop resource mobilisation systems for horticulture clusters. T8: Establish strategic partnerships with private sector, DFIs, and donor agencies.
2.5 Trade Information, Data Management, and Digital Integration	T1: Develop a centralised digital platform for real-time data on market trends, production forecasts, logistics, and quality standards. T2: Integrate digital trading systems to improve market visibility and connectivity across Ghana and ECOWAS. T3: Upgrade Ghana's Trade Information Portal to include horticulture and staple crop value chains. T4: Engage IT providers to develop/improve digital platforms for trade facilitation.



Component	Tasks
	T5: Train stakeholders on platform use and digital literacy. T6: Establish integrated digital trading systems for structured markets. T7: Create a convening platform to pool resources from private, public, and donor sources for infrastructure and technology adoption. T8: Conduct national and regional assessments to identify potential production clusters based on comparative advantage.
2.6 Support Establishment and Improvement of Production Clusters	T1: Build capacity of cooperatives and aggregation centres to improve efficiency and bargaining power. T2: Strengthen market linkages between producers, processors, and buyers. T3: Facilitate investments in shared infrastructure (cold storage, aggregation centres, packaging units). T4: Conduct needs assessments for cooperatives and SMEs, focusing on women and youth. T5: Provide technical support for business planning, governance, and financial management. T6: Link SMEs and cooperatives to domestic, regional, and international markets. T7: Facilitate partnerships between women/youth-led businesses and large buyers.
2.7 Reinforce Extension Systems and Delivery	T1: Convene national workshops for research institutions, academia, and private sector to design deployment mechanisms for innovative solutions. T2: Support research initiatives for climate-smart technologies and mechanisation. T3: Promote adoption of genomic technologies for breeding resilient crop varieties. T4: Establish trial farms in different agro-ecological zones to validate new varieties. T5: Develop early warning and monitoring systems (EWS) for climate and market shocks. T6: Map and review existing EWS frameworks and integrate with national food balance sheet systems. T7: Support compliance with private voluntary sustainability standards (e.g., GLOBALG.A.P.) to enhance export readiness. T8: Translate technical publications into local languages for wider adoption.



Component	Tasks
3.1 Create Service Forums for Stakeholder Engagement	T1: Establish and run service forums for staple food value chain actors, covering critical areas such as input supply, commodity production, trade facilities, market infrastructure, transport, finance, investment, regulations, strategic food reserves, and industrialisation. T2: Collate insights from forums and present to the National Advisory Committee, highlighting impacts, required actions, estimated costs, and timelines.
3.2 Input Market Access Development and Expansion T1: Organise and formalise Ghana's staple food value chains into competitive clusters. T2: Strengthen the capacity of targeted agribusiness groups to engage in structured trade and meet E standards.	
3.3 Market Information and Trade Intelligence Systems	T1: Upgrade Ghana's national market information systems and link them to ECOWAS regional platforms. T2: Strengthen national data collection systems for integrity and reliability. T3: Enhance cross-border data collection and monitoring for intra-African trade. T4: Promote the use of market intelligence by SHFs and private actors. T5: Disseminate information through SMS, radio, and periodic publications, including Ghana's contribution to the Regional Food Balance Sheet.
3.4 Development of a Regional Agricultural Commodity Exchange	T1: Assess Ghana Commodity Exchange (GCX) policies, credit acts, and regulatory frameworks to identify capacity gaps. T2: Support integration of GCX with ECOWAS electronic trading systems and regional food balance sheet platforms. T3: Develop regulatory frameworks for commodity exchanges where gaps exist. T4: Build capacity of private sector and SHFs to comply with regional and international trade standards. T5: Organise a regional workshop to develop a roadmap for harmonising commodity trade exchanges under AfCFTA. T6: Facilitate the creation of an ECOWAS Regional Commodity Exchange, coordinating spot and futures markets for staple foods and inputs.



Component	Tasks
4.1 Improving Competitiveness of the Staple Food Sector	T1: Conduct comparative benchmarking of Ghana's agribusiness environment against ECOWAS peers. T2: Analyse key sectors across intra-regional markets. T3: Perform comparative analysis of ECOWAS markets versus alternative export destinations for Ghana's staple crops.
4.2 Agricultural Trade Policy Harmonisation	T1: Secure approval for policy reforms from ECOWAS policy organs. T2: Support national adoption and implementation of harmonised trade policies. T3: Align national programmes with ECOWAS/AfCFTA policy reforms. T4: Conduct value chain training and awareness campaigns on regional trade opportunities for key actors.
4.3 Zero Tariffs and CET Harmonisation for Fertiliser Trade	T1: Convene technical meetings with Ghana Revenue Authority and ECOWAS customs officials on zero tariffs and CET for fertilisers. T2: Draft agreements for tariff harmonisation under ECOWAS frameworks.
4.4 Development of Soil Fertility Maps for Fertiliser Blending	T1: Conduct soil analysis and develop national soil fertility maps for Ghana's agro-ecological zones. T2: Develop site-specific fertiliser recommendations validated through field trials. T3: Collaborate with blending companies to produce nutrient-optimised fertiliser blends using both organic and mineral sources.
4.5 Development of Fertiliser Subsidy Guidelines with Exit Strategies	T1: Review existing fertiliser subsidy programmes (e.g., PFJ input subsidy) to identify best practices. T2: Develop smart subsidy guidelines incorporating e-voucher systems, transparent targeting, and time-bound exit strategies.



Component	Tasks
5.1 Facilitate Access to Finance and De-risking Mechanisms	T1: Conduct a rapid market assessment of traditional and non-traditional financing sources for agribusinesses in Ghana. T2: Assess financial readiness and capacity of targeted agribusiness groups seeking investment. T3: Deliver investment readiness training and mentorship for FBOs and SMEs to improve bankability. T4: Facilitate linkages between bankable SMEs/FBOs and financial institutions, DFIs, and derisking mechanisms such as GIRSAL.
5.2 Matching Grants for Productive Asset Investment	T1: Develop and field-test a Matching Grants Operating Manual. T2: Create marketing materials to solicit grant applications. T3: Establish and train a Project Technical Committee (PTC) to evaluate applications. T4: Launch calls for applications/concept notes with clear eligibility criteria. T5: Link targeted agribusinesses to additional financing opportunities under ECOWAS/AfCFTA frameworks.
6.1 Community Engagement and Needs Assessment	T1: Conduct participatory consultations to identify community needs and vulnerabilities to climate change. T2: Assess existing livelihood practices and their resilience. T3: Identify opportunities for climate-resilient livelihoods based on local resources.
6.2 Capacity Building and Skills Development	T1: Provide training on climate adaptation and sustainable livelihood practices. T2: Build technical skills in climate-smart agriculture, agroforestry, aquaculture, renewable energy, and related sectors. T3: Promote financial literacy, entrepreneurship, and market linkage development.
6.3 Livelihood Diversification and Innovation	T1: Support establishment of climate-resilient livelihood initiatives (e.g., sustainable agriculture, aquaculture, eco-tourism, renewable energy enterprises).



Component	Tasks
	T2: Facilitate access to technologies, inputs, and resources for these initiatives.
	T3: Promote innovation and knowledge-sharing platforms for adaptive practices.
	T1: Collaborate with local authorities, NGOs, and private sector to create enabling policies for
	climate-resilient livelihoods.
6.4 Strengthening Institutional Support	T2: Advocate integration of climate adaptation strategies into national and regional development
	plans.
	T3: Strengthen local institutions and community-based organisations for sustainability.
	T1: Establish robust M&E systems to track climate-resilient livelihood outcomes.
6.5 Monitoring, Evaluation, and Knowledge Sharing	T2: Document best practices and lessons learned for policy influence.
	T3: Facilitate knowledge-sharing through workshops, conferences, and digital platforms.
	T1: Conduct soil fertility and pH testing for climate-smart agriculture suitability.
	T2: Assess ecosystem, water, and biodiversity impacts.
	T3: Engage local communities, government, and private sector partners.
	T4: Collect socio-economic data to tailor interventions.
7.1 Pre-Study Phase for SDEP/ECHO	T5: Identify infrastructure gaps (transport, energy, water) for ECHO deployment.
	T6: Evaluate climate vulnerability and resilience strategies.
	T7: Align with ECOWAS, AfCFTA, and national frameworks.
	T8: Analyse supply chains and post-harvest logistics for optimisation.
	T9: Establish ESG compliance criteria for all project phases.
	T1: Train farmers on intercropping, agroforestry, and reduced tillage.
	T2: Educate on solar panel and biogas unit installation and maintenance.
7.2 Skills Training for SDEP/ECHO	T3: Provide skills in irrigation, recycling, and water purification.
	T4: Teach conversion of agricultural waste into biogas or fertilisers.
	T5: Build financial literacy for managing loans and investments.



Component	Tasks					
	T6: Train on FlexSus for resource monitoring.					
	T7: Educate on storage, processing, and packaging techniques.					
	T8: Develop local leadership for sustainable practices.					
	T9: Train on occupational health and safety standards.					
	T10: Ensure inclusive participation of women and youth in training programmes.					
	T1: Identify and prepare ECHO deployment sites.					
	T2: Install solar panels for irrigation and energy needs.					
	T3: Deploy waste-to-energy and fertiliser conversion units.					
	T4: Establish clean water systems through purification and recycling.					
7.2 FCHO Implementation Activities	T5: Deploy electrolysers for hydrogen fuel generation.					
.3 ECHO Implementation Activities	T6: Connect ECHO systems to power grids and irrigation networks.					
	T7: Install FlexSus sensors for real-time monitoring.					
	T8: Train technicians for ECHO maintenance and troubleshooting.					
	T9: Develop facilities for renewable energy processing.					
	T10: Scale modular ECHO systems across selected regions.					
	T1: Develop PPP policies aligned with global standards and ECOWAS priorities.					
	T2: Establish ESG compliance frameworks and reporting systems.					
	T3: Engage independent auditors for ESG validation.					
	T4: Train stakeholders in ESG principles and PPP governance.					
7.4 PPP System Enhancements (GSIA)	T5: Design structured leasing agreements for modular ECHO systems.					
	T6: Include insurance and maintenance in PPP contracts.					
	T7: Create an early-adoption pool for modular infrastructure.					
	T8: Enable scalable infrastructure through flexible leasing terms.					
	T9: Align PPP initiatives with ECOWAS and AfCFTA policies.					
	T10: Monitor PPP outcomes and compliance with ESG standards.					



Component	Tacks
Component	Tasks

Budget and use of funds

PROJECT 1: Ghana Fertilizer Access and Utilization Programme (Ghana FAUP)

OUTCOME 1: Accelerates the development and harmonization of regulatory frameworks and Implementation Plan for Organic fertilizer for Ghana, as reference to EAC Member states

Output 1.1. De

Description	Means	Unit Cost	Persons	Man days / Months	Frequency	Total (USD)
Regional inception and planning meeting.	Regional workshop	1500	30	1	1	45,000.00
Technical assessment of fertilizer policy and regulations in Ghana and the ECOWAS Member States	National consultants	250	10,5	20	1	52,500.00
Regional synthesis report taking into consideration national reports, ECOWAS, COMESA	Regional consultant	500	1	20	1	10,000.00
Development of ECOWAS Harmonised Fertilizer Regulations.	Technical workshops	1500	30	3	1	135,000.00
Development of the ECOWAS Harmonised Fertilizer Regulations Implementation Plan.	Regional consultant	500	1	20	1	10,000.00



Component	Tasks						
					Sub total(USD)	252,500.00	
evelop and Harmonize Organic and In							
Output 1.2. Establish Zero Tariff and co	ommon external tariffs (CET) Harmonisat i on for	Fertilizer Trade	in the ECOWAS Men	nber states.		
Description	Means	Unit Cost	Persons	Man days / Months	Frequency	Total (USD)	
Development of ECOWAS Fertilizer CET.	Regional consultant	500	1	40	1	10,000.00	
Technical customs meetings held on fertilizer CET drafting of the ECOWAS CET conducted.	Regional workshop	1500	40	2	4	240,000.00	
Validation and launch of ECOWAS Fertilizer CET conducted.	Regional workshop	1500	40	2	5	300,000.00	
					Sub total(USD)	550,000.00	
Output 1.3. Development of new ECOV	NAS Soil Fertility Maps to a	ssist fertilizer Blendi	ng companies in	coming up with new	v suitable fertilizer Blen	ds.	
Description	Means	Unit Cost	Persons	Man days / Months	Frequency	Total (USD)	
Conduct soil analysis and develop soil fertility maps based on the soil analysis for the ECOWAS region	National consultant	300	21	20	1	126,000.00	



Component	Tasks					
Develop new fertilizer recommendations based on the soil analysis that will include the missing nutrients, validate the findings via fertilizer trials	Regional consultant	500	1	30	1	15,000.00
Work with fertilizer blending companies to develop the new fertilizer blends (promote the sourcing of the nutrients from both organic and mineral fertilizer sources).	Regional consulant	500	1	30	1	15,000.00
					Sub total(USD)	156,000.00
Output 1.4. Developing ECOWAS Regio	nal Fertilizer Subsidy Guid	delines with existing s	trategies			
Description	Means	Unit Cost	Persons	Man days / Months	Frequency	Total (USD)
Conduct a critical review and analysis of existing subsidy programs in the ECOWAS region and elsewhere to determine key principles and associated actions for developing "smart" fertilizer subsidy programs for the region.	Regional consultant	500	1	30	1	15,000.00



Component		Tasks					
Develop Regional Fertilizer Subsidy Guidelines comprised of best practices to support ECOWAS Member States in the implementation of "smart" subsidies that use e-vouchers and have exit strategies.	Regional consultant	500	1	20	1	10,000.00	
Regional validation and launch of the ECOWAS Fertilizer Subsidy Guidelines.	Regional Workshop	1500	50	1	2 Sub total(USD)	150,000.00 175,000.00	
					Sub total(USD)	173,000.00	

OUTCOME 2: Establish and Strengthen the Agriculture input distribution networks using the hub agro-dealer model including national and regional fertilizer trade and agro-dealer association in the ECOWAS member states

Output 2.1. Support the Establishment of New and Strengthening of Existing Regional and National Fertilizer Trade Associations

Description	Means	Unit Cost	Persons	Man days / Months	Frequency	Total (USD)
Conduct needs assessments of the existing regional fertilizer associations; 5 existing national fertilizer associations; and 5 existing agrodealers associations	Regional consultancy	500	1	30	1	15,000.00
Develop and deliver capacity building support	National consultants	300	21	55	1	346,500.00



Component	T	Tasks					
Conduct a study and recommend 5 countries for the establishment of new fertilizer associations or agro-dealers associations	Regional consultant	500	1	20	1	10,000.00	
Convene a regional meeting of regional and national fertilizer associations to raise awareness about the initiative, share lessons learned and agree on next steps to strengthen/establish regional and national fertilizer associations in ECOWAS.	Regional fertilizer stakeholder Forums	1500	30	1	1	45,000.00	
					Sub total(USD)	416,500.00	
Output 2.2.Implement credit guarante	e schemes to Hub Agrodeale	rs through Agribusi	ness Partnershi	p Contracts			
Description	Means	Unit Cost	Persons	Man days / Months	Frequency	Total (USD)	
Establish a credit guarantee fund for the project	Regional fund	600,000.00	1	1	1	600,000.00	
Profile Screen and select 5 hubagrodealers in 10 selected countries.	National Consultants	300	10	10	1	30,000.00	
Implement capacity building of hub agrodealers	Direct National engagemen	t 10000	1	1	5	50,000.00	



Component		Tasks				
Develop linkages with suppliers and execute the credit guarantee scheme	Regional consultancy	500	1	5	5	12,500.00
Provide support, monitor and report on APC performance	National Consulatnst	300	10	10	1	30,000.00
					Sub total(USD)	722,500.00
Output 2.3. Implement the fertilizer and	d soil health capacity buil	ding programme				
Description	Means	Unit Cost	Persons	Man days / Months	Frequency	Total (USD)
Conduct capacity needs assessment of existing Hubs and agrodealers in 10 countries for: a) business and technical services; b) safe application and use of nutrient technology;	National Consultants	300	10	10	1	30,000.00
Develop an appropriate training curriculum	Regional Consultants	650	1	5	1	3,250.00
Provide appropriate training to the targeted groups in each country	Regional consultancy	650	1	3	5	9,750.00
Convene a regional trade fair to facilitate business linkages with suppliers in the region	Regional workshop	1500	50	1	5	350,000.00
					Sub total(USD)	393,000.00



Component	Tasks

Description	Means	Unit Cost	Persons	Man days / Months	Frequency	Total (USD)
Conduct feasibility of green ammonia production.	Regional consultancy	500	1	40	1	20,000.00
Link fertilizer blenders with green ammonia for blending through matching grants.	Regional workshop	1500	5	2	4	60,000.00
					Sub total(USD)	80,000.00
	-	-	-	Total Project Fun	d	2,745,500.00
PROJECT 2: Ghana Bioprotectants	Harmonisation Programm	ne (Ghana BHAP)			
OUTCOME 1: Assesment reports of exi	sting Bioprotectants registrati	on and commercia	lization in ECO	WAS member states		
Description	Means	Unit Cost	Persons	Man days /	Frequency	Total (USD)

<u>info@eusl.eu</u> +46 10 585 04 59



Component		Tasks				
Convene a regional inception workshop for all ECOWAS Member States, to develop a roadmap for regional bioprotectant registration, harmonization and commercialization	Regional workshop	1000	40	2	1	80,000.00
onduct assessment of bioprotectant egulatory frameworks	National, regional and international consultants	650	5	25	1	81,250.00
					Sub total(USD)	161,250.00
OUTCOME 2: Production of a synthetic						
					Frequency	Total (USD)
Output 2.1. Developed a harmonized b	pioprotectant registration re	egulations for ECOM	/AS member stat	res Man days /	Frequency 1	Total (USD) 150,000.00



Component		Tasks				
Validation workshop of the ECOWAS Harmonized Bioprotectants Regulations.	Regional workshop	1500	50	2	1	150,000.00
ECOWAS Organs Meetings: Committee on Agriculture; ECOWAS Council of Ministers to review and adopt the ECOWAS Harmonized Bioprotectants Regulations	Regional workshop	1500	50	2	1	150,000.00
					Sub total(USD)	563,750.00

OUTCOME 3. ECOWAS Harmonised Bioprotectants regulations strategic Implementation Plan in place

Output 3.1. Strategic implementation plan of the ECOWAS bioprotectant registration harmonization and commercialization regulations developed

Description	Means	Unit Cost	Persons	Man days / Months	Frequency	Total (USD)
Development of Implementation Plan of the ECOWAS Registration Harmonization and Commercialization Regulations, taking into consideration the input from the ECOWAS Member States.	Regional consultants	650	7	25	1	113,750.00
Launch and sensitization of Registration Harmonization and	National workshop	1500	25	1	21	787,500.00



Component		Tasks				
Commercialization Regulations in						
ECOWAS Member States						
					Sub total(USD)	901,250.00
				Total Project Fun	nds (USD)	1,522,500.00
PROJECT 3: Ghana Biotechnology and Institutionalize Description	•		*	Man days /	Frequency	Total (USD)
				Months		
Technical review meeting to nominate PoE members	Regional workshop	1500	30	1	1	45,000.00
Review, update National Biosafety Authorities including Standardisation of application forms and Standard Operating Procedures (SOPs).	Consultant	650	1	25	1	16,250.00
Establish, institutionalize a regional biosafety risk assessment mechanism through selection, and technical support to ECOWAS Regional Panel of	Consultant	650	1	25	1	16,250.00



Component	Tasks	Tasks					
Experts on biotechnology and biosafety.							
Induction training for PoE members, including a review of dossiers for a specific product or products.	Consultant	650	1	10	1	6,500.00	
					Sub total(USD)	84,000.00	
Description	Means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)	
Annual data collection in ECOWAS Member States for updating policies and products' development.	Consultant	650	1	20	1	13,000.00	
Testing of the regional risk assessment	Consultant	650	1	20	2	26,000.00	
process through appropriate case studies. Import application: Cropspecific trait.							



Component		Tasks				
Strengthen Biosafety Capacities in ECOWAS member states through ECOWAS Member States Biotechnology and Biosafety status updates, case study meeting/data transportability, Popularize the case study and Economic Assessment.	Workshops	1500	50	5	1	375,000.00
Economic Assessment of Regional Harmonization Approach Using Data Fransportability in Risk Assessment.	Consultant	650	1	10	1	6,500.00
					Sub total(USD)	557,000.00
Output 3.3. Enhance communication av	wareness and communicat	ion about ECOWAS E	Biotechnology ar	nd Biosafety Policy a		·
Output 3.3. Enhance communication av	wareness and communicat	ion about ECOWAS E	Biotechnology ar Persons	Man days / Months		·
•				Man days /	mong member states a	nd stakeholders.
Description Review and put in place program data	Means	Unit cost	Persons	Man days / Months	mong member states a	nd stakeholders. Total (USD)



Component		Tasks				
women and special interest groups to effectively popularize the policy.						
Publicize the experiences of farmers and traders with GM crops in ECOWAS Member States and other parts of the world.	Consultant	650	1	30	1	19,500.00
Awareness and Communications through development of model datadriven Communication strategy and validation with lead countries including regional workshop with biosafety authorities.	Consultant	650	1	20	1	13,000.00
Hold annual regional Biosafety and Biotechnology meetings in moving forward program.	Workshops	1500	25	1	1	37,500.00
Report progress on moving forward program to the Ministers of Agriculture and Natural Resources / Council of Ministers and ECOWAS Summit.	Consultant	650	1	15	1	9,750.00
					Sub total(USD)	168,750.00
				Total Project	Funds (USD)	809,750.00



Component Tasks

Description	means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)
Develop ECOWAS Regional Seed digital tracking and traceability systems.	Consultant	650	1	25	1	16,250.00
Support small and medium private seed companies through testing their varieties in second ECOWAS Member State to enable them to register their varieties on the ECOWAS Variety Catalogue.	workshops and Meetings	1500	25	5	1	187,500.00
Support full domestication of the ECOWAS Seed Trade Harmonisation Regulations	Workshops and Meetings	1500	25	3	2	225,000.00
Provide technical assistance to support seed companies with application, registration of varieties on ECOWAS Variety Catalogue and acquisition, activation and trading using ECOWAS Regional Seed Labels conducted.	Consultant	650	1	25	1	16,250.00



Component	Tasks					
Support the full implementation of the Seed Labels in close collaboration with the Ghana and ECOWAS Seed Committee.	Consultant	650	1	50	1	16,250.00
Support data collection and Input into the COMSIS platform	Consultant	650	1	60	1	19,500.00
Conducting COMSIS Data validation meeting.	workshops and Meetings	1500	80	3	1	180,000.00
Development of the COMSIS software	Procuring	190000	1	1	1	95,000.00
aintenance of COMSIS Software	Procuring	25000	1	1	1	12,500.00
				Total Project Fur	nds (USD)	768,250.00
PROJECT 5: COMESA ECOWAS Ho	 rticulture Accelerator (CE	EHA)				
OUTCOME 1: Facilitate Development or Dutput 5.1.1. Established Regional Pla			g value chain ac	tors		
Description	means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)
acilitate Establishment of Ghana HA	Workshop	1,500.00	25	1	5	187,500.00



Component		Tasks				
Conduct Ghana HA Stakeholders Mapping and Forums	Workshop	1,500.00	25	1	5	187,500.00
Organize regional Workshops/Forums for network Establishment	Workshop	1,500.00	30	1	1	45,000.00
Facilitate establishment and coordination of multi stake holder collaboration	Workshop	10,000.00	1	1	1	10,000.00
Facilitate workshop and seminars at national level - at least 4 workshop/seminar per partner state	Workshop	1,500.00	25	1	4	150,000.00
Facilitate Public Private Dialogue workshop and seminars at Rregionallevel	Workshop	1,500.00	25	1	2	75,000.00
Resource Mobilisation sytems for Ghana HA enhannced	Workshop	10,000.00	1	1	1	10,000.00
Establish strategic partnerships and collaborations, and strengthen existing ones	Workshop	10,000.00	1	1	1	10,000.00

Output 5.1.2. Trade Information, data Management and other instruments for Deepening Trade Agreements and integration developed and operationalized

<u>info@eusl.eu</u> +46 10 585 04 59

SUB TOTAL (USD)

675,000.00



Component	Tasks

Description	means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)
Leveraging the platform to integrate digital trading systems, improving market visibility and connectivity across the region	Consultant	500	1	10	1	5,000.00
Support the enhancement of the Trade Information Portals through addition of processes for prioritized products and include the regional corridor mapping, agricultural commodities, and products.	Consultant	500	1	10	1	5,000.00
Develop Centralized digital platform to address information gaps, providing real-time data on market trends, production forecasts, logistics, and quality standards	Consultant	500	1	10	1	5,000.00
Engage IT Providers to develop/Improve digital trading platform	Consultant	500	1	10	1	5,000.00
Support Training of stakeholders on Platform Use	Consultant	500	1	10	1	5,000.00



Component		Tasks				
Facilitate the establishemet of integrated digital trading system for market visibility and connectivity for value chain actors	Consultant	500	1	10	1	5,000.00
Support Convening platform to pool resources from private investments, public sector initiatives, and donor funding to support infrastructure, capacity building, and technology adoption.	Regional workshop	1500	25	1	1	37,500.00
Undertake detailed regional assessment to identify potential areas for establishing production clusters based on comparative advantages, resource availability and market demand.	Regional consultant	500	1	10	1	5,000.00
				SUB TOTAL (USD)		72,500.00
Output 5.1.3. Support establishment/in	nprovement of regional p	production cluster	·			
Description	means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)
Identify potential cluster locations	Consultant	500	1	10	1	5,000.00



Component		Tasks	ks				
Support Capacity Building for Aggregation and Cooperative - strengthen the operational skills of producer cooperatives and aggregation centers to improve efficiency and bargaining power within the value chain	Consultant	500	1	15	1	7,500.00	
Support Market Systems Linkage – Develop stronger connections between producers processors, and buyer to ensure a smooth flow	Consultant	500	1	10	1	5,000.00	
Support investments in shared infrastructure and logistics (appropriate storage, aggregation centers and packaging	Consultant	500	1	10	1	5,000.00	
Needs assessment conducted of potential cooperatives/associations/SMEs targeting women, youth	National Consultant	300	1	10	1	3,000.00	
Technical support provided to cooperatives and associations to register, develop business and sustainability plans, business management, governance, negotiations, financial management.	National Consultant	300	1	10	1	3,000.00	



Component		Tasks				
Link SMEs/cooperatives/associations to local markets, regional and international markets	National Consultant	300	1	10	1	3,000.00
Women's and youth's businesses linked to large companies product buyers locally, regionally and globally	National Consultant	300	1	10	1	3,000.00
				SUB TOTAL (USD))	34,500.00
OUTCOME 2: Strengthen Research Inno Output 5.2.1. Reinforce the extension s		or inputs and extension	on systems			
		Unit cost	Persons	Man days / Months	Frequency	Total (USD)
Output 5.2.1. Reinforce the extension s	ystem and delivery			-	Frequency 5	25,000.00



Component		Tasks				
Support accessibility and adoption of appropriate climate smart agriculture technologies and mechanization	Consultant	500	1	10	5	25,000.00
Support the translation of the developed and validated Publications to the commonly most used languages in the region	Consultant	500	1	10	5	25,000.00
Promote Access to Genomic technologies - Support investments in technologies that accelerate the breeding of high yielding and resilient crop varieties	Consultant	500	1	10	5	25,000.00
Support establishment of trial farms in Different agro -ecological zones to test and validate the perfomance of new varieties under varying climatic conditions	Consultant	500	1	10	5	25,000.00
Leverage Public Private Partnerships by engaging private seed companies in co developing and disseminating improved crop varieties for rapid commercialization and farmer adoption	Consultant	500	1	10	5	25,000.00



Component		Tasks				
Establish a private-sector logistics engagement platform to enhance regional coordination, foster strategic partnerships, and support evidence-based research and advocacy in the logistics sector.	Consultant	500	1	10	5	25,000.00
Support compliance to Private Voluntary Sustainability standards systems to promote sustainable production and business practices	Consultant	500	1	10	5	25,000.00
Development and rollout of early warning and monitoring systems (EWS) to mitigate shocks	National Consultant	300	1	15	5	22,500.00
Mapping, review and needs assessment of existing early warning systems	National Consultant	300	1	15	5	22,500.00
Establish early warning systems to help value chain actors anicipate and mitigate climate risks	National Consultant	300	1	15	5	22,500.00
Design programme to support existing EWS frameworks or development to enhance planning and mitigate against shocks (ECOWAS food balance sheet)	Regional consultant	500	1	10	5	25,000.00



Component	Task	S.S.		
			Sub Total (USD)	

				Sub Total (USD)		317,500.00
Output 5.2.2. Improved post-Harvest m	anagement circulatory					
Description	means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)
Advocate circularity by rrepurposing agricultural waste into value by-products, such compost or bioenergy, to reduce environmntal impact and generate additional income streams	Consultant	1500	1	5	1	7,500.00
Develop and disseminate post-Harvest Handling Technologies	Consultant	1500	1	5	1	7,500.00
Support marketsystems linkages	Consultant	1500	1	5	1	7,500.00
				Sub Total (USD)		22,500.00
Output 5.2.3. Support Implentation of I	ECOWAS Food Safety Reg	ulatory and Operation	nal framework in	nitiated in key trade o	corridors	
Description	means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)



Component		Tasks				
Information awareness	Consultant	5000	1	5	5	125,000.00
Identify Key Trade corridors in the region	Consultant	750	1	5	5	18,750.00
Support consultancy to identify and address Food safety Gaps	Consultant	750	1	5	5	18,750.00
				Sub total (USD)		162,500.00
Output 5.2.4. Access to Finance across	the value chain facilitat	ed				
Description	means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)
Description Strengthen of working capital and bridging finance	<i>means</i> Consultant	Unit cost 500	Persons 1		Frequency 5	25,000.00
Strengthen of working capital and				Months		



Component	Tasks	Tasks				
Advocate for targeted finance policy reform on the composition of the loan book	Consultant	500	1	1	5	2,500.00
Facilitate trade missions and partnerships to expand domestic, regional and international markets	Consultant	500	1	1	5	2,500.00
Targeted capacity building on credit worthiness, keeping good records and developing bankable business proposals	Training	1500	25	10	5	1,875,000.00
Output 5.2.5. Faciliating regional and i	nternational collabo	ration for Harmonication o	of Trada stands o	Sub Total (USD)		4,417,500.00
Output 3.2.3. Faciliating regional and in					_	
Description	means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)
Pacilitate the reduction or elimination of firmal and informal Tariff and Non-Tariff Barriers	Consultant	Unit cost 500	Persons 1		Frequency 5	25,000.00



Component		Tasks				
Develop simplified guides on compliance with manuals and guides on compliance with SPS regulations and harmonized quality standards	Consultant	500	1	5	5	25,000.00
Support the establishment of Trade Experts Engagement Networks to enable provision of rapid responses on emerging issues related to trade policy, trade facilitation, SPS and SQI. The delivery modality shall be as follows:	Consultant	500	1	10	5	25,000.00
Consultancy services from Trade Policy Expert; SPS Expert and SQI Expert	Regional Consultant	500	1	10	5	25,000.00
Dissemination and communication services for purposes of facilitating sharing the analysis and information collected.	Regional Consultant	500	1	10	5	25,000.00
Capacity building to VC actors within the clusters on GAPS, Plant health, Social, Environment and Food safety standards	National Consultants	300	5	5	5	37,500.00
Support the translation of the developed and validated NTBs	National Consultants	300	5	5	5	37,500.00



Component		Tasks				
toolkit/factbook to the commonly most used languages in the region						
Selection and profiling of target border points and target via a review of existing cross-border assessment reports and conducting cross-border assessments.	National Consultants	300	5	5	5	37,500.00
Regional stakeholder engagement for validation and dissemination of border assessment findings	workshop	1500	25	2	5	375,000.00
Conduct Assessment of key phytosanitary risks affecting trade in plants and plant products	Consultant	500	1	10	1	5,000.00
Consultancy to conduct study on key pest risks of food security and trade concerns in plant and plant products in the region (harmful organisms, plant protection products, etc)	Consultant	500	1	10	1	5,000.00
Expert Group meeting to develop pest risk management recommendations/options on plants and plant products (seed, pest control products, etc)	Regional workshop	1500	25	1	1	37,500.00



Component	Tasks					
Expert Group meeting to develop risk management recommendations/options for plant health risks	Regional workshop	1500	25	1	1	37,500.00
Support compliance with qualiy control and SPS standards - provide technical assistance and training to help stakeholders comply with domestic and international quality and SPS requirements, ensuring market readiness	Regional Consultant	1500	25	1	1	37,500.00
				Sub Total (USD)		760,000.0
Output 5.2.6. Support development an	d validation of CEHA Cross	s Cutting strategies/n	nethodology and		informed by gender	
Output 5.2.6. Support development and Description	d validation of CEHA Cross	s Cutting strategies/n	nethodology and		informed by gender	
				I impact assessment Man days /		and youth analysis



	Tasks				
Consultant	500	1	10	5	25,000.00
Consultant	500	1	10	5	25,000.00
Consultant	500	1	10	5	25,000.00
workshop	1500	25	2	5	375,000.00
workshop	1500	25	2	5	375,000.00
			Sub Total (US	5D)	875,000.00
	Consultant Consultant workshop	Consultant 500 Consultant 500 workshop 1500	Consultant 500 1 Consultant 500 1 Consultant 500 1 workshop 1500 25	Consultant 500 1 10 Consultant 500 1 10 Consultant 500 1 10 workshop 1500 25 2 workshop 1500 25 2	Consultant 500 1 10 5 Consultant 500 1 10 5 Consultant 500 1 10 5 workshop 1500 25 2 5



Component	Tasks

Description	means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)
Hosting of the CEHA General Assembly		1500	50	2	5	750,000.00
Ghana CEHA Board Meetings		1500	5	1	4	30,000.00
Technical Committee Meetings		1500	5	1	4	30,000.00
National Chapter Consultative Meetings		20000	5	1	4	400,000.00
Support B2B Business Forums		1500	5	1	4	30,000.00
Project Visibility		20000	1	1	1	10,000.00
Support to Private Business to improve and out scale CEHA Operations Inclusive of Small-Holders		10000	1	1	5	25,000.00
M&E (Baselines, data collection, project evaluations)		1500	1	10	5	75,000.00
Communication		10000	1	1	5	25,000.00
Host Forum on Gender/Youth and climate Change		5000	1	1	5	25,000.00
Support participation in the National Chapters forums		5000	2	1	5	50,000.00



Component	Та	Tasks					
Mainstreaming activities (Environment, Climate Change and Gender)		5000	1	2	5	50,000.00	
				Sub Total		1,450,000.00	
				Total Project Fur	nds	8,787,000.00	
				Combined Progr	am Funds	14,633,000.00	
SOCIAL DEVELOPMENT AND EMP	OWERING PROGRAMME			- 1			
Description	means	Unit cost	Persons	Man days / Months	Frequency	Total (USD)	
Pre-study of ECHO implementation	Soil and Environmental Analysis	50 000			4	200 000	
	Stakeholder Engagement Workshops	10 000			10	100 000	
	Infrastructure Feasibility Study	150 000			1	150 000	
	Policy Alignment Reviews	25 000			2	50 000	
	Climate Risk Assessment	50 000			1	50 000	
	Coordination and Overhead	I 1 750 000			Fixed	1 750 000	
Total						2 300 000	



Component Tasks

Skills Training						
	Vocational Training (Climate- Smart Agriculture)	50 per participant	30 000			1 500 000
	Renewable Energy Training	1 000 per session			300 sessions	300 000
	Water Management Practices	1 500 per module			120 sessions	180 000
	Post-Harvest Management	750 per session			300 sessions	225 000
	Leadership Training	1 000 per program			250 programs	250 000
	Digital Literacy Programs	1 000 per session			75 sessions	750 000
	Coordination and Overhead	1 000 000			Fixed	1 000 000
Total						4 205 000
ECHO Deployment				Aprox Capacity / T.C and p/day		
	Solar generation	300 000		500 to 750 kWh capacity p/day	8	2 400 000



Component	Tasks

	Solar storage	155 000	1350 kWh capacity	8	1 240 000
	Water Purification Systems	480 000	1000 cubic meter p/day	8	3 840 000
	Water storage	190 000	1000 cubic meter p/day	8	1 520 000
	Hydrogen Production Electrolysers	375 000	500 kWh p/day = 240 kg Hydrogen p/day	4	1 500 000
	Hydrogen Storage	350 000	240 kg capacity	4	1 400 000
	Water Treatment Plant	370 000	250 cubic meters/day	5	1 850 000
	Installation and maintenance	145 000		5 years	725 000
Total					14 475 000
FlexSus and Research					
	Real-Time Monitoring sensors	5 000 per system		25 systems	125 000
	Data Analysis and Reporting tools	10 000 per tool		25 tools	250 000
	Training for Local Teams	5 000 per session		20 sessions	100 000



Component Tasks

	Research and Development	2 250 000	Fixed	2 250 000
Total				2 725 000
GSIA: PPP Enhancement and connected Research	Compliance Framework Development	250 000	1 program	250 000
	ESG Criteria and Reporting Tools	5 000 per tool	20 tools	100 000
	Leasing of ECHO Model Setup	1 000 000	Fixed	1 000 000
	Training for Stakeholders	5 000 per session	150	750 000
	Risk Mitigation	25 000 per package	5 packages	125 000
	Administration and overhead	900 000	Fixed	900 000
Total				3 125 000
General items				
	Merger of Programs CEHA, FAUP etc	500 000	1	500 000



Component	Tasks						
	UNDP	100 000			5	500 000	
	FAO	100 000			5	500 000	
Security Measurements		200 000			5	1 000 000	
otal						2 500 000	
				Total SDEP		29,330,000.00	
				Program + SDEP Total		43,963,000.00	

<u>info@eusl.eu</u> +46 10 585 04 59

SECTION 3 – FEASIBILITY

3.1 RISK MANAGEMENT

3.1.1 Significant Risks Facing the Programme

The GSFPSEI is primarily a **capacity development and systems-strengthening programme**, with **limited environmental or social risks** anticipated. The participatory approach—mobilising communities, farmer-based organisations (FBOs), and private sector actors—combined with **progressive**, **hands-on capacity building** will enhance local ownership and risk mitigation capacity.

Potential risks include:

- Time constraints in implementing multi-stakeholder activities.
- Stakeholder commitment and alignment of interests among implementing partners.
- Policy shifts or delays in harmonisation processes under ECOWAS/AfCFTA.
- Market volatility affecting input and output prices.

These risks will be mitigated through **embedded monitoring tools**, adaptive planning, and continuous stakeholder engagement under the programme's governance framework.

3.1.2 Environmental and Social Risks

Ghana recognises that agriculture-based enterprises—including crop production, livestock, fisheries, and agro-processing—can generate negative environmental and social impacts if not properly managed. To address this, GSFPSEI will operate under Ghana's Environmental Assessment Regulations (L.I. 1652) and the Environmental Protection Agency (EPA) guidelines, ensuring compliance with:

- Environmental and Social Impact Assessments (ESIAs) for infrastructure-related interventions (e.g., ECHO deployment, irrigation systems).
- Risk management plans for biodiversity, water resources, and community health.

The programme will integrate climate-smart agriculture principles, promote sustainable land and water use, and enforce social safeguards to protect vulnerable groups, including women and youth.

3.1.3 Risk Management Strategy

To manage and mitigate risks throughout the programme cycle, GSFPSEI will establish an Internal Control Framework under the direct supervision of the Programme Steering Committee (PSC) and the National Programme Coordination Unit (NPCU), supported by technical and operational teams.

Key measures include:

- **Comprehensive Risk Log:** Detailing risk categories, probability, impact, assumptions, and mitigation measures.
- Annual Risk Review: Conducted during annual work planning and budgeting cycles.
- **Continuous Monitoring:** Using digital dashboards (FlexSus) for real-time tracking of operational and environmental indicators.
- **Governance Oversight:** The PSC will receive quarterly risk reports and provide strategic guidance.
- **Stakeholder Communication:** All implementing partners and key stakeholders will be informed of significant residual risks and mitigation actions.

This proactive approach ensures that **emerging threats are addressed promptly**, safeguarding the programme's objectives and sustainability.

– ENTERPRISE	NATURE OF POTENTIAL IMPACTS	- POTENTIAL IMPACTS	SOURCES OR CAUSES OF THE PREDICTED IMPACTS	MITIGATION MEASURES	- EFFECTS
		i. Deforestation	- Clearing of marginal land to increase production areas, poor farming methods	- Focus on increased yields rather than additional land	 Loss of tree cover and biodiversity Accelerating soil erosion Enhancing climate change by removing trees as a carbon sink to reduce carbon dioxide as a greenhouse gas
Crop and fruit production	Negative environmental impacts	ii. Land degradation	- Growing of crops and fruits as monocultures	 Promote multi- cropping and soil management 	 Loss of soil fertility and soil biodiversity Food diversification poor Nutritional input low
enterprises		iii. Pollution of the environment	 Use of pesticides to achieve crop/fruit protection against pests and diseases Crop/fruit processing wastes during value addition 	- Support the use of organic fertiliser, biochar, parythm products, and other agroecological practices and products	 Loss of biodiversity Crop and fruit produce contamination due to pesticide residues Water, air and soil pollution Poisoned food Low nutrient value in crops



– ENTERPRISE	NATURE OF POTENTIAL IMPACTS	- POTENTIAL IMPACTS	SOURCES OR CAUSES OF THE PREDICTED IMPACTS	MITIGATIONMEASURES	- EFFECTS
		iv. Pest resistance and build-up	- Excessive and improper use of agricultural pesticides	 See above Build awareness of the danger and impact of synthetic pesticides to human health 	 Increased economic cost of production and reduced enterprise profitability Spread of crop diseases to other areas Poor nutritional value of food crops
		v. Waterlogging and Salinity	- Irrigated production systems	 Utilisation of improved technologies such as drip irrigation Integration of solar water pumps 	 Loss of land productivity Low crop yield and stunted growths Poor quality of produce Limited cultivating times and options
– All enterprises	Negative social impacts	i. Water scarcity	- High water demand and abstraction rates for aquaculture, livestock, crop and fruit production	- The Project will work with other projects focusing on water and watershed management practices	 Increases costs and time to access water for non-agricultural uses Depleting water level Scarcity of water availability throughout the year



– ENTERPRISE	NATURE OF POTENTIAL IMPACTS	- POTENTIAL IMPACTS	SOURCES OR CAUSES OF THE PREDICTED IMPACTS	MITIGATIONMEASURES	- EFFECTS
		ii. Poor human health	 Fertiliser and Pesticide exposure during application Consumption of food products with fertiliser and pesticide residues 	- Technologies that require less water will be favoured including fruit tree varieties, which are more adaptable to local conditions - Sustainable agricultural practices including climate and environmentally smart agriculture will be part of all agronomic training	 Morbidity, loss of human life and increased healthcare costs Labour constraints due to poisoning Lack of Awareness of danger to human health
		i. Social disturbances	- Improved household income	- Gender awareness, education, and communications including	MigrationIncrease in gender-based violence



– ENTERPRISE	NATURE OF POTENTIAL IMPACTS	- POTENTIAL IMPACTS	SOURCES OR CAUSES OF THE PREDICTED IMPACTS	MITIGATIONMEASURES	- EFFECTS
				Dimitra Clubs and Household Approaches will be delivered across the Project	 Creation of islands of wealth within a region Breaking up of social systems due to competition
		ii. Labour constraints	Increased demand for labour	- Training and technical assistance provided by the prospective employers as, supported by the Project	- Shortage of labour
		iii. Spread of communicable diseases including HIV	Increased social interaction due to increased household incomes Increased access to diversified food	 Community education Awareness campaigns on the impact of nutrition 	 Poor human health (morbidity) Rise in 1st world illnesses Weakened immune system



SECTION 4 – IMPLEMENTATION & MANAGEMENT STRUCTURE

The GSFPSEI National Coordinator (appointed under the Ministry of Food and Agriculture – MoFA) will serve as the budget holder and oversee all operational, financial, and management aspects of the programme. The programme will employ a Programme Implementation Unit (PIU) comprising technical and operational experts to ensure effective delivery of results across its five flagship components:

- 1. Fertiliser Access and Utilisation (GH-FAUP)
- 2. Seed Harmonisation and Certification (GH-SHCP)
- 3. Biotechnology and Biosafety Implementation (GH-BBIP)
- 4. Bioprotectants Harmonisation (GH-BHAP)
- 5. Horticulture Accelerator (GH-HA)

Institutional Arrangements

The programme will be implemented under the leadership of MoFA, in close coordination with:

- Ministry of Trade and Industry (MoTI) for trade facilitation and AfCFTA integration.
- Ministry of Finance (MoF) for financial oversight and PPP frameworks.
- Environmental Protection Agency (EPA) for environmental compliance.
- Ghana Standards Authority (GSA) and Food and Drugs Authority (FDA) for SPS and quality standards.
- National Development Planning Commission (NDPC) for policy alignment.

Regional coordination will be ensured through **ECOWAS Commission**, with technical support from specialised agencies on **statistics**, **gender**, **climate change**, **and trade harmonisation**.

The programme will also collaborate with value chain umbrella bodies such as:

- Ghana Commodity Exchange (GCX)
- Ghana Agri-Input Dealers Association (GAIDA)
- Tree Crops Development Authority (TCDA)
- Private sector associations, farmer cooperatives, and regional producer networks
- Development partners including AfDB, UNDP, and EUSL/GSIA for PPP and blended finance.

Programme Steering Committee (PSC)

A Programme Steering Committee (PSC) will be established under MoFA, with representation from:

- Relevant government ministries and agencies
- AfDB and other development partners
- EUSL/GSIA representatives
- Private sector and farmer organisations



Mandate of PSC:

- Provide strategic direction and policy guidance.
- Approve annual budgets, work plans, and progress reports.
- Review programme performance and risk management reports.

The PSC will meet **semi-annually** (or more frequently if required) to review progress and provide guidance.

Programme Implementation Unit (PIU)

The **PIU**, hosted at MoFA, will manage day-to-day operations and ensure alignment with programme objectives. It will report to the PSC and coordinate with ECOWAS and AfCFTA structures for regional integration.

Core PIU Roles:

- National Coordinator Overall leadership and reporting.
- Agricultural Inputs Specialist Fertiliser and seed systems.
- Legal and Grants Management Specialist Compliance and contract oversight.
- Organisational Development & Capacity Building Specialist Institutional strengthening.
- Plant Protection & Biotechnology Specialist Biosafety and bioprotectants.
- Administrative & Finance Officer Financial management and procurement.

The PIU will also integrate **FlexSus digital monitoring tools** for real-time tracking of KPIs, environmental compliance, and financial performance.

Environmental and Social Screening form

PART A: General information

GENERAL PROJECT INFORMATION	
Project Name	
Estimated Cost (K)	
Project Site	
Funding Agency	
Project Objectives	
Proposed Main Project Activities	
Name of Evaluator/s	
Date of Field Appraisal	



PART B: Brief description of the proposed activities

Land Use and Environmental Safeguards

Ghana's smallholder agriculture occupies a substantial land area distributed across multiple agro-ecological zones. Within GSFPSEI's designated production clusters, the Programme anticipates that a material share of targeted parcels will undergo improvements during implementation. These improvements include the installation of irrigation infrastructure (e.g., solar arrays, pumps, distribution lines, reservoirs and conveyance pipes) and the construction or upgrading of productive assets (e.g., certified warehouses, aggregation centres, cold storage, and value-addition facilities).

The Programme recognises that such civil works may necessitate site preparation (selective vegetation removal, grading and levelling) and could therefore pose environmental and social risks if not properly managed. Accordingly, every beneficiary proposing fixed-asset development under GSFPSEI shall, prior to any construction or land-clearing, prepare and implement site-specific environmental and social due diligence and obtain all legally required approvals.

Mandatory Environmental and Social (E&S) Compliance

1. Screening and Permitting.

ECOWAS sub-project will undergo E&S **screening** to determine the appropriate instrument (e.g., Environmental and Social Management Plan (ESMP) or, where required by law, an Environmental Impact Assessment (EIA)). No works may commence until all **statutory permits/approvals** have been secured and the conditions thereof are understood by the beneficiary and any contractors.

2. Site-Specific ESMP.

The ESMP shall, at minimum, define:

- Vegetation and tree-management measures, prioritising avoidance and minimisation of clearing; selective removal; and like-for-like or better replanting/offset plans, including riparian buffers.
- Soil and water protection, including topsoil salvage and reuse, erosion and sediment control, spill prevention, and buffer zones around water bodies.
- Biodiversity safeguards, with seasonal work planning to avoid critical breeding periods and no-go areas for sensitive habitats.
- Construction management, addressing dust, noise, waste handling, traffic, and community safety; method statements for excavation and levelling; and chance-find procedures for cultural heritage.
- o Occupational and community health & safety (OHS/CHS), including PPE requirements, safe work method statements, and emergency response arrangements.
- Stakeholder engagement and grievance redress, ensuring timely disclosure, inclusive consultation (women, youth, vulnerable groups), and a grievance mechanism accessible in local languages.
- o **Monitoring indicators,** responsibilities, and reporting schedules aligned with Programme KPIs.

3. Irrigation and Water Resource Safeguards.



Designs shall be based on hydrological assessments, respect **environmental flows**, and include **efficient technologies** (e.g., drip/sprinkler) to reduce abstraction and energy needs. Solar installations will be sited to avoid shading conflicts, glare, and unnecessary vegetation loss.

4. Warehousing and Value-Addition Facilities.

Building siting and layout will **avoid sensitive land** (wetlands, flood-plains) where practicable. Designs shall incorporate **energy- and water-efficient** systems, safe effluent and solid-waste management, and compliance with applicable **food-safety/SPS** standards. Where any **physical or economic displacement** is unavoidable, beneficiaries must prepare proportionate **resettlement/compensation plans** consistent with national requirements and Programme policies **before** works proceed.

5. Contractual Controls.

All construction and supply contracts shall include **E&S** clauses making the approved ESMP and permit conditions contractually binding, with provisions for **supervision**, **non-compliance remedies**, **and corrective actions**.

Mitigation Hierarchy and Good-Practice Measures

- Avoid: Prioritise brownfield or already-disturbed plots; optimise footprints to reduce clearing.
- **Minimise**: Use directional trenching, micro-siting of solar/pipe routes, and staged works to limit disturbance.
- **Restore**: Re-vegetate promptly with native species; stabilise slopes; reinstate topsoil and drainages.
- **Offset (where required)**: Implement compensatory tree planting or habitat enhancement to achieve **no net loss** (or net gain, where feasible).

Responsibilities and Oversight

- **Beneficiaries/Proponents**: Prepare screening documentation, ESMP/EIA, secure permits, implement all measures, and maintain E&S records.
- Programme Implementation Unit (PIU): Provide templates and technical assistance; review ESMPs; ensure E&S conditions are embedded in contracts; monitor compliance and report to the PSC.
- **Contractors**: Execute works in line with method statements and ESMP; maintain OHS and CHS standards; report incidents promptly.
- Supervision and Reporting: The PIU will conduct periodic site inspections; require monthly E&S compliance summaries during construction; and prepare quarterly consolidated reports to the Programme Steering Committee.

Action Plan Requirement (Pre-Construction)

Before any land preparation or asset construction, each beneficiary shall submit to the PIU for clearance:

- 1. E&S Screening Form and permit/approval pathway.
- 2. **Site-specific ESMP** (or EIA where applicable), including:
 - Vegetation/tree-felling inventory and replanting plan.



- o Soil/water protection and erosion control plan.
- o OHS/CHS plan and emergency procedures.
- o Waste and hazardous-materials management plan.
- o Stakeholder engagement plan and grievance mechanism.
- o Monitoring matrix (indicators, frequency, responsibilities).
- 3. **Evidence of statutory permits/approvals** and any consent conditions.
- 4. **Contract E&S clauses** integrated into procurement packages.

Only upon PIU clearance and proof of statutory compliance may site works commence. This approach ensures GSFPSEI's infrastructure and land-use improvements are **legally compliant**, **environmentally responsible**, **and socially inclusive**, while enabling the productivity gains and market connectivity the Programme is designed to deliver.

PART C: Environmental and social baseline information of the site brief description

Cat	tegory of Baseline Information	Brief Description
Ge	ographical location	
x	Name of the Area (Name of the FO, District, T/A, Village)	
X	Proposed location of the project (Include a site map of at least 1:10,000 scale / or coordinates from GPS)	
Lar	nd resources	
x	Topography and Geology of the area	
X	Soils of the area	
x	Main land uses and economic activities	
Wa	iter Resources	
x	Surface water resources (e.g. rivers, lakes, etc.) quantity and quality	
x	Groundwater resources quantity and quality	
Bic	logical resources	
x	Flora (include threatened/ endangered/ endemic species)	
x	Fauna (include threatened/ endangered/ endemic species)	

Cate	egory of Baseline Information	Brief Description
	Sensitive habitats including protected areas e.g. national parks and forest reserves	
Clin	nate - This is needed in flood-prone regions	
X	Temperature	
x	Rainfall	
Soci	ial	
x	Number of people potentially impacted	
x	Type and magnitude of impacts (i.e. impact on land, structures, crops, the standard of living)	
x	Socio-economic overview of persons impacted	

PART D: Environmental and social screening form

	ANT D. LIIVII OIIIII EIILE	21 G11G	30014	. 50. 00	2111116 10111	<u>'</u>						
NO	AREAS OF IMPACT			IMPA	IMPACTS EVALUATION							
1.0	Is this sub-project site w	vithin		Exten	t or covera	ge (on-	Signific	ance (Low,				
	and/or will it affect the	followi	ng	site, v	vithin 3-5kr	n or	Mediu	m, High)				
	environmentally sensitive		_		nd 5km)							
		Yes	No	On-	Within	Beyond	Low	Mediu	High			
				site	3-5 km	5 km		m				
1.1	Sensitive habitats											
	 X National Parks and Game Reserve, X Wet-lands; X Areas with rare or endangered flora or fauna X Areas with outstanding scenery/tourist 											
	site											



1.2	Productive traditional agricultural /grazing lands									
1.3	Within steep slopes/mountains with potential for erosion									
1.4	Dry tropical forests such as Brachystegia species									
1.5	Along lakes, along beaches, riverine									
1.6	Near industrial activities									
1.7	Near human settlements									
1.8	Near cultural heritage sites									
2.0 S	creening Criteria for Impa	icts dur	ing Im	npleme	ntation an	d Operatio	n			
	he implementation and on nalities/ costs/impacts?	peratio	on of t	he acti	vity within	the select	ed site ge	enerate the	followir	ng
2.1	Deforestation									
2.2	Soil erosion and siltation									
2.3	Siltation of watercourses									
2.4										
	Environmental degradation arising from obtaining construction materials									
2.5	degradation arising from obtaining construction									



	pollution from unspent PV batteries							
	Nuisance - smell or noise							
	Incidence of flooding							
Will t	creening Criteria for Socia			enerate th	e follow	ing socioec	onomic	
costs	/impacts?							
3.1	Loss of land/land acquisition for human settlement, farming, grazing							
3.2	Loss of assets, property, houses							
3.3	Loss of livelihood							
3.4	Require a RAP							
3.5	Loss of cultural sites, graveyards, monuments							
3.6	Loss of income- generating Capacity							
3.7	Consultation (comments from Beneficiaries)							

PART E: Overall evaluation of screening excercises

The results of the screening process of the proposed activity would be either exempted or subjected to further environmental and resettlement assessments. The basis of these options is listed in the table below:

Review of Environmental Screening (OP 4.01)		Review of Resettlement Screening (OP 4.12)	Tick
The project is cleared. No serious impacts. (When all scores are "No" in form) form)		The project is cleared. No serious social impact. (Where scores are all "No", or "few" in form) "No", or "few" in form)	



2. There is a need for further assessment. (when some scores are "Yes, High" in form)	2. There is a need for resettlement/compensation. (When some scores are "Yes, High" in the form)
Endorsement by the Environmental Country Off	ficer Endorsement by the Director of Planning and Development
Name:	Name:
Signature: Date:	Signature: Date:

ENVIRONMENTAL & SOCIAL MANAGEMENT MONITORING PLAN

No	Project activity	Expected impacts	Proposed mitigations/ mitigation activities	Indicators	Target	Responsibility for Implementation	Estimated Cost

STAFF REQUIREMENTS

Senior Inputs and Biotechnology Officer (SIB Officer)

Monitoring and Evaluation Officer (M&E Officer)

Legal and Contracts Officer (GD Officer)

Senior Administrative and Human Resource Officer (SAHR Officer)

GSFPSEI Chief Executive Officer

GSFPSEI HA Regional Coordinator

GSFPSEI Agri-Business and Policy Advisor

GSFPSEI Finance and Planning Officer

GSFPSEI Knowledge, Events, Communication and Programme Officer.

EUSL GSFPSEI STAFF

Programme Development Manager

FlexSus and Technical Manager

Visual Design Manager

Implementation Manager