

# Towards a Resilient and Inclusive Food Security Framework in Mauritius



Food and Agricultural Research and  
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# TOWARDS A RESILIENT AND INCLUSIVE FOOD SECURITY FRAMEWORK IN MAURITIUS

## Executive Summary

Mauritius is entering a pivotal moment in the evolution of its agri-food system. In order to give renewed impetus to the sector and lay the foundations for long-term food sovereignty, the Ministry of Agro-Industry, Food Security, Blue Economy and Fisheries will convene *Les Assises de l'Agriculture*. As a preparatory step, the Food and Agricultural Research and Extension Institute (FAREI) initiated a series of pre-consultative meetings from 22 September 2025 with a broad cross-section of stakeholders, including governmental agencies, private-sector actors, farmer organisations, civil-society groups, youth, producer associations.

These engagements created a platform for collective reflection on sector performance, constraints and opportunities. Stakeholders highlighted persistent structural challenges such as fragmented governance, inadequate data systems, weak land-use coherence, limited value addition, climate vulnerability, declining soil health, labour scarcity and the ageing agricultural workforce. They also identified strong potential for transformation through digitalisation, regenerative practices, improved market organisation, strengthened extension, agro-processing, youth entrepreneurship and closer alignment between agriculture, health, environment, trade and tourism.

### Towards an Integrated Framework for five-year food security programme

To guide the national dialogue, ten thematic areas were conceptually developed through multidisciplinary analysis led by FAREI in consultative with AMB, Agricultural Services and SFWF. These themes shift the focus from a traditional production-centric model to a comprehensive agri-food systems approach in which production, markets, natural resources, institutions, nutrition, technology and resilience are integrated components of a unified system.

Together, the ten themes below constitute a structured and interconnected framework for modernising Mauritius' agri-food sector:

1. **Food Sovereignty and Resilient Production Systems** - Reinforces national self-reliance by promoting diversified, adaptive and sustainable production systems that reduce dependence on imports and external shocks.
2. **Conservation of Genetic Resources and Breeding** – Protects and develops local genetic resources to secure long-term autonomy, resilience and adaptation to evolving agro-ecological conditions.
3. **Climate Resilience, Adaptation and Disaster Preparedness** – Enhances adaptive capacity through risk assessment, early-warning systems and resilience-building measures against climate and disaster risks.

4. **Regenerative and Sustainable Agriculture** – Encourages resource efficiency and ecosystem restoration through regenerative practices, recycling of organic matter and circular production models.
5. **One Health Approach; Integrating Environment, Plant and Animal Health** – Safeguards the productive base of agriculture by promoting responsible resource use, pollution control and integrated land-water stewardship.
6. **Nutrition Security, Food Safety and Wellness** – Links agriculture to public health by promoting safe, nutritious and diverse food systems that support human well-being.
7. **Value Chains and Market Differentiation** - Enhances competitiveness by strengthening linkages from farm to market, promoting value addition, product differentiation and fair market access.
8. **Empowering Smallholders, SMEs, Women and Youth** – Promotes inclusive growth by building capacities and opportunities for those who form the social and economic backbone of the sector.
9. **Information and Knowledge Management, AgriTech and Youth Engagement** – Fosters innovation and generational renewal by leveraging data, digital tools and youth entrepreneurship to modernise the agricultural landscape.
10. **Good Governance, Institutional Coordination, Policy Coherence and Financing** – Strengthens accountability and alignment across institutions, ensuring that policy, regulation and financial mechanisms operate in concert.

Fisheries priorities—including food safety, aquaculture development, stock management, IUU control, post-harvest upgrading and blue-economy resilience—were also embedded to ensure a fully integrated Food Systems perspective. In parallel, specific inputs from Rodrigues have been preserved through a dedicated chapter in this consolidated report in order to reflect the island’s particular realities, priorities and institutional context.

### **A Coherent Vision for a Resilient and Inclusive Agri-Food System**

The ten themes collectively provide the analytical backbone for Mauritius’ agricultural transformation. They offer a coherent structure for addressing systemic constraints, mobilising investment, strengthening institutions and enabling evidence-based decision-making. Most importantly, they articulate a forward-looking vision in which food sovereignty, economic diversification, environmental sustainability, social inclusion and public health reinforce one another.

This consolidated report shall form the backbone of *Les Assises de l’Agriculture*, where its recommendations will undergo final validation and be elevated into a National Food Security Roadmap. The latter will guide all institutions in formulating their Operational Strategic Plans for 2026–2030, ensuring strong coherence with the outcomes of the national consultative process, shared stakeholder aspirations and the broader sustainable-development agenda.

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# 1. Introduction

Mauritius stands at a critical juncture in the transformation of its agricultural and food systems. Increasing exposure to climate shocks, rising dependence on food imports, volatile global markets, declining soil health, labour scarcity and changing consumer and nutritional needs have revealed the structural fragility of the current model. These challenges cannot be addressed through incremental adjustments to farm-level production alone; they require a deeper rethinking of how agriculture, markets, institutions, natural resources and public health interact as a system.

The Food and Agricultural Research and Extension Institute (FAREI) coordinated the pre-consultative process for *Les Assises de l'Agriculture*. As part of the process FAREI reviewed previous strategic plans and sectoral reports for both the crop and livestock sectors. FAREI also consulted a number of relevant regional and international strategic documents.

In line with national and regional/international strategies FAREI adopted an agri-food systems approach. This approach encompassed all actors, activities and value chains involved in producing, processing, distributing, consuming and disposing of food, as well as the economic, social, environmental and institutional contexts in which these processes operate. This approach acknowledges that food security, farmer livelihoods, environmental sustainability and public health are interdependent and must be addressed in an integrated manner — from farm to fork.

It is within this framework that ten inter-connected thematic areas were developed to structure national reflection and dialogue. These themes deliberately go beyond agronomic production to include value chains, governance, data and digitalisation, climate resilience, nutrition, seed sovereignty and social inclusion. Importantly, the framework does not shy away from addressing institutional coordination, policy coherence and governance, recognising that confidence, investment and productivity are strongly influenced by how public systems function and interact.

This pre-consultative report therefore represents a conceptual and strategic shift. It moves agriculture from a sectoral activity to a national agri-food system, where resilience, competitiveness, sustainability and inclusiveness are treated as mutually reinforcing objectives. While developed in preparation for *Les Assises de l'Agriculture*, the report already provides a coherent analytical backbone that institutions may use to re-align their strategies, programmes and investments in anticipation of the national roadmap to be validated through *Les Assises de l'Agriculture*.

## **1.1 Goal and Objectives of the Pre-Consultative Process Goal**

To develop a comprehensive food security framework to transform Mauritius' agri-food systems into a resilient, inclusive and sustainable model capable of ensuring food sovereignty, environmental stewardship and improved public health outcomes.

### **Objectives**

The pre-consultative process was designed to achieve the following objectives:

- Strengthen food sovereignty and resilient domestic production by identifying pathways to reduce import dependency, enhance adaptive capacity and stabilise local supply under climate and market shocks.
- Promote inclusive and competitive value chains that improve market access, value addition, price transparency and fair returns for producers and agri-entrepreneurs.
- Foster innovation, knowledge systems and youth engagement through improved data governance, digitalisation, research–extension linkages and generational renewal.
- Ensure sustainable natural-resource management and ecosystem health by promoting regenerative practices, soil and water stewardship and circular-economy models.
- Enhance nutrition security, food safety and public-health linkages by aligning agricultural production with dietary quality, consumer trust and wellness objectives.
- Strengthen governance, institutional coordination and financing mechanisms to improve policy coherence, service delivery, accountability and investment confidence across the agri-food system.

Together, these objectives provided the analytical lens through which stakeholder inputs were collected, interpreted and structured into the ten thematic areas presented in this report.

## 2. Methodology

### 2.1 Conceptual Framework

The pre-consultative process was grounded in an agri-food systems framework, recognising that agricultural performance and resilience are shaped not only by farm-level production, but also by upstream and downstream factors including input systems, markets, institutions, natural resources, nutrition and public health. Ten thematic areas designed to capture the broadest spectrum of constraints and opportunities affecting the crop sector was developed. Eight of them were modified and adapted for to the livestock sector, with an additional two specific themes complementing them.

### 2.2 Stakeholder Engagement and Consultation Process

From September 2025 onwards, FAREI coordinated a series of structured pre-consultative engagements using a bottom-up and participatory approach. These consultations sought to capture perspectives from stakeholders such as planters, breeders, agro-processors, agri-entrepreneurs, producer organisations, private-sector actors, civil-society groups, youth and relevant public institutions.

Key activities conducted include:

- Nine liaison meetings for both crop and livestock sectors held at DCs, MFs and at FAREI St Pierre.
- Stakeholders' Meeting – Crop Sector on 29 September 2025 at Boname Hall (91 participants).
- Stakeholders' Meeting – Livestock Sector on 08 October 2025 at FAREI Head Office, Réduit (52 participants).
- Youth Engagement Session on 07 November 2025 at FAREI Head Office (54 participants).
- Pre-Validation Workshop with planters and breeders (FSC Hall, St Pierre – 24 October 2025) in collaboration with the Small Farmers Welfare Fund (SFWF), facilitated by FAREI resource persons.
- Pre-Validation Workshop with Stakeholders (who attended the 29 September 2025 meeting) on 29 October 2025 at FAREI Head Office, Réduit.

Engagement modalities included liaison meetings, sector-specific stakeholder workshops, youth engagement sessions and pre-validation meetings. In recognition of the role of fisheries in national food security, the FAREI solicited views from the Fisheries Division of the Ministry of Agro-Industry, Food Security, Blue Economy and Fisheries who were also conducting parallel consultations as part of *Les Assises de l'Océan*. Their submissions, were integrated into this report. For Rodrigues, the Island Chief Executive's Office was formally contacted and inputs submitted by the Rodrigues side were incorporated while preserving their contextual specificities.



## 2.3 Synthesis and Policy Translation Process

Inputs collected through the pre-consultative process reflected diverse perspectives, priorities and levels of technical detail. To ensure coherence, neutrality and usability at policy and institutional levels, these contributions were systematically analysed, synthesised and translated into structured policy language. This also involved consolidating recurring issues and articulating proposed actions within a macro-policy framework that is accessible and actionable for decision-makers, institutions and development partners.

While preserving the essence and intent of stakeholder representations, the formulation deliberately adopts a neutral and strategic tone, enabling the recommendations to be useful to any stakeholder. Particular attention was given to cross-cutting issues such as governance, policy coherence, institutional coordination and confidence-building, recognising their influence on sector performance and investment decisions.

## 2.4 Validation and Consolidation

Draft outputs were subjected to pre-validation with selected stakeholder groups to ensure accuracy, relevance and fidelity to the issues raised. Complementary inputs arising from sectoral meetings were also integrated. Meetings with key partner institutions who collaborated in the pre-consultative process, namely the SFWF, AMB and the Agricultural Services were also held and draft copies were circulated for views.

## 2.5 Use of the Pre-Consultative Report

Even prior to formal validation at *Les Assises de l'Agriculture*, this pre-consultative report may serve as a strategic backbone for institutions in the formulation of their respective Operational Strategic Plans for 2026–2030. Following deliberation and endorsement at the *Assises*, the report will be consolidated into a food security roadmap, to which partner institutions shall be called upon to align their operations in order to materialise a unified broader and resilient sustainable agriculture development agenda.



# **CROP SECTOR**

## **CROP SECTOR: BUILDING A RESILIENT, SUSTAINABLE AND INCLUSIVE AGRI-FOOD SYSTEM**

The crop sector in Mauritius faces a convergence of structural, environmental and economic challenges that increasingly threaten national food security and agricultural sustainability. High dependence on imported food exposes the country to global price volatility, supply-chain disruptions and currency fluctuations, while domestic production remains constrained by limited land availability, rising input costs, labour shortages and uneven productivity. These pressures are compounded by climate variability, with more frequent droughts, floods and extreme weather events affecting yields, cropping calendars and farmer livelihoods.

Despite the presence of long-standing institutions, support mechanisms and technical expertise, the sector continues to be affected by fragmented planning, limited data integration and weak coordination across the production, post-harvest and market continuum. Inadequate alignment between production levels and consumption needs has resulted in seasonal gluts, shortages and income instability, while post-harvest losses, insufficient processing capacity and underdeveloped value chains reduce the overall efficiency and resilience of the system. At the same time, demographic trends — notably an ageing farming population and declining youth participation — raise concerns about generational renewal and long-term productive capacity.

Environmental sustainability has emerged as a critical constraint and opportunity for the crop sector. Soil degradation, declining organic matter and heavy reliance on imported chemical fertilisers have weakened ecosystem health and increased vulnerability to climatic stress. Water scarcity, inefficient irrigation infrastructure and pollution risks further strain natural resources. These challenges underscore the urgency of restoring soil fertility, improving water-use efficiency and transitioning toward production systems that are both climate-resilient and environmentally sound, while reducing dependency on external inputs.

Market dynamics also shape the sector's performance and future prospects. The predominance of low-value primary production, limited differentiation of local products and weak integration with processing, tourism and institutional markets have constrained income generation and investment. Although demand exists for safe, nutritious and sustainably produced food, gaps in certification, branding, traceability and logistics continue to limit access to higher-value domestic and export markets. Addressing these bottlenecks is essential to enhance competitiveness, strengthen consumer confidence and improve returns along the value chain.

Underlying these thematic priorities is the recognition that agriculture can no longer be addressed in isolation at the level of farm-based production systems. Instead, a farm-to-fork perspective is required, embracing a holistic agri-food systems approach that integrates production, post-harvest handling, processing, markets, nutrition and governance. Such an approach strengthens systemic resilience, enhances coherence across the value chain and builds the adaptive capacity required to respond effectively to future climatic, economic and food-security challenges.

## Theme 1: Food Sovereignty and Resilient Production Systems

Mauritius remains highly dependent on imported food, exposing the nation to global price volatility, currency fluctuations and supply-chain disruptions. Achieving food sovereignty therefore requires deliberate action to strengthen local production, reduce dependence on imports and ensure preparedness in times of crisis. This entails aligning agricultural production with national consumption needs, reinforcing value chains, improving post-harvest management and establishing robust systems for data-driven planning and monitoring.

Resilient production systems must withstand the increasing frequency of droughts, cyclones, floods and other climate-induced challenges. They should integrate traditional adaptive practices such as agroecology, agroforestry, intercropping and regenerative soil management with modern innovations including protected cultivation, vertical farming and digital agriculture. Soil-based systems remain the foundation for long-term fertility and ecosystem health, while soilless and controlled-environment systems can play a complementary role in optimising production under constrained conditions.

Institutions such as FAREI, the Agricultural Marketing Board (AMB), the Irrigation Authority and the Small Farmers Welfare Fund (SFWF) are key actors supporting transformation. However, gaps persist in coordination, production planning, digital integration and farmer support.

### 1.1 Intervention Area 1: Boosting production of strategic crops

This section addresses the boosting of major food crops in order to improve food self-sufficiency.

#### Priority Actions:

- Establish production targets for selected crops with potential to increase production including potato, onion, garlic, crucifer, legumes, tomatoes, banana and starchy crops (eddoes, cassava and sweet potato)
- Review seed purchase schemes for relevant strategic crops
- Review the pricing and grading system for relevant strategic crops
- Make provision for additional storage facilities at AMB to enhance storability for seeds and products for consumption
- Develop value chain flagship programmes using a farm to fork approach to increase production of strategic crops

### 1.2 Intervention Area 2: Labour Scarcity and Mechanisation

Persistent labour shortages, high mechanisation costs provision limit farm productivity. Mechanisation options remain unaffordable for small and medium planters.

#### Priority Actions:

- Simplify and fast-track permits for importation of agricultural labour, including seasonal schemes.
- Develop shared mechanisation clusters or cooperatives with subsidised access to small-scale equipment.
- Encourage R&D in low-cost mechanisation and simple robotics suited to smallholder operations (planting, fertilizing, harvesting).
- Provide subsidies and soft loans for machinery purchase or rental.
- Establish regional processing plants for basic crop transformation to reduce post-

harvest losses.

- Introduce frameworks for supervised use of rehabilitation and prison-detainee labour for outdoor agricultural work under ethical guidelines.
- Promote mechanisation service pools accessible through digital booking systems to ensure timely field operations.
- Expand availability of tractors and mechanisation services at regional level to reduce waiting times and enhance timeliness of land preparation.

### **1.3 Intervention Area 3: Neglected and Underutilised Crops (NUC)**

Many local and heritage crops have disappeared from mainstream markets due to low awareness and weak value-chain support.

#### **Priority Actions:**

- Compile a national database of NUC accessions and heritage varieties.
- Conduct research on optimal growing conditions, pest resistance and nutritional properties of traditional crops.
- Implement public awareness campaigns and “Eat Local” initiatives highlighting the nutritional and cultural value of indigenous crops.
- Develop market linkages and supply chains connecting traditional crop growers with supermarkets, hotels and processors.
- Develop Quality-Declared Seed (QDS) schemes and decentralised seed multiplication.
- Provide incentives and training to NUC growers, including youth and women.
- Conduct national media campaigns and food fairs promoting “local foodcrops” and “recipes from local foodcrops”
- Protect local germplasm under IP and biodiversity legislation.
- Promote partnerships with chefs and SMEs to valorise NUC-based dishes and processed foods.
- Integrate NUCs into school-feeding and nutrition programmes.

### **1.4 Intervention Area : Land Use and Access**

Limited arable land, infrastructure gaps and conversion to non-agricultural uses constrain production expansion.

#### **Priority Actions:**

- Establish and maintain a live Land Bank identifying available and suitable agricultural land.
- Ensure infrastructure readiness (water, drainage, electricity, security) before land allocation.
- Enforce zoning to prevent conversion of fertile agricultural areas.
- Promote agroforestry, intercropping and rotation to optimise land use.
- Digitise cadastral data using GIS to monitor land allocation and utilisation.
- Rehabilitate abandoned or marginal lands through cluster farming and soil-restoration schemes.
- Provide fiscal incentives for leasing idle private land for food production.
- Facilitate gradual release of sugar-cane lands for diversified food-crop production so as to reduce food import bill as opposed to income generated with sugar export.

### **1.5 Intervention Area 5: Vertical Farming and Hydroponics and Aeroponics**

Vertical farming and hydroponics adoption are means to optimise land use and to promote resilience to climate change.

**Priority Actions for vertical farming:**

- Promote soil-based vertical farming to strengthen organic/bio production systems.
- Encourage adoption of soilless systems in a complementary manner for high-value crops.
- Implement pilot projects in urban and peri-urban zones through public–private partnerships.
- Offer fiscal incentives for vertical-farming infrastructure and renewable-energy integration.
- Develop training manuals and standards for vertical-system design and management.
- Promote knowledge exchange through FAREI-led demonstration sites.

**Priority Actions for hydroponics and aeroponics:**

- Promote hydroponics and aeroponics for high-value or climate-sensitive crops.
- Diversify cultivated varieties through adaptive research.
- Provide concessional loans and input subsidies for infrastructure.
- Strengthen coordination between input suppliers, research and markets.
- Offer continuous training via FAREI, MITD and Polytechnics Mauritius.
- Foster R&D partnerships for new crops and nutrient formulations.
- Encourage cluster or cooperative hydroponic units to share infrastructure.

## **1.6 Intervention Area 6: Enhancing Commodity Production for Import Substitution**

This section addresses the revitalization of niche high-value commodities—Apiculture, Tea, and Mushrooms—to improve self-sufficiency, increase rural incomes, and reduce the national import bill through modernization and value addition.

**Policy, Regulation & Land Access**

- Enforce strict pesticide-use regulations to protect bee populations and ensure the health of the local ecosystem.
- Ensure secured access for beekeepers to the three national melliferous zones and rehabilitate ex-tea belt areas for replanting degraded fields.
- Facilitate NPPO clearance for the importation of inoculated mushroom substrates and establish a high-level coordination committee for mushroom sector development.
- Regulate honey quality and tea grading systems to ensure domestic produce can compete with and replace premium imported brands.

**Research, Innovation & Agritech**

- Conduct research on bee diseases and deploy IoT-enabled "Smart Hives" to monitor hive temperature and weight, maximizing honey yield.
- Upgrade nurseries to propagate improved tea varieties and diversify local mushroom substrate sources using agricultural by-products like bagasse and sawdust.
- Provide credit and grants for Smart Climate-Controlled Units for mushroom cultivation and modern processing/grading facilities for tea.
- Promote the cultivation of melliferous trees and flowering cover crops to support honey production and soil health.
- Training, Youth & Cooperative Development
- Strengthen training and mentorship on production and marketing; organize smallholders into cooperatives to produce high-value specialty teas and artisanal honey.
- Develop community-based digital pollination services linking beekeepers with fruit

and vegetable growers via mobile platforms.

- Introduce youth-specific financial incentives and digital literacy programs to attract a new generation to the tea and mushroom sectors.

#### **Marketing, Branding & Value Addition**

- Promote national branding for Mauritian honey and tea to capture the domestic tourism and retail markets.
- Encourage tea growers to diversify into herbal blends and by-products (cosmetics, compost) and launch awareness campaigns on the nutritional benefits of locally grown mushrooms.
- Use the National Agritech Data Platform to track commodity prices and production volumes, ensuring a stable supply that displaces imports.

## Theme 2: Conservation of Genetic Resources and Breeding

Seed sovereignty is the cornerstone of a resilient and self-reliant agri-food system. Reliable access to quality, affordable and locally adapted seed varieties enable farmers to maintain productivity under variable climatic conditions while preserving biodiversity. Mauritius remains heavily dependent on imported seed for most vegetable and field crops, leaving the country vulnerable to supply-chain disruptions, currency fluctuations and phytosanitary restrictions.

Local breeding and multiplication capacity are limited, scattered across public institutions with insufficient infrastructure, funding and skilled personnel. Traditional and under-utilised crops—such as cassava, sweet potato, taro, millet and indigenous vegetables—are gradually disappearing, leading to genetic-resource erosion. Safeguarding and promoting these resources is essential for climate adaptation, nutrition diversity and cultural identity.

Existing institutions (NPPO, FAREI, MSIRI, UoM) provide a base for seed-system development, but coordination and legal frameworks require modernisation and alignment with international and regional standards (UPOV 1991, ITPGRFA, SADC Seed Protocol). Stronger farmer participation, cooperative models and public-private partnerships will be crucial for local seed production, quality assurance and conservation.

### 2.1 Intervention Area 1: National Seed Policy and Institutional Framework

Fragmented mandates and outdated legislation hinder coordination and transparency.

#### Priority Actions:

- Formulate and adopt a National Seed Policy and Action Plan covering breeding, certification, import/export and farmers' rights.
- Establish a National Seed Council bringing together public, private and farmer representatives.
- Update seed legislation to align with UPOV 1991, ITPGRFA and SADC Seed Protocols.
- Maintain a central seed registry of certified varieties accessible to stakeholders.
- Develop a National Seed Information System integrating production, certification and trade data for policy monitoring.
- Assign QDS seed production responsibility to Barkly Experimental Station (Agricultural Services) while FAREI focuses on varietal research and improvement.
- Review and strengthen seed-selection and certification standards to ensure varietal purity, germination and yield consistency.

### 2.2 Intervention Area 2: Local Breeding and Research Programmes

Dependence on imported varieties and limited R&D investment restrict local innovation.

#### Priority Actions:

- Establish national seed banks and germplasm collections for traditional and underutilised crops (cassava, sweet potato, winged bean, moringa, pigeon pea,



breadfruit, etc.).

- Strengthen government nurseries to supply quality planting materials of traditional crops at affordable prices.
- Strengthen breeding programmes for drought, pest and disease-tolerant crops.
- Establish public–private breeding partnerships and adaptive-trial sites.
- Participate in regional breeding programmes under SADC and IOC.
- Expand biotechnology and molecular-marker laboratories for faster varietal development.
- Encourage open-pollinated and farmer-preferred varieties suited to local soils and climate.
- Conduct annual seed-sector performance audits and publish findings to guide research priorities.
- Document local varieties through participatory characterisation with farmers.
- Ensure representativeness and survival of diverse crops through the establishment of decentralized field gene-plots at regional level.
- Implement purifying breeding programmes to stabilise and preserve genetic integrity of local crop varieties.

### **2.3 Intervention Area 3: Seed Multiplication and Distribution Systems**

Insufficient certified-seed supply and weak distribution networks reduce farmer access.

#### **Priority Actions:**

- Develop contract-seed production schemes linking research stations with farmer cooperatives.
- Establish regional seed-multiplication centres with irrigation, drying and storage facilities.
- Promote Quality-Declared Seed (QDS) systems.
- Support seed cooperatives and SMEs with finance and technical training.
- Introduce digital inventory platforms for real-time seed availability and demand.
- Develop a framework for capturing data on seed producers and varieties produced.
- Provide training on post-harvest seed handling, cleaning and packaging for retail or distribution.

### **2.4 Intervention Area 4: Seed Quality Assurance and Regulation**

Limited inspection capacity and uneven standards undermine farmer confidence.

#### **Priority Actions:**

- Upgrade governmental seed-testing laboratories or facilities and pursue ISO 17025 accreditation.
- Train inspectors and technicians in modern diagnostic methods.
- Introduce risk-based inspection schedules focused on major crops.
- Implement digital traceability (QR codes) on certified seed lots.
- Enforce penalties for counterfeit or sub-standard seed.
- Harmonise testing protocols with SADC and COMESA standards.
- Deploy mobile seed-testing units to service remote areas.

### **2.5 Intervention Area 5: Conservation of Plant Genetic Resources (PGR)**

Traditional varieties and wild relatives are being lost due to land-use change and market neglect.

**Priority Actions:**

- Strengthen the National Gene Bank for in-situ and ex-situ conservation.
- Support community seed banks and heritage gardens managed by farmer groups.
- Compile a national digital inventory of plant-genetic resources.
- Promote on-farm conservation and participatory varietal selection.
- Collaborate with regional and global gene banks for safety duplication.
- Conduct awareness campaigns on the cultural and nutritional value of traditional crops.
- Encourage seed-exchange fairs and farmer-field days celebrating traditional crops.
- Integrate PGR management into school and community-garden projects.

**2.6 Intervention Area 6: Farmer Participation and Seed Rights**

Farmers are insufficiently recognised as custodians and multipliers of local varieties.

**Priority Actions:**

- Recognise farmer-managed seed systems within national regulation.
- Provide training in breeding, seed selection, storage and community multiplication.
- Protect farmers' rights to save, exchange and sell farm-saved seed within guidelines.
- Create farmer innovation and micro-grant funds for local breeding initiatives.
- Facilitate registration of farmer varieties in the national catalogue.
- Include women and youth associations in seed-production and decision-making structures.
- Support farmer-led networks for peer learning and community quality control.

**2.7 Intervention Area 7: Regional Cooperation and Knowledge Exchange**

Limited participation in regional initiatives restricts access to new technologies and markets.

**Priority Actions:**

- Participate actively in SADC, COMESA and IOC seed-harmonisation programmes.
- Align certification and quarantine procedures with regional frameworks.
- Facilitate safe cross-border germplasm exchange under phytosanitary protocols.
- Undertake joint regional research projects on breeding and genetic diversity.
- Organise training and study tours for breeders, regulators and seed producers.
- Position Mauritius as a regional training and testing hub for tropical seed systems.
- Invite regional seed entrepreneurs to Mauritian fairs and exhibitions to spur investment and learning.

**2.8 Intervention Area 8: Financing and Incentives**

High production costs and limited credit constrain local seed enterprises.

**Priority Actions:**

- Establish seed-production credit lines and concessional financing for certified producers.
- Provide matching grants for start-ups investing in seed infrastructure.
- Offer tax incentives for R&D and promotion of local varieties.
- Integrate seed-sector financing into national Green and Agri-Business Funds.
- Support cost-sharing schemes for cooperative storage and processing facilities.

## Theme 3: Climate Resilience, Adaptation and Disaster Preparedness

As a Small Island Developing State (SIDS), Mauritius is highly exposed to cyclones, acute water-stress periods and flash floods, all of which directly affect crop production, food security and farmer livelihoods. Building resilience requires not only preparedness but also proactive adaptation and mitigation strategies to manage these growing risks effectively. The country imports roughly three-quarters of its food requirements, making it highly sensitive not only to local climate shocks but also to international supply-chain disruptions. At the same time, the agricultural sector depends heavily on imported inputs such as chemical fertilisers—around 26,000 tonnes valued at Rs 700 million in 2024—which increases production costs and environmental vulnerability.

Disaster preparedness must therefore include robust and technology-enabled systems for assessing crop damage and food-supply impacts, supported by real-time tools such as drones, satellite imagery, automatic weather stations and AI-based forecasting. These systems should feed into a national agricultural disaster database to guide early recovery actions and, where necessary, trigger transparent and evidence-based import mechanisms when indicators such as crop losses or price spikes warrant intervention.

At the same time, local climate-resilient crops—better adapted and less resource-demanding than imported hybrids—should be strengthened through national breeding programmes and seed-system partnerships with international research institutions. Expanding production of Quality-Declared Seeds (QDS), conserving Plant Genetic Resources (PGR) and promoting drought-tolerant and traditional crops such as cassava, sweet potato, taro and cowpea is a must to enhance self-reliance and diversification.

Climate resilience should also integrate short-term coping measures with long-term adaptation and mitigation actions. These include investment in water-harvesting infrastructure, improved drainage, renewable-energy solutions (agrivoltaics, biodigesters, solar irrigation) and wider adoption of sustainable practices such as intercropping, composting, mulching and agroforestry. Developing quality standards for compost, bio-fertilisers and seaweed-based organic inputs shall further support a low-emission and circular farming system.

Through integrated policies, climate-smart investments and inclusive disaster-management systems, Mauritius can reinforce the resilience of its agri-food sector and safeguard both production and livelihoods against an increasingly volatile climate.

### 3.1 Intervention Area 1: Disaster Risk Assessment and Early Warning Systems

Mauritius remains highly exposed to cyclones, droughts and flash floods, yet existing disaster-assessment and early-warning mechanisms are largely manual, fragmented and under-resourced. The limited number of automatic weather stations and weak data integration delay timely response and risk communication to farmers.

**Priority Actions:**

- Expand the network of Automatic Weather Stations (AWS) across all agro-climatic zones and link them to a national data platform.
- Deploy drones, satellite imagery and AI-based predictive models for real-time field assessment and forecasting.
- Establish a National Agricultural Disaster Database to centralise damage assessment, yield-loss data and resource mobilisation.
- Create mobile-based farmer alert systems (SMS, WhatsApp, or dedicated apps) for rapid reporting and early warning dissemination.
- Integrate bioswale projects, shelterbelts and vegetative barriers into disaster-preparedness plans for high-risk zones.
- Develop multi-channel communication systems to reach small and ageing farmers using both digital and traditional media.
- Build technical capacity among officers in GIS, remote sensing and data analytics to support disaster evaluation and risk communication.
- Standardise post-disaster crop-loss assessment templates and ensure adequate staffing and mobility for rapid evaluation.
- Designate and train regional contact farmers to support early-warning dissemination and rapid field reporting.

**3.2 Intervention Area 2: Import Regulation and Food Security**

Post-disaster imports decisions require timely data and relevant criteria, to avoid market imbalances.

**Priority Actions:**

- Develop transparent, evidence-based criteria for automatic import triggers, based on yield forecasts, market prices and verified crop-loss assessments.
- Establish a National Risk and Import Decision Database to guide government decisions.
- Create digital dashboards consolidating production, loss and price data for real-time decision support.
- Publish import permit processes, timelines and follow-up reports to ensure transparency.
- Strengthen monitoring and enforcement to curb illegal and premature imports.
- Maintain strategic buffer stocks and invest in cold-storage and minimal-processing facilities to stabilise local supply.
- Train producers in post-harvest preservation techniques such as drying, freezing and vacuum sealing.
- Ensure import policies align with local crop calendars and protect farmer incomes during recovery periods.

**3.3 Intervention Area 3: Local Crop Development and Genetic Resources**

Climate variability threatens traditional and high-value crops. Strong breeding programmes, funding and adoption of quality seed systems can increase the resilience of local production.

**Priority Actions:**

- Formulate a National Crop Breeding and Seed-System Strategy to develop and conserve drought-, heat- and pest-tolerant varieties.
- Strengthen partnerships between FAREI, UoM, MCIA and international research institutions (FAO, CGIAR) for genetic improvement.
- Promote cultivation of traditional climate-resilient crops such as cassava, sweet potato, taro, cowpea and plantain.
- Scale up Quality Declared Seed (QDS) production and distribution to ensure wider

access to improved varieties.

- Conserve and promote the use of Plant Genetic Resources (PGR) as part of adaptation strategies.
- Support establishment of post-harvest and storage infrastructure for perishable traditional crops.
- Create niche markets and branding strategies for traditional and climate-resilient produce to incentivise growers.
- Establish a multidisciplinary Rapid-Response Task Force (RRTF) for emerging pest and disease threats related to climate change (e.g. *Liriomyza huidobrensis*, locusts, nematodes).

### **3.4 Intervention Area 4: Adaptation Strategies**

Adaptation practices such as efficient water management, crop diversification and soil-conservation measures remain limited in scale due to cost, awareness and technical capacity constraints.

#### **Priority Actions:**

- Expand water-harvesting systems and on-farm reservoirs to increase water availability during dry periods.
- Rehabilitate and maintain land drainage networks to prevent waterlogging and soil degradation.
- Promote agroforestry, intercropping, mulching and minimal tillage to enhance soil structure and moisture retention.
- Support training of trainers on adaptive practices across all regions and microclimates.
- Encourage bio-digesters, composting and organic-matter enrichment to improve soil health and reduce input dependency.
- Implement Bioswale projects and erosion-control works in flood-prone areas.
- Develop a National Adaptation Plan for Agriculture with region-specific action lines.
- Integrate desalination and water-recycling technologies for high-demand sectors such as hotels and agro-industries.
- Facilitate access to adaptation funding and technical assistance from international climate-finance mechanisms.
- Develop micro-climatic and vulnerability maps to target site-specific adaptation interventions.
- Develop rapid-response input-supply mechanisms to provide seeds, compost and irrigation materials immediately after disasters.
- Implement joint maintenance programmes for drainage and farm-access roads between agricultural and local authorities.
- Promote research on pest and disease dynamics/ complex under changing climatic conditions for better preparedness.
- Promote R&D development in adaptation strategies such as water management, crop development and soil conservation.

### **3.5 Intervention Area 5: Mitigation Strategies**

The agricultural sector contributes to emissions through fertiliser use, fuel consumption and land degradation. Limited renewable-energy adoption and weak compost regulation constrain the sector's mitigation potential.

#### **Priority Actions:**

- Promote renewable-energy systems in agriculture, including agrivoltaics, biogas and solar-powered irrigation.
- Encourage permaculture and regenerative farming practices to improve carbon sequestration.

- Develop and enforce quality standards for compost, biofertilisers and seaweed-based organic inputs.
- Support research on biofuel production using agricultural and livestock waste.
- Encourage green-manuring, cover crops and leguminous rotations to replace synthetic fertilisers.
- Introduce post-disaster soil-restoration programmes with incentives for compost and organic amendments.
- Promote low-emission mechanisation and precision agriculture to optimise fuel and fertiliser use.
- Develop a Land Drainage Master Plan integrating soil conservation and carbon-management principles.
- Establish a national knowledge-sharing platform to disseminate climate-smart agriculture (CSA) success stories and practices.

### **3.6 Intervention Area 6: Institutional Coordination and Capacity Building**

Climate and disaster risk management remain institutionally fragmented. Coordination among ministries, parastatal bodies and research institutions is limited and capacity in new technologies is still developing.

#### **Priority Actions:**

- Establish a Central Coordination Mechanism linking MAIFSBEF, FAREI, MMS, MLGDRM and other key stakeholders.
- Integrate climate resilience and policies, budgets and extension programmes.
- Build capacity of officers in climate-risk analysis, modelling and digital tools.

## Theme 4: Regenerative and Sustainable Agriculture

To meet climate and biodiversity goals, Mauritius must shift towards low-emission, regenerative farming systems that place soil fertility at the centre of production. Healthy soils require the regular return of organic matter and the support of biologically active systems that maintain productivity and resilience. Yet traditional sources such as cow manure are becoming scarce, creating the need to mobilise alternative streams such as compost, crop residues, municipal green waste and biochar.

Mauritius currently generates between 1,200 and 1,500 tonnes of solid waste daily, of which nearly 60% is organic. The large proportion of biodegradable waste presents an untapped opportunity for composting and other forms of valorisation. However, the absence of systematic segregation at source, limited logistics for separate collection have constrained the development of an integrated waste-to-resource value chain.

At the same time, adopting regenerative practices — including agroecology, agroforestry, intercropping and integrated crop–livestock systems — can reduce reliance on chemical fertilisers and pesticides while restoring ecosystem services. The loss of soil organic matter from continuous use of synthetic inputs highlights the urgency to close the nutrient loop by returning organic materials to the soil. Locally available resources such as bagasse, seaweed, livestock manure and food waste can be processed into compost and biofertilisers, contributing both to soil regeneration and to import substitution of chemical fertilisers.

Institutionally, waste management and composting activities remain fragmented among several ministries and local authorities, with limited coordination mechanisms. Existing subsidy structures tend to favour synthetic fertilisers over organic alternatives, creating a policy imbalance that limits investment in composting or circular solutions. Strengthening institutional coordination, establishing clear quality and safety standards and aligning fiscal incentives could unlock the circular economy potential of organic waste streams.

The circular economy also provides a platform for climate mitigation and resilience. Diverting organic waste from landfills reduces methane emissions, while applying compost to agricultural soils enhances carbon sequestration and water retention. By embedding circular and regenerative principles, Mauritius can achieve long-term soil fertility, sustainable productivity and reduced environmental impact — contributing directly to its national climate, biodiversity and sustainable development objectives.

The following key intervention areas outline priority actions required to strengthen soil fertility and accelerate Mauritius' transition to regenerative and circular agricultural systems

### 4.1 Intervention Area 1: Natural Farming Zones

Adoption of natural-farming practices remains limited due to low awareness and lack of financial incentives. Farmers require demonstration and mentoring to transition



from conventional to ecological systems, while consumers increasingly demand chemical-free produce.

**Priority Actions:**

- Identify and gazette selected localities or villages as Natural Farming Zones based on farmer interest, ecological suitability and proximity to conventional production areas.
- Provide training, mentoring and start-up incentives (inputs, compost units, certification support) to ensure successful transition and replication.
- Establish model natural-farming clusters with demonstration plots, composting sites and knowledge-exchange visits.
- Develop zonal standards and certification schemes to guarantee integrity and consumer confidence in chemical-free products.
- Strengthen extension capacity through training of trainers in natural-farming techniques, pest control and soil-health management.
- Facilitate market linkages and premium branding for produce originating from certified Natural Farming Zones.
- Encourage participatory monitoring involving local authorities, cooperatives and consumer groups to ensure transparency.
- Integrate Natural Farming Zones into national climate-adaptation and agroecology policies for long-term institutional support.
- Promote community composting, bio-input production and water-harvesting practices as pillars of self-sufficient natural-farming models.
- Document and disseminate success stories to encourage replication across other regions.

#### **4.2 Intervention Area 2: Waste Valorisation**

Significant volumes of plant and food waste from markets and processing units remain underutilised, contributing to landfill accumulation and loss of valuable organic matter.

**Priority Actions:**

- Enact legislation to prohibit dumping of green waste in landfills and promote recycling
- Develop PPP composting and bioconversion plants such as the proposed 'Vermi Compost'.
- Integrate municipal and agro-industrial organic waste streams into national composting networks.
- Incentivise enterprises producing compost, animal feed and bioenergy from agricultural.
- Promote community-based waste segregation and composting schemes inspired by successful Nairobi models.
- Create circular economy projects for coconut husk and seaweed valorisation.

#### **4.3 Intervention Area 3: Sustainability Adoption**

Although smallholders are more adaptable, limited access to knowledge, certification and incentives has slowed the adoption of agroecology and low-input practices.

**Priority Actions:**

- Establish a local certification body for bio-/organic production and develop dedicated organic zones as part of which suitable localities could be declared chemical free areas.
- Provide incentives and training for adoption of regenerative and low-input

practices, including demonstration plots and model farms.

- Develop business models illustrating the economic viability of agroecological farming.
- Integrate agroecology and sustainability standards (e.g. Singapore model) into national production frameworks.
- Introduce university-level recognised courses in organic and sustainable agriculture.
- Support digital tools (Web 2.0 platforms, apps) to promote traceability, knowledge sharing and market access for certified producers

#### **4.4 Intervention Area 4: Organic Matter Availability**

Traditional sources of organic matter such as cow manure are declining due to reduced livestock populations and rising costs of collection and transport. Consequently, farmers face limited access to affordable organic inputs.

##### **Priority Actions:**

- Establish regional composting and bio-digestion facilities using segregated agricultural, market and municipal green wastes, seaweed, filter mud, bagasse and livestock waste.
- Develop a coordinated waste collection and transport system from source to composting centres, with participation of local authorities and private operators.
- Introduce fiscal incentives or tax relief for enterprises converting organic waste into compost, biofertilisers, or biochar.
- Ban or impose levies on organic waste sent to landfill and encourage waste segregation at source.
- Conduct a national soil quality mapping exercise to assess soil organic matter content and guide targeted soil restoration interventions.
- Promote on-farm composting and use of crop residues, cover crops and green manures as primary sources of organic matter before purchasing external inputs.
- Support pilot projects on biochar production and integration into local farming systems, with quality testing and farmer training.
- Provide appropriate machinery through SPMPC or cooperatives to support cover crop incorporation, shredding and compost turning.
- Develop quality and safety standards for compost and other organic soil amendments to ensure product reliability and farmer confidence.
- Strengthen research on low-cost crop residue management tools and on the safe use of seaweed compost considering potential heavy metal content.
- Encourage participation in regional soil initiatives such as the Soil Initiative for Africa (SIA) for technical and financial support.
- Develop an online compost and organic-manure database to connect suppliers with farmers and promote transparency on quality and pricing.
- Encourage establishment of new model cattle farming systems, in particular by government, where production of manure is the primary activity and that of milk a byproduct in order to ensure supply of manure for sustaining soil fertility.

#### **4.5 Intervention Area 5: Agroecology and Regenerative Farming Systems**

The transition from conventional input-dependent farming to regenerative systems is hindered by fragmented knowledge, limited technical guidance and absence of market recognition. Farmers often lack access to appropriate seeds, machinery and extension services that demonstrate the economic and environmental benefits of agroecological practices.

**Priority Actions:**

- Develop and implement a National Agroecology Transition Programme to guide and support farmers in adopting practices such as intercropping, crop rotation, agroforestry, mulching, reduced tillage and integrated crop–livestock systems.
- Strengthen capacity of extension officers through specialised training in agroecology, soil health management and integrated pest management (IPM).
- Establish demonstration “Soil Health Farms” and agroecology learning sites in different agro-climatic zones, showcasing cost-effective regenerative practices (AgriSud Model).
- Produce a practical “Guide on Agroecology and Regenerative Farming” with locally adapted examples, crop sequences and soil restoration techniques.
- Provide subsidies or grants for the purchase of leguminous cover crop seeds, companion and trap crops, eco-service plants and heirloom varieties.
- Support interinstitutional collaborative research on soil biology, organic matter restoration and soil carbon monitoring.
- Reorient existing agricultural subsidies towards agroecological inputs and practices that enhance soil resilience and biodiversity.
- Develop national certification and labelling standards for “Regenerative” or “Agroecological” produce to create consumer recognition and market incentives.
- Allocate designated sections in supermarkets and the National Wholesale Market for certified agroecological produce.
- Facilitate leasing of planted forestry lands for agroforestry projects under clear sustainability guidelines.
- Promote intercropping with sugar cane and other main crops to optimise resource use and improve soil fertility.
- Undertake cost-benefit analyses of agroecological transitions to inform policy and support adoption at scale.
- Provide continuous training on composting, microbial soil health and zero-budget natural farming principles.
- Design incentive schemes or temporary income-support measures for farmers adopting fallow or soil-resting periods to regenerate soil fertility.
- Ensure balanced allocation of land between biomass energy and agro-voltaic projects and core food production to safeguard food security

**4.6 Intervention Area 6: Reducing Reliance on Chemical Inputs**

Mauritius remains highly dependent on chemical fertilisers and pesticides, leading to soil degradation, biodiversity loss, health concerns and trade risks due to pesticide residue limits in export markets. The imbalance between subsidised synthetic inputs and limited incentives for organic alternatives discourages change.

**Priority Actions:**

- Establish Integrated Soil Health Programmes combining soil testing, tailored organic amendments and IPM training to reduce dependence on synthetic fertilisers.
- Develop model Integrated Crop–Livestock Demonstration Farms that showcase nutrient recycling, composting and biological pest control methods.
- Provide adequate fiscal incentives and soft loans to farmers investing in composting units, drip irrigation, biofertiliser production and protected cultivation systems.
- Enforce the Use of pesticides Act and Code of Practice through accredited training, licensing and monitoring of pesticide sales and application.
- Support local R&D for biopesticides and biofertilisers derived from Mauritian plants and microorganisms suited to local soils.
- Identify and promote alternative, locally available sources of phosphorus and

potassium nutrients.

- Create a tiered certification system (“In Transition”, “IPM Certified”, “Organic”) to support farmers’ gradual progression towards low-input systems.
- Facilitate direct market linkages between sustainable producers and institutions (schools, hotels, hospitals) through public procurement initiatives.
- Strengthen laboratory capacities (Soil Chemistry, Food Tech and residue testing) to monitor soil health and food safety.
- Designate buffer zones around reservoirs and rivers where only sustainable practices are permitted.
- Integrate awareness campaigns on safe chemical use and encourage progressive adoption of regenerative methods through incentives.
- Introduce market surveillance and enforcement to prevent distribution of substandard or unsafe agro-inputs, ensuring fertiliser and pesticide quality.
- Undertake research and field validation on the use of activated carbon (biochar) and beneficial microbial consortia as soil-health enhancers to reduce soil-borne diseases such as Bacterial Wilt, Pythium and Erwinia and dependency on chemical pesticides.
- Promote farmer adoption of these biological soil-management solutions through demonstration plots and technical advisory support.

#### **4.7 Intervention Area 7: Circular Economy Models**

The linear “take–make–dispose” model dominates agricultural and municipal systems, causing nutrient loss and environmental pressure. Proper waste segregation, adequate recycling infrastructure and enhanced coordination between ministries can contribute towards the development of a national circular food system.

##### **Priority Actions:**

- Integrate circular economy principles across agricultural, waste management and energy policies to close nutrient and water loops.
- Provide fiscal and technical incentives for the valorisation of agricultural by-products (cane trash, manure, food waste) into compost, animal feed and renewable energy.
- Promote black soldier fly larvae rearing for organic waste conversion into protein feed and biofertiliser.
- Support water circularity through rainwater harvesting, leachate recycling in greenhouses and safe use of treated wastewater for irrigation.
- Establish Circular Agriculture Demonstration Farms and a peer-learning network to showcase resource efficiency practices.
- Encourage use of renewable energy (solar, biogas) for agricultural operations such as irrigation, drying and cooling.
- Train extension officers to assist farmers in developing customised circular transition plans and identifying feasible technologies.
- Provide shared equipment (rotovators, shredders, compost turners) through cooperatives or hire schemes.
- Incentivise farmers who increase soil carbon sequestration, water retention and biodiversity through verified circular practices.
- Encourage entrepreneurs to develop and market natural enemies for pest control.
- Integrate circular economy modules into agricultural education and vocational training curricula.
- Strengthen inter-ministerial coordination for waste collection, recycling and monitoring of nutrient flows.
- Evaluate the use of Concentrated Molasses Silage (CMS) and saline water as alternative nutrient sources within a Blue Economy framework.
- Support applied research on local composting prototypes, microbial inoculants

(e.g. beneficial soil bacteria) and low-cost regenerative formulations.

#### **4.8 Intervention Area 8: Food Loss and Waste Reduction**

Approximately 30–40% of locally produced fruits and vegetables are lost across the supply chain due to poor post-harvest practices, inadequate infrastructure, limited cold storage and inefficient market linkages. This reduces farm income, increases import dependency and contributes to greenhouse gas emissions.

##### **Priority Actions:**

- Conduct national awareness campaigns on food loss prevention targeting farmers, traders, retailers and consumers.
- Establish community-level cold rooms and conditioning facilities for smallholder clusters through cooperatives or public–private partnerships.
- Provide subsidies for rigid stackable crates and improved packaging materials to reduce post-harvest losses.
- Support shared processing facilities for surplus or imperfect produce to extend shelf life and create new market products.
- Encourage collaborations between farmer cooperatives, hotels and NGOs for surplus food redistribution or transformation.
- Develop mobile digital platforms for real-time market information, price alerts and weather forecasts to reduce mismatches between production and demand.
- Promote “imperfect produce” (eg expiring products) campaigns to change consumer perception and reduce retail waste.
- Review market standards to allow flexibility for grade-based marketing of local produce.
- Integrate food loss reduction indicators into national food security and climate monitoring frameworks.

#### **4.9 Intervention Area 9: Climate Contribution**

Agriculture both contributes to and is affected by climate change. Scaling regenerative practices can significantly enhance carbon sequestration, reduce emissions and strengthen resilience. However, the sector lacks a coherent framework linking agricultural transformation to national climate targets.

##### **Priority Actions:**

- Integrate regenerative agriculture within the Nationally Determined Contributions (NDCs) and national climate strategies.
- Develop incentive schemes for farmers adopting low-emission and carbon-sequestering practices (e.g., compost use, agroforestry, biochar).
- Support local R&D on climate-smart practices and precision tools adapted to Mauritian conditions.
- Facilitate access to finance for renewable energy systems and low-emission technologies for farming operations.
- Create a national network of Climate-Smart Demonstration Farms to test and share innovations.
- Strengthen agricultural extension services to provide continuous technical support on adaptation and mitigation measures.
- Develop certification and traceability systems for regenerative and climate-friendly agricultural products.
- Encourage adoption of biomass energy and explore opportunities for green hydrogen use in agriculture.
- Ban or phase out hazardous agrochemicals and promote integrated nutrient management for emissions reduction.

- Recognise agroecology as a key pathway in achieving agricultural emission reductions and climate adaptation goals.
- Optimise the contribution of Rodrigues and Agalega to national food production and carbon balance through adapted regenerative models.
- Support establishment of bio-farming units and biogas systems to recycle waste and reduce emissions.

#### **4.10 Intervention Area 10: Production Systems**

Conventional open-field systems face declining productivity due to soil degradation and limited adoption of sustainable methods.

##### **Priority Actions:**

- Promote integrated, sustainable and climate-resilient production systems combining agroecology and smart farming.
- Strengthen Integrated Pest and Disease Management (IPDM) and biological control.
- Encourage composting, permaculture and regenerative soil practices.
- Facilitate research and breeding of climate-adapted, high-yield varieties.
- Establish demonstration “Model Soil Health Farms” showcasing best practices.
- Promote local entrepreneurship in bio-input and biocontrol-agent production.
- Provide small-grant or tax-credit schemes for adoption of soil-health technologies.
- Train farmers on sustainable techniques.

## Theme 5: One Health Approach; Integrating Environment, Plant and Animal Health

Healthy soils and reliable water resources are the foundation of agricultural productivity and environmental stability in Mauritius. Yet soil fertility has declined over time because of erosion, nutrient mining, excessive chemical input and loss of organic matter. Freshwater availability is under pressure from competing domestic, industrial and tourism uses, while rainfall variability and drought events linked to climate change further constrain supply.

Mauritius produces roughly 130,000 tonnes of animal manure per year, far below national crop-nutrient requirements. To compensate, around 26,600 tonnes of chemical fertilisers valued at Rs 707 million were imported in 2024. Dependence on these inputs raises production costs, degrades soil biology and contributes to water pollution and greenhouse-gas emissions.

Simultaneously, approximately 500,000 tonnes of solid waste are generated annually—70 % biodegradable—but most remains unsegregated and landfilled. Harnessing this organic waste for compost and bio-energy would close nutrient loops, cut emissions and support a circular economy.

Water-use efficiency remains low due to outdated irrigation infrastructure, limited storage and minimal reuse of treated wastewater. Run-off laden with fertiliser and pesticide residues contaminates waterways and coastal ecosystems. Pollution from plastics and agrochemical packaging further threatens soil and marine health.

An integrated soil-and-water-management framework—anchored in evidence-based governance, efficient irrigation, nutrient recycling and pollution control—is therefore essential to safeguard natural resources, ensure long-term productivity and enhance resilience to climate change.

### 5.1 Intervention Area 1: Soil Fertility and Biological Health

Declining soil fertility and limited testing capacity hinder efficient nutrient management.

#### Priority Actions:

- Upgrade and decentralise soil-testing laboratories; deploy mobile soil-analysis units.
- Develop a national digital soil database with fertility maps and recommendations.
- Provide affordable farmer test kits and training in interpretation.
- Issue soil-health cards indicating nutrient status and management options.
- Promote Integrated Soil Fertility Management (ISFM) combining organic and mineral inputs.
- Encourage mixed crop–livestock systems to recycle manure.
- Conduct soil-fertility awareness campaigns through extension and farmer groups.
- Carry out benchmark soil surveys every five years to monitor trends and guide fertiliser policies.



## **5.2 Intervention Area 2: Organic Matter and Nutrient Management**

Shortage of organic inputs and excessive reliance on chemical fertilisers can impact soil structure and biodiversity.

### **Priority Actions:**

- Promote on-farm composting using crop residues, green waste and agro-industrial by-products.
- Establish regional composting and bio-digestion facilities via public–private partnerships.
- Encourage seaweed-based and microbial biofertilisers as local alternatives.
- Introduce compost-quality standards and certification.
- Provide incentives or rebates for compost users.
- Support manure-collection and cooperative composting schemes.
- Train farmers on nutrient budgeting and fertiliser-use efficiency to reduce wastage.
- Promote composting of banana, pineapple and vegetable residues through simple pit or windrow methods demonstrated on pilot farms.

## **5.3 Intervention Area 3: Soil Conservation and Land Management**

Erosion and poor conservation practices continue to degrade land and reduce productivity.

### **Priority Actions:**

- Prepare soil-vulnerability and erosion-risk maps to guide interventions.
- Train farmers in contour planting, terracing, vegetative barriers and agroforestry.
- Encourage reduced tillage, cover crops and crop rotation to preserve structure and carbon.
- Integrate soil-conservation criteria into land-use and environmental regulations.
- Provide mechanisation support for soil-friendly implements (mulchers, residue incorporators).
- Undertake joint maintenance of drains and farm access roads with local councils to control erosion and flooding.
- Establish model conservation plots in each region for demonstration and farmer training.

## **5.4 Intervention Area 4: Water Networks and Irrigation Efficiency**

Upgrading of irrigation systems can enhance productivity.

### **Priority Actions:**

- Modernise and rehabilitate existing irrigation networks to reduce leakages.
- Expand drip and sprinkler systems through subsidised schemes.
- Build small reservoirs and rainwater-harvesting structures in major farming zones.
- Provide financial incentives for farmers to build overnight storage reservoirs.
- Promote reuse of treated wastewater under defined quality standards.
- Encourage IoT-based irrigation sensors for real-time water management.
- Strengthen coordination among Irrigation Authority, CWA and FAREI.
- Provide micro-irrigation kits to small and backyard farmers with training on maintenance.
- Develop micro-climate and water-availability maps to tailor irrigation scheduling and drought-preparedness planning.

## **5.5 Intervention Area 5: Pollution, Waste Management and Circular Economy**

Uncontrolled disposal of agro-chemicals and plastic waste contaminates soil and

water.

**Priority Actions:**

- Promote Integrated Pest Management (IPM) and gradually phase out hazardous products.
- Enforce container-return and disposal schemes for pesticide packaging.
- Support biodegradable mulches and controlled-release fertilisers.
- Create regional waste-recycling centres for farm plastics and packaging.
- Encourage waste-to-soil initiatives linking municipal green waste to composting.
- Include pollution-control indicators in farm certification systems.
- Establish awareness programmes on safe storage and triple-rinsing of agro-chemical containers.
- Strengthen testing for heavy-metal accumulation in intensively cropped soils and irrigation water.

### **5.6 Intervention Area 6: Monitoring, Data Systems and Governance**

Weak coordination and limited data hinder evidence-based soil- and water-management decisions.

**Priority Actions:**

- Create a National Soil & Water Monitoring Network linked with climate and land-use data.
- Publish annual soil- and water-quality bulletins.
- Standardise data protocols among MAIFSBEF, MESWDCC, FAREI and UoM.
- Develop digital dashboards for decision support and public transparency.
- Build regional capacity for data collection and analysis.
- Integrate soil and water indicators into the National Agricultural Observatory.
- (Extension addition): Train extension officers to collect geo-referenced field data using mobile applications for real-time reporting.

### **5.7 Intervention Area 7: Research, Innovation and Capacity Building**

Low investment and slow technology transfer limit adoption of sustainable practices.

**Priority Actions:**

- Support research on local composting technologies, microbial inoculants and bio-inputs.
- Promote precision-agriculture tools for soil and water management.
- Encourage innovation in desalination, irrigation automation and water recycling.
- Strengthen training of extension officers on soil, water and pollution management.
- Foster knowledge exchange within SADC/IOC on land and water innovation.
- Introduce farmer field schools on soil and water conservation to demonstrate best practices.
- Include youth and women participation in soil-conservation and compost-enterprise projects.

### **5.8 Intervention Area 8: Institutional Coordination and Policy Integration**

Responsibilities for soil, water and waste management are dispersed across several ministries and local authorities.

**Priority Actions:**

- Establish a national coordination mechanism bringing together MAIFSBEF, MESWDCC, MLGDRM and FAREI.
- Integrate soil-, water- and pollution-management goals into National Land-Use

and Climate Strategies.

- Ensure joint planning and budgeting among line ministries for infrastructure maintenance.
- Embed soil and water indicators into agricultural performance assessments.
- Strengthen collaboration with local authorities for waste segregation and compost collection.

## Theme 6: Nutrition Security, Food Safety and Wellness

Nutrition security and food safety are essential components of national well-being and sustainable development. While Mauritius enjoys adequate food availability, dietary diversity and nutritional quality remain insufficient. Heavy reliance on imported and ultra-processed foods—often high in fats, sugars and salt—has contributed to rising rates of non-communicable diseases (NCDs) such as diabetes, hypertension and obesity. Micronutrient deficiencies and undernutrition persist in vulnerable groups, reflecting the double burden of malnutrition.

Ensuring nutrition security requires stronger integration among agriculture, health, education and trade policies. Agricultural production must focus not only on yield, but also on nutrient density, cultural suitability and food safety. Locally grown fruits, vegetables, pulses and traditional staples should play a larger role in everyday diets.

Food-safety systems are largely in place but remain fragmented across ministries. Limited laboratory capacity and inconsistent surveillance reduce effectiveness. Strengthened coordination, transparent reporting and traceability are key to building consumer confidence and maintaining export compliance.

Consumer awareness of healthy diets is growing but still needs to be strengthened. Nutrition education, clear labelling and promotion of local, wholesome foods can guide healthier choices. Linking farmers, processors and consumers through shorter value chains will improve access to safe, nutritious food while supporting local economies.

A coherent institutional framework, supported by research, monitoring and cross-sector collaboration, will enable Mauritius to deliver a food system that supports nutrition, wellness and economic sustainability.

### 6.1 Intervention Area 1: Safe Food Production

There is a need to review and implement the usage of agro chemicals to ensure food quality, soil and water resources.

#### Priority Actions:

- Establish a routine monitoring programme for nitrate levels in locally grown leafy vegetables and other sensitive crops.
- Expand residue-monitoring capacity within the Food Technology Laboratory for both domestic and export produce.
- Promote Good Agricultural Practices (GAP), MauriGAP and organic certification schemes through training and incentives to reduce chemical dependence.
- Conduct on-farm demonstrations on safe pesticide handling, calibration and alternatives such as bio-pesticides and trap crops.
- Develop a traceability and labelling system linking production batches to residue-testing results for transparency.
- Enforce periodic auditing of retailers and distributors of agricultural inputs to ensure compliance.
- Introduce community-based monitoring teams to collect samples and report unsafe practices in fresh-produce markets.
- Establish a multi-agency Food Safety Coordination Committee to harmonise

enforcement across agriculture, health and trade authorities.

- Ensure compliance of law for dosage, usage and safety information to be in legible font size.
- Review pesticides volume packaging so that they fit normal dosage requirements for 1 arpent.
- Conduct periodic retailer audits and farmer-training sessions on safe handling and record-keeping.

## **6.2 Intervention Area 2: Pesticide Residue Monitoring and Health Surveillance**

Pesticide-residue testing is a major factor in public-health monitoring and risk-communication mechanisms.

### **Priority Actions:**

- Expand the national residue-monitoring programme to cover a wider range of crops and markets, using internationally recognised sampling protocols.
- Upgrade analytical laboratories with modern multi-residue detection equipment and ensure international accreditation (ISO 17025).
- Review residue analysis with respect to international norms.
- Develop a joint alert system linking residue exceedances with rapid communication to producers and retailers.
- Integrate food-safety and occupational-health surveillance to identify exposure trends among farm workers and consumers.
- Conduct public-awareness campaigns on safe harvest intervals, pre-harvest intervals and withdrawal periods.
- Introduce risk-based inspection plans focusing on crops and areas with a history of high residue levels.
- Promote collaboration with universities and health institutions to research chronic exposure impacts on vulnerable populations.
- Publish annual national residue-monitoring reports to enhance transparency and consumer confidence.

## **6.3 Intervention Area 3: Health Impacts**

Limited health surveillance and data on chronic pesticide exposure hinder risk management. Farmers, farm workers and consumers may be affected by unsafe handling of agro-chemicals, contaminated produce, or inappropriate disposal of containers. Coordination between agriculture and health authorities on food-related illnesses remains weak.

### **Priority Actions:**

- Establish a joint health-and-agriculture surveillance mechanism to track pesticide-related illnesses and foodborne conditions.
- Conduct baseline and follow-up medical screenings of farmers and farm workers to detect exposure symptoms early.
- Develop a national registry of pesticide poisoning and foodborne disease incidents managed jointly by the Ministries of Health and Agro-Industry.
- Integrate public-health data with residue-monitoring results to enable targeted interventions.
- Promote protective-equipment use and safe-handling campaigns for farmers and sprayers.
- Implement a public-awareness programme on safe washing, storage and preparation of fresh produce.
- Collaborate with universities to research long-term exposure impacts on vulnerable populations (children, women, elderly).
- Introduce medical-waste and pesticide-container disposal protocols for farms and

rural communities.

#### **6.4 Intervention Area 4: Alternatives to Chemical**

Farmers rely heavily on chemical pesticides due to limited knowledge of Integrated Pest Management (IPM) and inadequate supply of biological alternatives. Fruit-fly infestations remain a persistent challenge causing high crop losses.

##### **Priority Actions:**

- Implement a National IPM Programme combining biological, cultural and mechanical pest-control techniques.
- Establish a central IPM knowledge and alert platform for real-time pest-management guidance.
- Empower farmers on low-toxicity and biological pest-control options.
- Provide subsidies or tax exemptions for approved bio-inputs to boost adoption.
- Strengthen regional pest-surveillance and early-warning systems in collaboration with NPPO and SADC.
- Demonstrate IPM results through model farms showcasing cost-effectiveness.
- Form community pest-management clusters to coordinate area-wide fruit-fly control.
- Create a National IPM Coordination Committee linking research, regulation and farmer organisations for monitoring and evaluation.

#### **6.5 Intervention Area 5: Nutrition-Sensitive Agriculture**

Agricultural production in Mauritius has historically focused on yield and commercial value rather than nutrient density. The nutritional potential of traditional crops remains under-valued and coordination between agriculture and health authorities is limited. Consumer awareness of balanced diets and the nutritional value of local foods is still low.

##### **Priority Actions:**

- Undertake a national nutrient-profiling study of major and traditional crops to identify varieties rich in vitamins, minerals and fibre.
- Collaborate with the Ministry of Health and Wellness to integrate nutrition objectives into agricultural and school-feeding programmes.
- Promote the production and consumption of nutritious crops such as soya bean, avocado, acerola, soursop, guava and sweet potato through public-private nursery initiatives.
- Strengthen seed and planting-material dissemination systems to make nutrient-dense varieties widely available.
- Develop community and backyard nutrition gardens and school demonstration plots as practical learning sites.
- Conduct public-awareness campaigns highlighting the nutritional benefits of local produce and balanced diets.
- Integrate nutrition indicators into agricultural planning and monitoring frameworks.
- Encourage food processors to reformulate products with locally sourced, nutrient-rich ingredients.
- Support farmer cooperatives and women's groups to supply nutrient-dense produce to public institutional markets (schools, hospitals, canteens).
- Promote research on bio-fortified and climate-resilient varieties to address micronutrient deficiencies and ensure year-round availability.
- Promote R&D in biofortified crops to address nutrient deficiencies including Vitamin D, iron and Vitamin B12.

## 6.6 Intervention Area 6: Institutional Procurement

Public institutions such as schools, hospitals and correctional facilities represent a significant market for food. However, procurement policies often prioritise price over quality and origin, resulting in limited uptake of locally produced, nutritious foods.

### Priority Actions:

- Develop and implement a National Institutional Food Procurement Policy prioritising locally produced, certified safe and nutritious foods.
- Introduce local-content quotas for agricultural and processed products supplied to public institutions.
- Simplify procurement procedures to enable participation of farmer cooperatives, SMEs and women-led agribusinesses.
- Establish framework contracts between government institutions, AMB and producer groups for stable supply at fair prices.
- Require MauriGAP or HACCP certification for suppliers to institutional feeding programmes.
- Capacity development of smallholder farmers and local processors so they can meet procurement standards.
- Integrate nutrition criteria (dietary diversity, sodium and sugar limits) into institutional menus and tender specifications.
- Encourage joint planning between Ministries of Agro-Industry, Health, Education and Commerce to align supply and demand cycles.
- Monitor and evaluate procurement outcomes based on indicators such as proportion of local produce, nutritional quality and supplier participation rate.
- Establish a multi-agency steering committee to oversee the Institutional Procurement Programme and ensure policy coherence.

## 6.7 Intervention Area 7: Consumer Awareness and Trust

Consumers remain insufficiently informed about food-safety standards, nutritional value and production practices. Misinformation and inconsistent labelling have eroded trust in locally produced foods. Limited access to verified data on residues, certification and origin constrains consumer empowerment and healthy purchasing decisions.

### Priority Actions:

- Design and implement a National Food-Safety and Nutrition Awareness Campaign promoting safe-handling practices, balanced diets and trust in locally certified produce.
- Develop a public information portal publishing up-to-date results from residue monitoring, MauriGAP and organic-certification audits.
- Conduct community outreach through schools, local councils and women's associations to raise awareness on safe-food preparation and good consumption habits.
- Strengthen labelling enforcement to guarantee accuracy on ingredients, allergens, origin and nutritional profiles.
- Partner with consumer-protection organisations and media to disseminate verified food-safety information and counter misinformation.
- Encourage retailers and supermarkets to display certification logos and QR codes linking products to their traceability data.
- Introduce "Know Your Farmer" and "Buy Local Safe" programmes connecting consumers with local producers through fairs and digital platforms.
- Develop nutrition-education materials for schools and workplaces highlighting the health benefits of safe and nutritious foods.
- Establish a Consumer Advisory Panel under the National Food-Safety Committee



- to provide feedback on public-communication strategies.
- Monitor impact of awareness campaigns through consumer-trust and perception surveys conducted annually.
- Register and train market sellers and street vendors on traceability, hygiene and labelling requirements

## **6.8 Intervention Area 8: Food Industry Reformulation**

The growing consumption of processed foods high in salt, sugar and saturated fats contributes to non-communicable diseases. Reformulation efforts by local food manufacturers remain voluntary. Technical guidance, fiscal incentives and coordination between health authorities, research bodies and industry can contribute to this measure.

### **Priority Actions:**

- Develop and implement a National Food Reformulation Strategy in partnership with the Ministries of Health, Commerce and Agro-Industry to reduce sodium, sugar and fat in processed foods.
- Establish voluntary → progressively mandatory nutrient targets for major food categories (bread, snacks, beverages, sauces).
- Provide technical assistance and training to processors on product reformulation, portion-size control and use of healthier ingredients.
- Facilitate joint research with universities on substitution of synthetic additives with natural, locally sourced alternatives.
- Introduce fiscal incentives or recognition schemes for companies achieving reformulation benchmarks (e.g. "Healthier Choice" label).
- Require clear front-of-pack nutrition labelling consistent with WHO guidance.
- Promote use of locally grown nutrient-dense crops (sweet potato, cassava, breadfruit, legumes) as alternative raw materials in processing.
- Strengthen inspection and compliance capacity to monitor adherence to reformulation standards.
- Encourage public-private platforms to share best practices and innovation in low-salt, low-sugar product lines.
- Monitor population-level dietary outcomes through joint surveys by Health and Statistics Mauritius to evaluate reformulation impact.

## **6.9 Intervention Area 9: Horticultural Therapy and Wellness Initiatives**

Urbanisation, sedentary lifestyles and rising stress levels have weakened links between people and nature. Limited community green spaces and lack of structured wellness programmes reduce opportunities for physical activity, mental-health support and social inclusion through agriculture-based activities.

### **Priority Actions:**

- Establish horticultural-therapy gardens in hospitals, elder-care homes, rehabilitation centres and schools to support physical and psychological wellbeing.
- Train health and social-service professionals in the therapeutic use of gardening for rehabilitation and stress management.
- Promote community wellness gardens in collaboration with local councils and NGOs to foster social interaction and food awareness.
- Integrate nutrition and wellness education components into horticultural-therapy programmes.
- Encourage the private sector and CSR foundations to sponsor wellness gardens and community green spaces.
- Develop training programmes on ergonomics and adaptive gardening tools.
- Include horticultural therapy indicators in national wellness and social-

development monitoring frameworks.

- Facilitate research on health outcomes and cost–benefit of horticultural-therapy interventions in partnership with universities.

### **6.10 Intervention Area 10: Enforcement, Coordination and Governance**

Implementation of food-safety and nutrition initiatives is often fragmented across multiple ministries and agencies, resulting in overlaps, enforcement gaps and limited accountability. Absence of a dedicated coordinating mechanism slows policy execution and information sharing.

#### **Priority Actions:**

- Establish a National Food Safety and Nutrition Security Council bringing together key ministries, statutory bodies and private stakeholders to steer policy and implementation.
- Develop a comprehensive Food Safety and Nutrition Act harmonising current regulations on production, processing, labelling and consumer protection.
- Strengthen inspection, surveillance and enforcement capacity of regulatory authorities through modern tools, training and budget support.
- Introduce joint inspection protocols between Health, Agro-Industry and Commerce officers to avoid duplication and ensure coherence.
- Clarify institutional mandates through memoranda of understanding between agencies for coordinated implementation.
- Integrate digital data-sharing systems to connect inspection findings, laboratory results and traceability platforms.
- Conduct periodic inter-agency simulation exercises to test emergency-response and food-recall mechanisms.
- Ensure regular public reporting on compliance rates, enforcement outcomes and corrective measures.
- Promote capacity building of local authorities in market surveillance and safe-food enforcement.

Align national governance structures with SADC and Codex Alimentarius frameworks to ensure international recognition of standards.

## Theme 7: Value Chains and Market Differentiation

Mauritius must move beyond commodity production to build a diversified, traceable and high-value agro-economy that creates jobs, raises farmer incomes and strengthens food-system resilience. Strengthening waste valorisation, quality standards and product innovation will further enhance both economic and environmental sustainability. The country's agricultural base remains dominated by small, ageing producers operating on fragmented plots with limited access to technology, finance and post-harvest infrastructure. As a result, most local produce is sold raw, while processing, packaging and certification capacities remain underdeveloped.

Tourism remains a key catalyst for transformation. With more than 1.3 million visitors recorded in 2023 (Mauritius Tourism Authority, 2024), strong synergies exist between agriculture, hospitality and growing consumer demand for healthy, authentic and traceable Mauritian products. Trusted national brands such as "Bio Mauritius" or "Sustainable Mauritius," underpinned by digital traceability, could reposition local produce in premium domestic and export segments. Building resilient value chains that connect farmers, processors and markets will therefore be central to reducing import dependency, creating rural employment and advancing a circular, climate-smart agri-food system.

According to the Ministry of Agro-Industry and Food Security (2023), domestic food-crop production averages around 110,000 tonnes annually, while over 75 percent of national food consumption depends on imports. This imbalance opens opportunities for import substitution through value-added and differentiated production. However, progress can be achieved by enhanced information systems on investment prospects and market opportunities. The recent establishment of the National Wholesale Market (2023) provides a foundation for fairer trade and transparent pricing which can consider differentiated auctioning mechanisms for agroecological and bio-products. This underscores the need of a well-designed, user-centred digital platforms supported by sustained outreach and trust-building.

### 7.1 Intervention Area 1: Post-Harvest Systems

High post-harvest losses result from inadequate storage, weak logistics and limited processing capacity.

#### Priority Actions:

- Align harvest scheduling with market demand to prevent surpluses.
- Develop low-cost, solar-powered cooling and drying facilities at farm level.
- Expand AMB cold-storage and processing capacity for strategic crops.
- Support SME-level and household processing to reduce waste.
- Establish regional conditioning and packing centres managed by cooperatives.
- Promote women's cooperatives for grading and value-addition services.
- Explore innovative technologies such as food irradiation and smart-shelf-life tracking.
- Provide targeted credit and grants for post-harvest infrastructure.

## 7.2 Intervention Area 2: Inclusive Value Chains

Smallholders are poorly integrated into structured value chains, limiting their market power and profitability. Weak organisation and lack of contract arrangements prevent stable market access.

### Priority Actions:

- Encourage contract farming frameworks between smallholders, cooperatives and institutional buyers.
- Develop farmer clusters and cooperatives to enhance collective bargaining and economies of scale.
- Facilitate digital platforms, regional fairs or village markets connecting producers directly to buyers, processors and exporters.
- Pilot minimum support price mechanisms on selected commodities.
- Establish a Police Agricole Unit to safeguard farm produce and infrastructure, improving security and confidence.
- Reinforce producer associations' governance to ensure transparent management of cooperative enterprises.

## 7.3 Intervention Area 3: Value Addition Opportunities

Most local produce is sold raw or semi-processed; small producers face barriers in accessing technology, finance and markets. Processing facilities are limited and uncoordinated, resulting in low returns to farmers.

### Priority Actions:

- Develop regional agro-processing parks and shared facilities for SMEs equipped with certified processing and packaging lines.
- Include cold- and chilled-room facilities at NWM with commodity-specific storage guidelines.
- Introduce fiscal incentives, concessional loans and blended finance for investment in post-harvest and transformation technologies.
- Promote innovation in ready-to-eat, functional and nutraceutical products (e.g. breadfruit, cassava, aloe vera, turmeric, moringa, herbal infusions).
- Facilitate technology transfer partnerships between universities, research institutions and private processors.
- Promote PPPs for cold storage, logistics and product aggregation facilities.
- Support capacity-building for women-led and youth agro-processing cooperatives drawing from successful models such as Lijjat Papad (India).
- Conduct sensory evaluation and product development training to enhance local product quality.
- Simplify barcode registration and product approval for SMEs.
- Authorise farm-gate sales by registered planters to reduce post-harvest losses and improve planter margins.
- Undertake value-chain analyses for key crops and develop commodity-specific value-addition manuals.

## 7.4 Intervention Area 4: Agri-Business Models

Smallholders operate mainly as primary producers with limited capacity to integrate transformation, marketing, or service functions.

### Priority Actions:

- Support transition of smallholders toward integrated agribusinesses through training, extension and access to credit.
- Facilitate cooperative formation and business incubation for farmer groups in

collaboration with SME Mauritius.

- Promote contract-farming and out-grower schemes with processors, retailers or hospitality sectors.
- Develop regional farmer markets and aggregation hubs to strengthen supply coordination.
- Establish innovation hubs and incubation centres for agri-entrepreneurs.
- Include entrepreneurship mentoring and digital-finance tools targeting youth and women.
- Introduce time-bound payment systems for institutional buyers to improve cash flow of small producers.
- Introduce cooperative-exchange model providing integrated cultivation, quality, storage and logistics services.

## **7.5 Intervention Area 5: Market Differentiation and Certification**

Premium markets for agro-ecological and organic products are emerging, but certification, labelling and traceability mechanisms remain fragmented and costly.

### **Priority Actions:**

- Develop and enforce national certification standards under a unified 'Bio-Mauritius' framework.
- Establish a single-window certification and traceability platform using QR codes and blockchain.
- Integrate certification and traceability into public procurement and institutional feeding programmes such as for prisons and hospitals.
- The NWM to dedicate auction zones for agroecological and bio foodcrops.
- Conduct educational campaigns targeting both consumers and producers on the need for agroecological / bio farming. And benefits to health and environment.

## **7.6 Intervention Area 6: Market Integration**

Weak linkages between producers, processors, distributors and retailers can result in inefficiencies and price volatility.

### **Priority Actions:**

- Deploy a digital marketplace platform linking farmers, hotels and supermarkets in real time.
- Strengthen cooperative marketing structures and logistics coordination.
- Introduce transparent pricing and electronic auction mechanisms at the National Wholesale Market. Explore digital online auctioning along with in situ physical NWM auction.
- Create regional aggregation hubs and logistics corridors to improve product flow.
- Encourage supermarket and hospitality partnerships for long-term supply contracts with certified producers.
- Review the NWM operations to – consider sister regional auction market in the North and East to reduce transport costs and post-harvest losses.
- NWM to adopt differentiated auction hours for fruits (morning) and vegetables (afternoon) to improve freshness and turnover and expand display space for fruits during peak harvest months (Oct–Dec).
- Review parking space and vehicle flow / movement at NWM.
- The Agricultural Marketing Board (AMB) to act as regulator for key commodities (e.g., carrot, tomato).
- To initiate a price stabilisation mechanism at the NWM, through the development of a smartphone app that will indicate to planters in real time whether more supply or lesser supply of foodcrops are needed, helping harvest planning at same time.

- Enhance price transparency by publishing indicative retail reference prices alongside NWM prices to support fair market conduct and informed decision-making.

## **7.7 Intervention Area 7: Consumer Trust and Branding**

Consistent branding and consumer awareness of origin, quality and production methods can be used to valorise local products.

### **Priority Actions:**

- Develop a unified national agri-brand ('Bio-Mauritius', 'Sustainable Mauritius') backed by traceability systems and QR codes.
- Implement quality-grading and packaging standards with Mauritius Standards Bureau oversight.
- Create consumer education campaigns promoting local, safe and sustainable produce.
- Support SMEs to access trade fairs and digital marketing platforms.
- Train producers in storytelling, digital promotion and social media engagement.
- Encourage influencer partnerships to raise brand recognition.

## **7.8 Intervention Area 8: Export Markets**

Mauritian exporters face high logistical costs and compliance gaps with international standards limiting competitiveness.

### **Priority Actions:**

- Update phytosanitary and SPS protocols to align with EU and Codex Alimentarius standards.
- Provide technical assistance and exporter training for compliance and traceability.
- Support branding for niche, high-value exports such as organic vanilla, herbal teas and tropical fruits.
- Strengthen or establish new innovative freight rebate and export financing mechanisms for agri-SMEs.
- Draw lessons from Rwanda's specialty coffee and Zima brand to position 'Sustainable Mauritius' products in premium markets.
- Promote bilateral trade partnerships and mutual recognition of certification.
- Establish GAP/HACCP-ready export packhouses and shared certification facilities for smallholders.
- Create a body that will identify niche markets for local foodcrops, its promotion and required guidance / support to planters.

## **7.9 Intervention Area 9: Tourism as a Driver**

Linkages between agriculture and tourism need to be strengthened to offer more opportunities to local producers.

### **Priority Actions:**

- Develop the 'Mauritian Flavours' initiative linking farms, chefs and hotels through certified local sourcing.
- Facilitate long-term contractual arrangements between hotels, restaurants and local producers.
- Organise promotional events and culinary festivals showcasing Mauritian produce.
- Introduce incentives for tourism operators sourcing from certified local suppliers.
- Integrate gastronomy and local food experiences into national tourism branding.

### **7.10 Intervention Area 10: Agro-Tourism**

Agro-tourism remains an area with high potential in Mauritius and requires investment and enhanced coordination among ministries.

#### **Priority Actions:**

- Develop a national agro-tourism policy and simplified permitting framework.
- Create demonstration farms and visitor circuits such as the proposed 'Mauritian Flavour Trail' linking vanilla, tea, fruit and rum estates.
- Provide financial and technical support for farmers to diversify into hospitality services.
- Integrate agro-tourism within rural development and marketing programmes.
- Benchmark successful models from South Africa's wine routes and Zanzibar's spice tours (FAO, 2023).
- Promote partnerships between tourism operators, communities and local authorities to ensure quality and visitor safety.



## Theme 8: Empowering Smallholders, SMEs, Women and Youth

Smallholders form the backbone of Mauritius' agriculture and are pivotal to national food security, especially in fruit and vegetable production. According to the 2024 Census of Agriculture, 99 percent of all agricultural producers are smallholders, most of whom operate on less than one acre of land. Despite their importance, smallholders face limited access to land, finance and markets, as well as labour shortages and fragmented value chains.

SMEs, women and youth are essential to modernising and diversifying agriculture, bringing innovation, inclusiveness and renewal to the farming community. Yet agriculture remains perceived as a low-income, labour-intensive sector, leading to weak youth interest, limited female participation and an ageing farming population.

Existing support schemes (HRDC training, DBM loans, SFWF assistance) have shown promise but suffer from low outreach, bureaucratic procedures and insufficient follow-up. Moreover, high input costs, lack of mechanisation and weak integration between smallholders and formal markets have constrained growth.

By strengthening access to land, finance, training and secure markets—while promoting farming as a professional and inclusive enterprise—Mauritius can unlock the potential of smallholders, SMEs, women and youth to drive sustainable agricultural transformation.

### 8.1 Intervention Area 1: Youth Engagement

Youth need to be attracted in agriculture by wider career pathways and entrepreneurial support.

#### Priority Actions:

- Establish a national agri-entrepreneurship and innovation programme linking education, training and finance.
- Introduce school gardens and smart-farming modules to build interest in from an early age.
- Integrate agriculture as an elective subject at primary and secondary-school levels, complemented by inter-school garden competitions and recognition schemes.
- Develop regional agri-tech incubators and demo hubs for youth-led enterprises.
- Provide start-up grants, micro-leasing and green loan facilities for agri-start-ups.
- Launch mentorship and digital marketing training schemes for young farmers.
- Professionalise and modernize the agricultural sector and make it a high income generator.
- Establish a Youth Empowerment Unit within the Ministry of Agro-Industry, Food Security, BE & F to coordinate programmes on agri-entrepreneurship, digital innovation and training.
- Launch a "Best Garden at Home" annual competition for youth under 18 years to promote household-level food production.
- Organise annual Youth Agri-Innovation Fairs where students and young entrepreneurs exhibit projects and receive mentorship or seed funding.

## **8.2 Intervention Area 2: Farmer Pool Rejuvenation (Youth Engagement)**

An ageing farming population and lack of incentives discourage youth participation.

### **Priority Actions:**

- Launch youth and women agripreneurship programmes with start-up grants and mentoring.
- Integrate modern agriculture into school and tertiary curricula.
- Establish school gardens and digital learning platforms to foster early interest.
- Create incubation farms linking technical training with entrepreneurship.
- Publicise youth success stories through media campaigns.
- Ensure land-lease and credit facilities for young planters.
- Integrate agriculture qualifications into national recognition systems.
- Revive Agricultural Youth Clubs with toolkits and leadership training.

## **8.3 Intervention Area 3: Recognition of Smallholders**

Smallholders account for nearly all local producers but remain poorly recognised within national policies and frameworks. They are often excluded from schemes due to lease constraints, lack of registration and limited visibility as economic operators. It is important to recognize the contribution of small holders in local agricultural production.

### **Priority Actions:**

- Formally recognise and register smallholders as core contributors to food security.
- Develop a national classification system for smallholders and SMEs by activity type, scale and production system.
- Conduct GIS mapping of smallholder plots to guide planning, clustering and service delivery.
- Embed differentiated incentives and policy measures tailored to smallholder realities (e.g. credit access and marketing support).
- Strengthen inter-institutional coordination (FAREI, DBM, SME Mauritius, NWECC) to streamline access to schemes.
- Promote awareness campaigns and success-story competitions to improve public perception of smallholder agriculture as a viable career.
- Encourage household-level processing and preservation to increase community food security and value addition.

## **8.4 Intervention Area 4: Retention and Motivation**

Agriculture is increasingly viewed as a difficult sector with relatively low remuneration, price volatility and limited market access. This requires measures to retain the stakeholders within the sector.

### **Priority Actions:**

- Introduce maximum price mark-up guidelines to ensure equitable returns across the value chain (farmer–wholesaler–retailer).
- Implement floor prices for strategic commodities to stabilise incomes.
- Strengthen follow-up mechanisms under DBM, SFWF and HRDC programmes to ensure beneficiaries remain supported post-training.
- Encourage value addition and local processing to increase profitability.
- Reinforce agricultural planning and zoning to prevent subdivision of productive land.
- Promote public campaigns highlighting agriculture’s economic and environmental contribution.
- Implement import-control measures for selected crops during peak local production to protect smallholders’ income stability.

- Exempt fruits and vegetable producers from income tax.
- Introduce a Maximum Retail Price (MRP) framework for key agricultural inputs (fertilisers, pesticides, feed) to protect farmers from market distortions and over-pricing.

### **8.5 Intervention Area 5: Women and Youth Empowerment**

Women and youth remain under-represented in commercial farming due to limited access to land, finance and decision-making structures, as well as social perceptions that agriculture is physically demanding and financially insecure.

#### **Priority Actions:**

- Provide collateral-free, interest-free loan facilities for women and young entrepreneurs, with flexible repayment terms.
- Establish clusters and cooperatives for women and youth in mechanisation, processing and marketing.
- Promote branding and value-added products led by women entrepreneurs (e.g. baby foods, dried herbs, high-fibre products).
- Introduce training and mentorship programmes combining technical, digital and business skills.
- Replicate successful models such as Ferney Agri Hub and Eco Sud for youth incubation.
- Introduce nursery or childcare facilities to support women entrepreneurs with young children.
- Ensure women/youth representation in agricultural committees and decision-making bodies.
- Encourage the establishment of Young Farmers' Clubs and international exchange programmes.
- Integrate rehabilitation and social-reintegration youth programmes with sustainable agriculture training.
- Simplify procedures and reduce administrative burdens in existing financial-support schemes.

### **8.6 Intervention Area 6: Capacity Building and Skills Development**

Traditional training programmes remain theoretical and disconnected from labour-market and farm realities. Youth and women often lack practical exposure, mentorship and digital tools.

#### **Priority Actions:**

- Establish national and international exchange programmes and industrial placements for hands-on training.
- Incorporate agriculture modules in school curricula, encouraging early exposure and positive attitudes.
- Develop cost and feasibility sheets per crop to guide business planning.
- Create online platforms linking producers, buyers, processors and consumers.
- Promote coaching and mentoring hubs focusing on finance, marketing and digital literacy.
- Mobilise donor and private partners to support innovation labs and agri-tech incubation hubs for smallholders and youth.

### **8.7 Intervention Area 7: Empowers the farmer into an entrepreneur**

Agriculture is still perceived as subsistence work rather than a professional career path. Weak institutional recognition and limited incentives hinder the emergence of entrepreneurial farmers.

**Priority Actions:**

- Launch a National Agri-Entrepreneurship Programme to promote business-oriented farming models.
- Redesign Planter's Cards to include enhanced benefits (insurance, grants, training, input rebates).
- Develop a land bank and facilitate access to leasehold or cooperative-based land for trained graduates and spouses of farmers.
- Promote digitalisation and data-driven decision-making in farm management.
- Introduce minimum support prices for key crops to provide predictability and encourage reinvestment.
- Facilitate regional and international study tours to expose Mauritian farmers to innovative and profitable models.
- Foster collaboration between ministries, the business sector and export-promotion agencies to strengthen agri-entrepreneurship.

**8.8 Intervention Area 8: Succession Planning and Generational Renewal**

An ageing farming population threatens long-term productivity and food sovereignty. Many young people view agriculture as risky and outdated, lacking succession incentives or modern career pathways.

**Priority Actions:**

- Design succession-support schemes offering concessionary loans, mentorship and start-up grants for young farmers.
- Encourage parental engagement and mentorship programmes linking retiring planters with youth.
- Develop youth-targeted credit lines and guarantee funds for promising projects.
- Promote agriculture career campaigns showcasing success stories and viable income opportunities.
- Simplify access to land, licences and markets for young entrepreneurs.
- Introduce tax or lease incentives for farmers transferring land use rights to trained youth.
- Revitalise Agricultural Youth Clubs with starter kits, mentorship and leadership training.
- Integrate agriculture career pathways within pre-vocational and secondary curricula, supported by internships and mentoring.

## **Theme 9: Information and Knowledge Management, Agritech and Youth Engagement**

Strengthening agriculture in Mauritius requires timely access to reliable information, effective knowledge management and the adoption of modern technologies. Farmers need accurate data on weather, pests, diseases, markets and prices to make informed decisions, yet current systems are often fragmented and difficult to access. Robust information and communication platforms, combined with better knowledge sharing between research, extension and farming communities, are essential to close this gap.

At the same time, AgriTech innovations such as IoT sensors, mobile applications, precision farming tools and forecasting models can help farmers increase productivity and manage risks, while also attracting a younger, tech-savvy generation into agriculture. Ensuring that these systems are affordable, farmer-friendly and supported by adequate training and financing will be critical. By combining stronger information and knowledge flows with AgriTech adoption and youth engagement, Mauritius can modernise its agriculture sector and make it more resilient, competitive and appealing for the next generation.

Farmers need timely, informed decisions regarding production planning, pest control and marketing, hence the importance of developing an Agricultural Digital Public Infrastructure that integrates data, information, communication and knowledge management.

### **9.1 Intervention Area 1: Foodcrops Monitoring and Preparedness**

Fragmented data and limited cross-institutional information flow are challenges to national monitoring and preparedness.

#### **Priority Actions:**

- Set- up a functional central digital platform integrating production, market, pest and weather data.
- Update and publish soil-fertility and crop-suitability maps for all agro-zones.
- Establish standardised data-collection and reporting protocols across institutions.
- Integrate meteorological, pest and market datasets into a unified dashboard.
- Train farmers and extension officers to input and interpret real-time data.
- Conduct periodic consumer- and export-demand surveys to inform production forecasts.
- Promote participatory information-sharing pathways where farmers can report production, pest and disease and other critical data.

### **9.2 Intervention Area 2: Financing and Investment for Agri-Innovation**

Innovative AgriTech and start-ups struggle to access finance due to high perceived risk and limited tailored funding mechanisms.

#### **Priority Actions:**

- Create a dedicated Agri-Innovation Fund supporting pilot projects and digital solutions.
- Establish public-private partnerships (PPPs) for investment in AgriTech infrastructure and youth ventures.
- Introduce innovation vouchers and grant schemes for technology adoption by

SMEs and farmers.

- Facilitate micro-leasing and risk-sharing finance to support equipment and ICT access.
- Engage commercial banks and development finance institutions to design green and digital finance products.
- Create a dedicated budget line within agricultural institutions for development, upgrading and maintenance of Agricultural Digital Infrastructure with objective to aid decision making processes by stakeholders.
- Establish regional Agri-Tech Equipment Sharing Hubs to provide farmers, SMEs and cooperatives with rental access to drones, IoT sensors, soil-testing devices and other high-cost digital equipment, supported through micro-leasing, PPP investment and risk-sharing finance mechanisms.

### **9.3 Intervention Area 3: National Information Platform**

Agricultural data systems are fragmented across multiple institutions hindering evidence-based decision-making.

#### **Priority Actions:**

- Develop a National Agricultural Digital Infrastructure Framework to sustain digital innovation and Artificial Intelligence development.
- Establish a unified national agri-information platform integrating data on weather, pests, markets, land use and certified inputs with contents available on user friendly mobile interface for farmers and stakeholders to use.
- Link existing agricultural databases (at FAREI, SFWF, Statistics Mauritius, IA ..) through open APIs to enable information exchange for smart decision making.
- Develop a registration and traceability system for agro-chemicals sales in order to improve safety and accountability.
- Conduct baseline and follow-up surveys to assess adoption and usability of digital tools.
- Establish a governance mechanism to ensure data quality, privacy and ownership compliance.
- Ensure sustainability, continuity and reliability of data services

### **9.4 Intervention Area 4: Digital Decision Making Tools and Forecasting Models**

Limited adoption of digital forecasting and decision-support tools constrains productivity and risk management.

#### **Priority Actions:**

- Deploy multilingual mobile applications with user friendly pictograms for advisory services, including for crop establishment and cultural practices planning. Integrate AI for ease of use.
- Install across the island automatic weather stations and pest-surveillance networks that shall feed a national agri-information platform with continuous learning models so as to forecast or provide early warning to situations like pest or disease attack and water stress to planters.
- Develop yield forecasting systems that take into account biotic and abiotic stress at field level.
- Promote and make available AgriTech bundles (soil sensors, portable testing kits, traceability systems).
- Make continuous impact assessment of adoption through monitoring systems.
- Develop simple farm-management software tailored for planters to record planting data, input use and sales and to automatically generate cash-flow summaries for farm management.

- Integrate satellite-imagery and remote-sensing data within national forecasting systems to monitor regional crop conditions and stress levels.
- Design forecast and advisory outputs in clear, visual formats (icons, colour codes, SMS notifications) to improve usability and adoption among farmers.

### **9.5 Intervention Area 5: Producer-to-Consumer Platforms**

Farmers have limited direct market access, relying on multiple intermediaries that erode profit margins.

#### **Priority Actions:**

- Develop digital B2B (planters to businesses) and B2C (planters to consumers) market platforms linking producers with buyers.
- Provide technical and financial support for cooperative-led e-commerce ventures.
- Explore possibility of a digital auctioning system where the planter can offer his produce to a highest bidder.
- Modernise the NWM to offer digital auctioning system.

### **9.6 Intervention Area 6: Capacity Building and Inclusiveness**

Inadequate training and low digital literacy limit the effective use of AgriTech and information systems by farmers and officers.

#### **Priority Actions:**

- Introduce continuous training programmes on digital tools for farmers and extension officers.
- Develop certification courses in digital agriculture and data management with local institutions.
- Establish regional demonstration hubs to showcase best practices and technologies.
- Promote peer-to-peer learning and farmer field schools using ICT applications.
- Ensure accessibility for women and youth through targeted outreach and training materials.
- Organise annual field-technology days and demonstration events showcasing practical AgriTech solutions and best practices for farmers and extension staff.
- Produce subject-specific digital toolkits (e.g. Agroecology, Bio-Farming, Integrated Pest Management) providing step-by-step technical guidance and video demonstrations.
- Collaborate with academic institutes to review and align agricultural curricula with emerging labour-market and digital-technology requirements.
- Install interactive self-learning kiosks at regional agricultural centres to enable farmers, women and elderly planters to access training materials and advisory content in Kreol, French and English.

### **9.7 Intervention Area 7: Promotion of precision agriculture**

Precision agriculture/ farming can be used to enable farmers to address climate vagaries and optimize the use of resources.

#### **Priority Actions:**

- Enhance financial support and investment facilitations to promote precision agriculture
- To develop capacity building and training programmes for researches, growers and other stakeholders to upgrade their skills to use precision farming tools.
- To identify and introduce necessary policy, regulatory and institutional reforms to



facilitate the use of precision farming tools

- To develop physical and digital infrastructure such as wide digital connectivity and equipment sharing hubs to promote adoption of precision farming tools
- To promote R&D and technology transfer in precision farming to find local solution to existing challenges

## **Theme 10: Good Governance, Institutional Coordination, Policy Coherence and Financing**

Cohesive governance and technical support, underpinned by coherent and supportive policies, have the potential to unlock the constrained capacity of the agri-food sector. Stronger coordination among ministries, parastatal bodies, local authorities and research or extension services is critical to avoid duplication, optimise scarce resources and ensure effective and timely farmer support.

The agricultural institutional landscape, however, remains fragmented, with overlapping responsibilities among divisions and agencies and limited mechanisms for regular joint planning and review. Clearer mandates, enhanced communication channels and a well-defined coordination structure are required to improve efficiency and ensure that public institutions deliver services in a harmonised and transparent manner. The establishment of a dedicated coordination “cell” or focal point, supported by digital dashboards and GIS tools, would strengthen visibility, accountability and responsiveness across agencies.

Common access to centralised agricultural databases and digital platforms will enhance evidence-based decision-making, transparency and service delivery. Innovative financing mechanisms, performance-based management systems and clear institutional mandates are essential to enable the transformation of the sector. While several financing instruments currently exist, there is a pressing need to evolve towards adaptive models—such as equity funds for young entrepreneurs, carbon-credit schemes and a potential Banque Agricole—to mobilise investment and attract new actors to the sector. Strengthened accountability and robust monitoring and evaluation frameworks will be critical to ensure that governance reforms translate into tangible and sustainable results by reinforcing coordination, coherence and accountability, Mauritius can create an enabling governance environment that supports agricultural innovation, financial sustainability and long-term food sovereignty.

By reinforcing coordination, coherence and accountability, Mauritius can create an enabling governance environment that supports agricultural innovation, financial sustainability and long-term food sovereignty.

### **10.1 Intervention Area 1: Production Planning**

Uncoordinated crop planning can lead to seasonal shortages and income instability.

#### **Priority Actions:**

- Establish supportive framework to coordinate national production targets and interpretation of production data for informed decision making.
- Conduct regular demand and consumption surveys and publish indicative production calendars.
- Align import and trade policies with domestic production cycles to stabilise prices.
- Introduce transparent indicative price mechanisms for strategic crops.
- Promote consumption of local staples (eg cassava, sweet potato, taro) through nationwide awareness.

- Implement mandatory public-procurement quotas for local produce in public institutions (schools, hospitals, canteens).
- Develop regional food-balance sheets for self-sufficiency tracking.

## 10.2 Intervention Area 2: R&D and Farming Community Linkages

There is a need to establish platforms to adapt R&D to farmers' needs and to transfer research output to farmers.

### Priority Actions:

- Undertake Rapid Rural Appraisals (RRA) to realign extension programmes with farmer needs.
- Encourage participatory video and peer-to-peer learning approaches for knowledge sharing.
- Reorient national research priorities toward local crop improvement, climate resilience and productivity enhancement.
- Require farmer validation of research topics before implementation to ensure practical.
- Released varieties prior to national dissemination.
- Publish all outcomes from publicly funded research to promote transparency and shared learning.
- Strengthen participatory research models linking research institutions, universities and farmer clusters for co-designed field trials and feedback.
- Conduct applied research and mapping of agro-climatic suitability zones for key fruit crops to guide orchard planning and reduce planting mismatches.
- Establish model orchards in appropriate regions as demonstration and training hubs for farmers and extension officers.
- Provide technical assistance and mentoring for orchard establishment, maintenance and pest-management based on validated field research results.

## 10.3 Intervention Area 3: Institutional Coordination and Mandate Review

Fragmented mandates and overlapping responsibilities across ministries and parastatal institutions lead to duplication, inefficiency and delayed service delivery.

### Priority Actions:

- Undertake a comprehensive review and clarification of institutional mandates under the Ministry of Agro-Industry and allied agencies.
- Establish interinstitutional flagship programmes towards to common goals
- Establish a technical committee to facilitate inter-agency communication and joint planning.
- Adopt a modular structure for divisions to enhance flexibility without creating new units.
- Establish regular ministerial and review meetings to monitor progress and align priorities.
- Develop a shared digital platform for all divisions and parastatal bodies to exchange information, project data and resources.
- Use ICT dashboards for better monitoring and planning of agricultural programmes.
- Formalise linkages with foreign agricultural institutions to strengthen technical cooperation.
- Adopt standardised templates and shared KPIs across institutions to align monitoring and reporting.
- Collaborate with the Ministry of Labour for importation of foreign labour to review and update farm-labour regulations, ensuring that imported agricultural workers.

#### **10.4 Intervention Area 4: Regional Integration and Cooperation**

Mauritius' participation in regional agricultural bodies remains limited and mechanisms for implementing regional agreements are weak.

##### **Priority Actions:**

- Strengthen active participation in SADC, COMESA, IOC and AU agricultural platforms to align with regional goals and funding opportunities.
- Review, track and monitor all existing international agreements to ensure follow-up and implementation at national level.
- Leverage opportunities under the African Continental Free Trade Area (AfCFTA) to enhance market access for Mauritian products.
- Promote bilingual capacity to facilitate regional and continental collaboration.
- Align decisions made at regional level with national legislation and standards, particularly on agricultural trade and laboratory accreditation.
- Position Mauritius as a regional hub for technical expertise in sustainable agriculture and agri-innovation.

#### **10.5 Intervention Area 5: Policy Coherence Across Sectors**

Policies governing sectors such as agriculture, trade, health, tourism and environment need to be synergized for better efficiency.

##### **Priority Actions:**

- Establish inter-ministerial councils or task forces to align policies on agriculture, food security, trade, environment and health.
- Integrate shared national targets for food sovereignty, import substitution and sustainable production.
- Encourage joint programmes linking tourism, schools and public institutions to local food procurement and nutrition awareness.
- Benchmark and adapt the international frameworks such as CADP for policy coherence.
- Implement follow-up mechanisms to ensure decisions are implemented.
- Develop Crop-Loss Relief Allowance to compensate planters for drought, floods, or pest outbreaks.
- Develop a coordinated policy framework—jointly with the Ministry of Commerce and the Agricultural Marketing Board—to implement a maximum retail-price mechanism for selected foodcrops, anchored on benchmark wholesale prices to ensure fair mark-ups, consumer protection and income stability for producers.”

#### **10.6 Intervention Area 6: Agricultural Data and Digital Governance**

Data on production, land use, markets and weather are fragmented, inconsistent and not easily accessible across institutions. Farmers remain reluctant to share information due to weak data governance frameworks.

##### **Priority Actions:**

- Recognise agricultural data as part of the national dataset, governed under clear data-governance protocols.
- Establish an Observatoire de l'Agriculture at national and regional levels.
- Create a national agri-food system information platform and to setup an inter-agency steering to oversee its implementation.
- Strengthen collaboration with Statistics Mauritius for standardised data collection, analysis and dissemination.
- Build trust with farmers by developing data-protection guidelines and transparent feedback mechanisms.

- Promote the use of digital tools and analytics to support decision-making, monitoring and service delivery.

### **10.7 Intervention Area 7: Monitoring, Evaluation and Accountability**

Weak performance tracking and limited transparency hinder accountability and result in inefficient resource allocation.

#### **Priority Actions:**

- Implement performance-based budgeting and clear Key Performance Indicators (KPIs) for agricultural institutions.
- Enhance accountability and transparency in use of public funds and human resources and assets.
- Require annual performance and audit reports from all agencies to be tabled at the National Assembly for scrutiny.
- Introduce citizen and stakeholder feedback mechanisms to assess service delivery quality.
- Encourage adoption of digital monitoring dashboards for real-time progress tracking of major projects.
- Institutionalise a culture of evaluation through periodic independent reviews of policies and programmes.
- Publish an annual Agriculture Performance Bulletin accessible to stakeholders.
- Conduct periodic client-satisfaction surveys among farmers to improve public-service delivery.
- Develop training for officers on performance management and results-based reporting.

### **10.8 Intervention Area 8: Financing and Investment Mechanisms**

Limited access to affordable financing, lack of tailored credit products and insufficient investment in green and innovative agriculture restrict sectoral transformation.

#### **Priority Actions:**

- Ensure agriculture's fair access to climate-finance facilities, redirecting part of national climate funds toward climate-smart farming investments.
- Establish equity funds and performance-linked soft loans for young agro-entrepreneurs and start-ups.
- Create a dedicated Banque Agricole or green-finance window to access global climate funds.
- Adopt an Agriculture Technology Diffusion Scheme (ATDS) to promote technology adoption.
- Develop a carbon-credit and ecosystem-services financing mechanism to reward sustainable practices.
- Promote public-private partnerships and government co-funding in innovative agri-enterprises.
- Encourage academic-business mentorship and incubation support for sustainable agribusiness ventures.
- Establish dedicated financing schemes for women and youth, targeted for specific activities.
- Develop micro-insurance products on climate and pest-risk management.
- Simplify grant access for acquisition of farm equipment by smallholders.
- Create a national mentorship network linking experienced agri-entrepreneurs with new entrants.
- Introduce temporary income-support or concessional-credit facilities to help farmers maintain livelihoods during non-productive or transition phases (e.g., establishment of perennial crops such as orchards).

### **10.9 Intervention Area 9: Institutional Strengthening and Human Capital**

Outdated structures, unclear mandates and insufficient technical capacity hinder effective service delivery.

#### **Priority Actions:**

- Formulate and implement a National Agriculture and Extension Policy to modernise extension services.
- Recruit and retain subject-matter specialists in key disciplines such as soil management, pest control, climate resilience and agribusiness.
- Strengthen IT and logistics support for efficient service delivery.
- Recognise the importance of technical staff and administrative staff as distinct categories and none overstepping on each other.
- Ensure adequate resourcing of agencies to avoid understaffing and improve field coverage.
- Provide continuous training to officers in technical writing, policy drafting and results-based management.

### **10.10 Intervention Area 10: Farmer Security and Enforcement**

Increasing theft and vandalism on farms cause financial losses and discourage investment in production.

#### **Priority Actions:**

- Create a Police Agricole with ensuring adequate staffing and logistics support.
- Review legislation to include cash compensation for theft losses and fast-track trials for field-level cases.
- Promote digital surveillance systems (CCTV, drones, IoT sensors) through cooperative or cluster-based initiatives.
- Develop public-private partnerships for security infrastructure in high-risk agricultural zones.
- Establish a communication link between police or a police Agricole unit and farmer associations for real-time reporting and coordinated response.
- Raise awareness among farmers on preventive measures and cooperative security models.

### **10.11 Intervention Area 11: Production Planning**

Uncoordinated crop planning leads to seasonal gluts, shortages and income instability; price discovery remains weak.

#### **Priority Actions:**

- Establish supportive framework to coordinate national production targets and interpretation of production data for informed decision making.
- Conduct regular demand and consumption surveys and publish indicative production calendars.
- Align import and trade policies with domestic production cycles to stabilise prices.
- Introduce transparent indicative price mechanisms for strategic crops.
- Promote consumption of local staples (eg cassava, sweet potato, taro) through nationwide awareness.
- Implement mandatory public-procurement quotas for local produce in public institutions (schools, hospitals, canteens).
- Develop regional food-balance sheets for self-sufficiency tracking.

### **10.12 Intervention Area 12: Insurance and Safety Nets**

Existing crop insurance and relief mechanisms do not adequately protect smallholders or SMEs. Limited awareness, rigid conditions and high premiums discourage participation.

**Priority Actions:**

- Design flexible insurance schemes tailored to diverse crops and farm sizes.
- Conduct actuarial and feasibility studies for long-term financial sustainability.
- Establish a National Agricultural Reinsurance Facility to manage high-risk exposure.
- Pilot index-based and weather-based insurance products for automatic payouts post-disaster.
- Provide premium subsidies for small and vulnerable farmers.
- Conduct awareness campaigns to educate farmers on insurance options and claim processes.
- Develop standard operating procedures for disaster-compensation and relief disbursement.
- Introduce emergency contingency funds for immediate post-disaster support and provide short-term livelihood stipend to affected farmers while re-establishing crops.
- Explore insurance linkages with banks and microfinance institutions for wider outreach.



# **LIVESTOCK SECTOR**

## **LIVESTOCK SECTOR: RETHINKING PRODUCTION MODELS FOR A SMALL-ISLAND, RESOURCE-CONSTRAINED ECONOMY**

Mauritius remains significantly dependent on imported animal products and inputs—particularly milk and dairy products, processed meats and feed ingredients—exposing the national food system to international price volatility, foreign-exchange pressures and supply-chain disruptions. Strengthening livestock therefore matters not only as a production objective, but as a strategic component of national resilience, nutrition security and economic stability. At the same time, livestock development must be approached within the realities of a Small Island context where land is scarce, competing land uses are expanding and social, health and environmental safeguards constrain the scale and location of animal production.

These constraints call for a revised model that is resource-efficient, biosecure and spatially compatible with national land-use and environmental requirements. In practice, this implies prioritising livestock systems that can perform under limited land availability, tighter zoning conditions and higher scrutiny on waste management, odour, water quality and public-health risks.

Despite structural limitations, Mauritius has demonstrated strong technical capability in broiler and egg production, indicating that the country possesses operational know-how, veterinary capacity, production discipline and value-chain organisation that can be replicated and adapted to other livestock segments. This experience provides a practical foundation for broadening local animal protein supply—provided that expansion is guided by robust biosecurity, clear standards for housing and welfare and compliance with public-health and environmental requirements. The strategic challenge is therefore less about proving feasibility and more about designing the right production systems, incentives and market arrangements to scale sustainably within national constraints.

A livestock transformation agenda must also be anchored in a farm-to-fork / agri-food systems approach. Herd or flock performance is inseparable from feed security, water availability, veterinary services, genetics management, processing capacity, cold-chain reliability, food safety controls, market organisation and consumer confidence. Progress will depend on strengthening coordination across these links—particularly around animal health surveillance, feed and forage strategies, traceability, slaughter and processing infrastructure and standards that support both domestic substitution and competitiveness for niche markets.

Ultimately, a resilient livestock sector for Mauritius will be one that is smaller in footprint but higher in efficiency, delivering safe and affordable animal products while minimising pollution risks and aligning with land-use and environmental obligations. This requires clear national targets, a realistic species and production mix, stronger data and monitoring systems and financing mechanisms that encourage modernisation, compliance and value addition—so that livestock contributes meaningfully to food sovereignty, nutrition security and sustainable development.

## Theme 1: Food Sovereignty and Resilient Production Systems

Mauritius remains heavily dependent on imports of animal products such as milk, meat and feed ingredients, making its food system vulnerable to global supply shocks, currency fluctuations and price volatility. Enhancing food sovereignty requires expanding local production capacity, improving reproductive efficiency, strengthening feed and forage availability and building climate-resilient systems adapted to limited land and resource constraints.

A diversified and sustainable livestock sector—anchored in improved breeding, herd management and productivity—will reduce import dependency while ensuring stable access to safe, nutritious and affordable livestock products for all. This transformation calls for coordinated interventions in herd expansion, animal health, feed security and genetic improvement, supported by farmer capacity-building and institutional alignment.

### 1.1 Intervention Area 1: Herd Expansion and National Production Targets

National livestock production, excluding poultry, meets only a fraction of domestic demand, with declining cattle and goat herd and high dependence on imported meat and milk. Expanding the national herd sustainably requires balancing productivity gains with resource efficiency and environmental limits.

#### Priority Actions:

- Develop a National Livestock Development Strategy with species-specific production targets aligned to national consumption needs and local resources.
- Identify priority zones for livestock expansion based on land suitability, feed resources and infrastructure access.
- Facilitate access to land suitable for livestock
- Simplify access to agricultural land and utilities for livestock producers through streamlined lease and permit processes.
- Promote and support development of feedlot system supported by feed resource development) using underutilized land for increased meat production (beef, goat/sheep and deer)
- Promote contract farming and cluster models to enable collective investment and economies of scale.
- Strengthen data systems for monitoring herd size, production and productivity.
- Provide incentives for sustainable intensification and adoption of climate-resilient production systems.
- Develop value chain flagship programmes for goat and pig

### 1.2 Intervention Area 2: Labour Scarcity and Mechanisation

Labour shortages and rising wages constrain productivity and herd/flock management.

#### Priority Actions:

- Promote small-scale mechanisation and labour-saving technologies.
- Enhance training in mechanisation of farm activities
- Support shared-equipment or service-provider models for affordability
- Facilitate importation of skilled labour

### 1.3 Intervention Area 3: Feed and Fodder Security

Dependence on imported feed ingredients and rising prices exposes the sector to

vulnerabilities such as to price volatility and supply disruptions. Local fodder production is constrained by land scarcity, difficult terrain, limited availability of planting materials, appropriate machinery, insufficient large-scale production or grazing areas, and low adoption of fodder conservation techniques, resulting in unreliable year-round feed availability.

**Priority Actions:**

- Update the inventory of local feed resources (fodder crops, agro-industrial by-products) for the creation of a fodder and feed database through consolidation of research
- Digital mapping of potential and existing fodder production/grazing sites to enhance productivity
- Support to fodder producers to optimize production and promote fodder conservation
- Diversify feed base and promote cultivation of high-yielding, climate resilient fodder crops adapted to local conditions.
- Promote adoption of sustainable land management practices for sustainable fodder production
- Precision-feeding technologies and optimise utilisation of feed resources.
- Establish community based national fodder production and conservation sites/banks/reserves
- Encourage the setting up of integrated tree-pasture silvopastoral sites and promote the use of home-grown protein forages for climate resilient livestock rearing
- Enhance research on alternative feed resources sources such as insects, seaweed, or agro-industrial by-products for integration in commercial or small-scale manufacture of animal feeds.
- Train farmers and technicians on feed and fodder management, sustainable land management practices, conservation techniques, use of feed-formulation software and digital ration tools.
- Encourage PPP or private investment in local manufacturing of feed technologies (hay/silage bales, etc) and total mixed ration (TMR)
- Revisit Feed subsidy Scheme to be result oriented

#### **1.4 Intervention Area 4: Breeding stock and Reproductive Management**

Unavailability of adequate genetic stock and limited access to artificial insemination service reduce productivity, hinder genetic progress and herd growth. Improved reproductive efficiency and structured breeding programmes are essential for genetic progress and to sustain herd expansion.

**Priority Actions:**

- Strengthen artificial insemination and extend across major livestock species (beef cattle, goat/sheep and pigs)
- Provide AI service using local breeds
- Provide mobile breeding services for remote and smallholder areas.
- Set up goat reproduction farm and scale up cattle and sheep reproduction farms to increase the supply of breeding stock.
- Enhance farmer training on reproductive management, heat detection, calving/kidding management, nutrition and improved housing to improve reproductive efficiency and herd progression.
- Facilitate the importation of breeding stock, including young heifers, stud bulls, bucks, rams and pigs.
- Facilitate farmer participation in nucleus and multiplier herds.
- Support private breeders in developing certified local breeding stock businesses.

## **1.5 Intervention Area 5: Animal Health and Biosecurity**

Endemic diseases, limited veterinary coverage and inadequate farm biosecurity pose major threats to productivity and market credibility. Strengthening preventive health systems is essential for sustainable livestock production and trade readiness.

### **Priority Actions:**

- Strengthen veterinary services for enhanced surveillance, vaccination programmes, and diagnostic capacity (recruitment, mobile clinics, training of paravet, modern diagnostic tools)
- Strengthen veterinary capacity for surveillance and health care (recruitment, mobile clinics, trained paravets, and modern diagnostic tools).
- Develop curriculum and provide training on basic veterinary care
- Set up government quarantine station
- Establish early-warning systems and rapid-response mechanisms for disease outbreaks and containment.
- Promote good husbandry and hygiene practices through continuous farmer education.
- Enhance coordination between veterinary services, private practitioners and livestock associations.
- Facilitate disposal of dead animals

## Theme 2: Conservation of Genetic Resources and Breeding

Mauritius' dependence on imported livestock breeds has improved short-term productivity but increased costs, reduced adaptability and weakened sovereignty over its animal genetic resources. Conserving and improving local breeds—many of which are tolerant to heat, diseases and low-quality feed—is essential for long-term resilience, biodiversity and food security. A national breeding framework is needed to balance productivity, adaptation and independence.

### 2.1 Intervention Area 1: Institutional Support and Policy Frameworks

Lack of a coordinated policy framework hampers long-term genetic-resource management.

#### Priority Actions:

- Establish a national breeding policy aligning with regional and international conventions.
- Establish modern AI laboratory for semen collection, storage and quality assurance across species
- Enhance performance recording and selection programmes to increase productivity.
- Establish a National Gene Resource Centre and genetic-data repository.
- Secure sustainable funding for conservation and breeding initiatives.
- Facilitate collaboration with regional /international institutions for conservation and utilisation of AnGR.

### 2.2 Intervention Area 2: Conservation of Animal Genetic Resources

Indigenous breeds with valuable adaptive traits are undervalued and risk extinction.

#### Priority Actions:

- Develop a national genetic resource inventory to document and tract existing livestock breeds and their genetic potential
- Identify, characterise and document all local livestock breeds.
- Establish on-farm and ex-situ conservation herds of creole cattle and local goats
- Promote local breeds with desirable adaptive traits.
- Promote awareness of the cultural and economic value of local breeds.

### 2.3 Intervention Area 3: Prevention of Genetic Resource Loss

Unregulated importation of exotic breeds and inadequate conservation strategies and risk the extinction of indigenous breeds and biodiversity loss

#### Priority Actions:

- Regulate importation of exotic genetics through a controlled-approval system.
- Implement national recording and traceability of breeding activities.
- Develop farmer-based conservation schemes with incentives for maintaining pure lines
- Facilitate and promote collaboration with regional genebanks for conservation of genetic materials
- Create awareness on importance of preserving local breeds

### 2.4 Intervention Area 4: Breeding Programmes for Climate Resilience and Productivity

Existing breeding programmes are fragmented and not specifically aligned with climate goals.

**Priority Actions:**

- Develop a National Breeding Strategy integrating productivity and resilience traits.
- Support applied research on genetic selection for heat tolerance and disease resistance.
- Facilitate partnerships with research institutions and regional breeding centres for use of innovative technologies in reproduction and genetic improvement.
- Build national capacity in animal genetics, data analysis and reproductive biotechnology.

**2.5 Intervention Area 5: Reducing Dependence on Imported Genetics**

Heavy reliance on imports undermines livestock self sufficiency, increases vulnerability and costs.

**Priority Actions:**

- Create local nucleus and multiplier herds to produce quality breeding stock.
- Strengthen genetic evaluation systems to identify high performing local animals
- Facilitate exchange of breeding males between farms to promote genetic diversity
- Facilitate regional partnerships for germplasm exchange within SADC and AU-IBAR frameworks.
- Support establishment of private breeding centres to strengthen local supply chain



## Theme 3: Climate Resilience, Adaptation and Disaster Preparedness

Mauritius' livestock systems face intensifying cyclones, heat waves, flash floods and water stress, with cascading impacts on animal health, feed availability and market continuity. Resilience demands robust preparedness (risk monitoring, early warning, response financing) and practical on-farm adaptation (climate-smart housing, heat-tolerant breeds, efficient water/feeding systems).

Mitigation co-benefits strengthen resilience: improved manure management, precision/efficient feeding and circular solutions (biogas, compost) reduce emissions while lowering input risk. A coordinated framework linking meteorological, veterinary and extension services—underpinned by data and insurance—will protect livelihoods and national supply.

### 3.1 Intervention Area 1: Disaster Assessments

Post-shock losses to stock, feed and infrastructure are inconsistently measured, delaying relief and recovery planning.

#### Priority Actions:

- Deploy a standardised livestock loss-assessment protocol (animals, feed/forage, housing, milk/meat supply).
- Maintain a georeferenced database of farm assets and hazards to target relief.
- Train rapid-assessment teams (veterinary + extension) and pre-position survey tools.
- Establish thresholds that trigger emergency measures (feed reserves, import windows).

### 3.2 Intervention Area 2: Adaptation Strategies

Many units are not designed for heat, intense rainfall or water scarcity; breeds and practices are slow to adjust.

#### Priority Actions:

- Promote climate-smart housing (shade, ventilation, cool roofs, runoff control) and heat-stress management.
- Accelerate adoption of climate-tolerant breeds and resilient species mixes where appropriate.
- Support efficient water systems (rainwater harvesting, trough design, leak control) and drought-proof forage plans.
- Scale precision/efficient feeding to stabilise performance under stress (balanced rations, targeted supplementation).
- Establish demo farms showcasing integrated adaptation packages (housing + breed + water + feeding).

### 3.3 Intervention Area 3: Mitigation Strategies (with Resilience Co-Benefits)

Emissions from enteric methane and manure raise climate impact while wasting nutrients and energy.

#### Priority Actions:

- Improve manure management (covered storage, composting) and promote biogas where viable.
- Pilot methane-reducing feeding options (additives, ration optimisation) and

monitor results.

- Encourage local/alternative proteins (e.g., insect meal where feasible) to cut feed-supply risk.
- Integrate mitigation targets and indicators into livestock development and extension plans.

### **3.4 Intervention Area 4: Early Warning Systems**

Farmers receive late, generic alerts; disease and weather signals are not fused into actionable advice.

#### **Priority Actions:**

- Build an integrated Early Warning for Livestock (EWL) combining weather, heat-index, vector/disease risk and feed alerts.
- Use mobile/SMS/app pushes with simple guidance (move stock, adjust rations/water, vaccinate, secure fodder).
- Link meteorological, veterinary and extension services for joint risk bulletins and field follow-up.
- Maintain local forage and water-point monitoring to anticipate shortages.

### **3.5 Intervention Area 5: Insurance and Safety Nets**

Limited risk-financing leaves farmers exposed to asset loss and cash-flow shocks after disasters.

#### **Priority Actions:**

- Develop index-based livestock insurance (heat, rainfall, cyclone) with premium support for smallholders.
- Maintain emergency feed/water reserves and criteria for rapid, transparent release.
- Create a contingency fund for veterinary outreach, vaccinations and rapid repairs to basic housing.
- Bundle finance with adaptation investments (cool roofs, water storage, forage systems) via concessional credit.

## Theme 4: Regenerative and Sustainable Agriculture

Livestock systems are both contributors to and victims of climate change. In Mauritius, limited land, feed imports and environmental constraints call for a shift toward regenerative and circular practices that cut emissions while sustaining productivity. By improving feed efficiency, valorising waste, integrating crops and livestock and diversifying species, the sector can enhance soil health, recycle nutrients and secure national food sovereignty.

The transition to low-emission livestock will hinge on practical innovations—precision feeding, alternative proteins, manure-to-energy systems and resilient housing—coupled with consumer awareness and supportive policy

### 4.1 Intervention Area 1: Crop–Livestock Integration / Species Mix

Resource optimisation can be achieved through crop-livestock integrated system

#### Priority Actions:

- Promote closed-loop crop–livestock integrated systems for resilience.
- Encourage rotational grazing and mixed species.
- Support diversification toward small livestock (small ruminants, poultry and rabbit) requiring less land and inputs.

### 4.2 Intervention Area 2: Agroecology and Regenerative Systems

Intensive models degrade natural resources and increase climate vulnerability.

#### Priority Actions:

- Support silvopastoral and agroforestry-livestock.
- Set up demonstration farms for agroecological practices.
- Promote climate-smart and resilient production systems, including heat-tolerant breeds, climate-adapted housing and efficient water and feeding technologies.
- Support access to green finance and sustainability certification.
- Integrate environmental performance indicators into farmer-support schemes.

### 4.3 Intervention Area 3: Methane Reduction and Climate Contribution

Enteric fermentation and manure management are key emission sources lacking systematic mitigation.

#### Priority Actions:

- Promote feed additives and vaccines targeting rumen methane production.
- Partner with universities for R&D on low-emission feed additives and supplements
- Support biogas installations for manure-to-energy conversion and fertiliser co-products.
- Facilitate partnerships with energy and waste management companies for waste recycling especially in pig zones
- Integrate emission-reporting tools into farm monitoring to inform national inventories.

### 4.4 Intervention Area 4: Housing, Facilities and Animal Welfare

Poorly designed housing increases energy use, emissions and animal stress.

#### Priority Actions:

- Promote sustainable housing with natural ventilation, daylight and local materials.

- Introduce design templates combining energy-efficiency and animal-comfort standards.
- Encourage silvopastoral shading and integration of renewable-energy systems (solar, biogas).

#### **4.5 Intervention Area 5: Waste management and Circular Economy**

Livestock waste and by-products are often underutilised or poorly managed, leading to environmental burdens contributing to odour, pollution, GHG emission and lost economic potential. Turning waste into value supports both sustainability and profitability.

##### **Priority Actions:**

- Promote best practices in manure management, including covered storage and controlled nutrient application to reduce emissions and losses.
- Promote circular-economy models for livestock by-products (manure, offal, hides, etc.) through composting, biogas, biofertiliser and feed-recycling systems).
- Encourage private sector and PPP investment in waste-to-energy, composting, pelletising and nutrient-recovery enterprises.
- Establish and enforce national quality standards and regulatory guidelines for animal-based by-products, manure management and bio-inputs.
- Provide targeted incentives for farms and processors adopting certified, environmentally sound waste-valorisation and recycling technologies.
- Integrate livestock waste valorisation into national circular-economy and climate strategies, aligned with low-emission and sustainability goals.
- Align land-use planning and environmental-licensing frameworks to facilitate low-emission livestock waste and bioenergy facilities.
- Zone and develop eco-industrial clusters or parks linking livestock production, bioenergy, composting and fertiliser industries.
- Strengthen capacity building through training modules on nutrient recovery, pathogen control and environmental compliance.

## Theme 5: One Health; Integrating Environment, Plant and Animal Health

Animal health underpins productivity, food safety and public trust. However, the misuse of antibiotics in livestock production contributes to antimicrobial resistance (AMR), threatening both animal and human health. The path forward lies in prevention—through stronger biosecurity, vaccination, natural remedies and improved housing—rather than reliance on antibiotics.

Adopting a One Health approach that links veterinary, human and environmental health will ensure early detection, coordinated response and responsible management of zoonotic risks. As urbanisation increases, zoning, surveillance and consumer transparency must guide where and how livestock are raised to protect communities and ecosystems.

### 5.1 Intervention Area 1: Responsible Use of Antibiotics

Unregulated use of antimicrobials increases AMR risks and undermines food safety.

#### Priority Actions:

- Implement a National Antimicrobial Resistance (AMR) Action Plan specific to the livestock sector.
- Enforce stricter regulation of antibiotic sales and distribution and use.
- Build awareness campaigns for farmers and veterinarians on responsible use.
- Integrate AMR monitoring in national livestock databases and residue-testing programmes.

### 5.2 Intervention Area 2: Alternatives to Antibiotics

Limited access to effective, affordable alternatives perpetuates dependence on antibiotics.

#### Priority Actions:

- Promote biosecurity, vaccination and improved housing and proper feeding to prevent infection naturally.
- Support research on use of herbal and organic remedies (e.g., neem, turmeric, garlic) with proven antimicrobial properties.
- Promote organic/natural farming systems that minimize use of veterinary drugs
- Create a framework for certification and safe commercialisation of approved natural products.

### 5.3 Intervention Area 3: Zoonotic Risks and Disease Surveillance

Weak surveillance and data-sharing delay detection and control of emerging zoonoses.

#### Priority Actions:

- Strengthen national disease-surveillance systems and laboratory networks for real-time reporting.
- Integrate animal and human health surveillance under a unified digital platform.
- Train veterinary and health officers for coordinated outbreak response.
- Engage community animal-health workers to improve local disease intelligence.

### 5.4 Intervention Area 4: One Health Coordination

Fragmented sectoral action hinders a unified approach to AMR, zoonoses and

environmental health.

**Priority Actions:**

- Establish a National One Health Platform linking veterinary, medical and environmental authorities.
- Conduct joint simulations, training and risk-assessment exercises.
- Develop joint policies on AMR, zoonotic surveillance and food safety management.
- Facilitate regional collaboration (SADC/AU-IBAR) for transboundary disease control.

### **5.5 Intervention Area 5: Policy on Livestock Location and Zoning**

Policy framework to regulate siting of farms near urban centres and ESA need to be harmonized to address risks of contamination and social conflict.

**Priority Actions:**

- Develop livestock zoning and land-use guidelines balancing biosecurity, environment and community safety.
- Enforce setback distances and waste-disposal standards for intensive units.
- Require environmental and health-impact assessments prior to farm licensing.
- Promote low-density and environmentally compatible livestock clusters.

## Theme 6: Nutrition Security, Food Safety and Wellness

Livestock products play a vital role in ensuring balanced diets and national nutrition security. However, growing health concerns linked to non-communicable diseases, misuse of veterinary drugs and unsafe production practices threaten public trust and wellbeing. Strengthening food safety, residue monitoring and nutrition-sensitive production will ensure that livestock systems contribute not only to food security but also to public health and community wellness.

### 6.1 Intervention Area 1: Safe Food Production

Inadequate food safety systems compromise hygienic, traceable, and welfare-compliant livestock production.

#### Priority Actions:

- Strengthen regulatory control and monitoring of veterinary drugs and feed additives.
- Improve inspection capacity and residue testing at abattoirs and collection points.
- Enforce food safety systems of medium and large processors, and voluntary (with technical assistance) for micro- and small-scale producers.
- Develop national livestock hygiene and husbandry guidelines (cahier de charges) to standardise on-farm biosecurity, milking hygiene, and meat handling.
- Provide training and certification programmes for farmers, abattoir workers, and processors on Good Hygienic Practices (GHP) and Good Manufacturing Practices (GMP).
- Designate Natural Farming and Low-Residue Zones to ensure chemical-free production and establish inspection and compliance systems at farm and retail levels.
- Facilitate establishment of accredited slaughter and processing facilities that comply with food safety and animal welfare standards.
- Introduce incentive schemes (grants, branding, or tax rebates) for enterprises implementing certified safety systems.

### 6.2 Intervention Area 2: Health Impacts and Alternatives to Chemicals

Overreliance on chemical inputs affects both human health and livestock ecosystem balance.

#### Priority Actions:

- Integrate livestock and public health strategies to promote moderate, safe consumption of animal products as part of balanced diets.
- Collaborate with the Ministry of Health to align dietary guidelines with sustainable livestock production and nutrition goals.
- Develop educational campaigns on the nutritional value of locally produced milk, eggs, and lean meats.
- Undertake research on alternatives to allopathic treatment and promote natural and organic alternatives for disease prevention and pest control (e.g. herbal remedies, probiotics, essential oils, etc.)
- Conduct awareness campaigns on the link between drug residues and consumer health.

### 6.3 Intervention Area 3: Consumer Awareness, Trust and Sustainable Diets

Limited consumer confidence reduces demand for local livestock products. Consumers rarely connect food choices to environmental impact.



**Priority Actions:**

- Conduct nationwide campaigns promoting local, safe and healthy livestock foods and low carbon diets.
- Create a “Trust Mark” or certification label for compliant producers.
- Strengthen communication between authorities, producers and consumers.
- Promote reduction of food waste across retail and household levels.
- Support innovation adoption through enabling policies, targeted incentives and consumer awareness on sustainable livestock products.

## Theme 7: Value Chains and Market Differentiation

Mauritius must move beyond commodity-based livestock production to build a diversified, high-value and market-responsive agro-economy. Developing strong and inclusive value chains—from production and aggregation to processing, branding and marketing—will create jobs, raise farmer incomes and reduce dependence on imports. Opportunities exist to differentiate local produce through sustainability, traceability and quality assurance while leveraging tourism, hospitality and export channels as key demand drivers.

However, fragmented supply chains, weak aggregation, high logistics costs and limited market intelligence continue to constrain competitiveness. Strengthening integration, transparency and branding across the livestock value chain will be essential to position Mauritian products in premium markets and establish “Made in Mauritius” as a mark of quality and trust.

### 7.1 Intervention Area 1: Value Addition Opportunities and market integration

Most livestock products are sold raw with minimal processing, limiting profitability and market reach. Capturing more value requires investment in processing capacity, innovation and product diversification.

#### Priority Actions:

- Enhance R&D for development of new dairy and meat products (e.g soft cheese, mozzarella, processed meat)
- Promote the development of small- and medium-scale processing and packaging units for meat, milk and derived-products (fiscal incentives, incubation centre, training)
- Facilitate partnerships between producers, processors and retailers to ensure consistent quality and supply.
- Develop traceability, labelling systems and product certification scheme (e.g. “BioMauritius”, “Sustainable Mauritius”) to enhance market access.
- Strengthen market information systems providing near real-time prices, demand trends and buyer linkages.
- Facilitate integration of small producers into retail, hospitality and institutional procurement channels.
- Develop mechanism to protect current and emerging processors (e.g import taxes, quota) from unfair competition.

### 7.2 Intervention Area 2: Agri-Business Models

Many livestock enterprises operate informally and lack access to finance, technology and markets. Structured agribusiness models can enhance professionalism, coordination and access to value chains.

#### Priority Actions:

- Promote cooperative and cluster models to strengthen collective bargaining and shared services.
- Facilitate access to finance through tailored credit schemes, guarantees and equity partnerships.
- Encourage public–private partnerships for shared infrastructure and cold-chain logistics.

### 7.3 Intervention Area 3: Consumer Trust, Branding and Agrotourism

## Opportunities

Limited branding and awareness of local livestock products limits consumption. Linking branding with tourism, gastronomy and sustainability can increase visibility, credibility and trust.

### Priority Actions:

- Launch national campaigns promoting local livestock products and their nutritional and cultural value.
- Develop farm-to-fork, agro-tourism and culinary tourism initiatives showcasing local production systems.
- Strengthen labelling, certification and communication to reinforce consumer confidence.
- Collaborate with hotels, restaurants and chefs to feature certified Mauritian products.
- Integrate sustainable-diet education into schools and tourism initiatives.
- Promote collective branding and storytelling around Mauritian livestock heritage and sustainable production.

## Theme 8: Empowering Smallholders, SMEs, Women and Youth

Smallholders remain the foundation of livestock production in Mauritius, yet many face shrinking margins, labour shortages, ageing farmers and limited access to finance and technology. Women, youth and SMEs are key to revitalising the sector but remain under-represented. Empowering these groups through better recognition, targeted support and access to productive assets will ensure inclusion, innovation and continuity in the livestock value chain.

### 8.1 Intervention Area 1: Recognition of Smallholders

Smallholder farmers are often informal and under-represented in national statistics and policy frameworks.

#### Priority Actions:

- Create a National Register of Smallholders to support policy targeting and inclusion.
- Develop a framework for recognition of farmers as a “profession”
- Facilitate representation of smallholder groups in decision-making platforms.
- Strengthen farm-business planning, financial management and record-keeping through training and extension.

### 8.2 Intervention Area 2: Retention and Motivation

Rising costs, limited profitability and social perception discourage farmers from staying in livestock activities.

#### Priority Actions:

- Provide incentives such as input subsidies, credit support and guaranteed markets.
- Improve extension support and peer-learning networks to enhance motivation.
- Recognise exemplary farmers through awards and mentorship programmes.

### 8.3 Intervention Area 3: Sustainability Adoption

Adoption of sustainable practices remains slow due to knowledge gaps and resource constraints.

#### Priority Actions:

- Promote climate-smart and regenerative livestock practices through training and demonstration farms.
- Support access to green finance and sustainability certification.
- Integrate environmental performance indicators into farmer-support schemes.

### 8.4 Intervention Area 4: Women and Youth Empowerment

Women and young people face structural barriers in land access, financing and leadership roles.

#### Priority Actions:

- Provide targeted grants, mentorship and incubation programmes for women- and youth-led agribusinesses.
- Ensure gender- and youth-sensitive design of all support schemes.
- Create recognition platforms for women and youth innovators in livestock production.

### 8.5 Intervention Area 5: Capacity-Building Models

Training and advisory services are often not tailored to practical on-farm realities.

**Priority Actions:**

- Set-up farmer field schools and vocational training focused on hands-on livestock management.
- Develop modular curricula integrating entrepreneurship and digital literacy.
- Partner with universities and private training providers to expand outreach.

### **8.6 Intervention Area 6: Professionalisation of Farming**

Livestock farming is still viewed as informal self-employment rather than a structured enterprise.

**Priority Actions:**

- Introduce farm-business planning and record-keeping modules in all training programmes.
- Encourage regrouping of farmers, formation of cooperatives and SMEs for shared services aggregation and collective marketing.
- Facilitate registration of farms as legal business entities to access finance, insurance and other government support

### **8.7 Intervention Area 7: Inclusive Value Chains**

Smallholders remain weakly integrated into organised value chains and often face low bargaining power.

**Priority Actions:**

- Link smallholders to processors, retailers and institutional buyers through contracts or cooperatives.
- Establish aggregation and collection centres to reduce transaction costs.
- Promote equitable pricing mechanisms and transparent quality standards.

### **8.8 Intervention Area 8: Succession Planning**

The ageing farming population threatens continuity of livestock enterprises.

**Priority Actions:**

- Create incentives for inter-generational farm transfer and mentorship/apprenticeship.
- Include livestock farming in youth employment and entrepreneurship programmes.
- Support youth participation in cooperatives and producer organisations.

## Theme 9: Information and Knowledge Management, AgriTech and Youth Engagement

Strengthening agriculture in Mauritius can be accelerated by improving access to timely information, enhancing knowledge exchange, and embracing modern technologies. By integrating data systems and making them more accessible, farmers will be better equipped to make informed decisions on production, pricing, and markets. Closer collaboration between research, extension services, and the farming community will further speed up the transfer and adoption of innovations, driving a more responsive and resilient agricultural sector.

AgriTech solutions such as sensors, mobile apps, precision farming tools and digital marketplaces can modernise the sector, enhance productivity and make farming more attractive to youth. However, digital literacy, affordability and access remain key barriers. Building inclusive digital ecosystems and engaging the younger generation as drivers of innovation will help create a more connected, resilient and competitive agri-food system.

### 9.1 Intervention Area 1: National Information Platform

Agricultural data are dispersed across multiple institutions, with limited interoperability and access for decision-making. A unified national platform is needed to consolidate and share information transparently.

#### Priority Actions:

- Develop a centralised, interoperable National Livestock Information System (NLIS) integrating all institutions.
- Establish data-sharing agreements among agencies (FAREI, AS, SFWF, MMA, Statistics Mauritius, etc.).
- Create user-friendly digital dashboards and mobile applications for farmers and policymakers.
- Build capacity on microchipping, data collection and digital management within public institutions.
- Launch awareness campaigns to promote registration of Farms and farmers/operators and ensure compliance
- Ensure open access for policymakers and farmers under strict data protection.

### 9.2 Intervention Area 2: R&D and Farming Community Linkages

Stronger collaboration and feedback loops between researchers, extensionists and farmers ensure research results are translated into on-farm practices.

#### Priority Actions:

- Create participatory platforms linking scientists, extension agents and producers.
- Set up farmer field schools and demonstration sites for practical knowledge transfer.
- Facilitate continuous dialogue and co-design research agendas based on field needs.
- Introduce feedback systems to evaluate adoption and effectiveness of technologies.
- Leverage digital tools and platforms to strengthen networking and information sharing between researchers, extension services, farmers and value-chain actors

### 9.3 Intervention Area 3: Digital Tools for Decision-Making

The potential of digital technologies in agriculture remains underexploited due to low

awareness, fragmented initiatives and affordability barriers. Scaling digital tools can improve efficiency, traceability and climate adaptation.

**Priority Actions:**

- Develop and promote use of mobile app for record-keeping, breeding, farm management, production tracking, and e-marketing.
- Support pilot projects using IoT sensors, drones and GIS for monitoring livestock, and resource use.
- Train farmers and extension officers in the use and maintenance of digital tools.
- Develop e-learning modules for livestock management and entrepreneurship.
- Offer digital vouchers or incentives for young farmers adopting AgriTech.

#### **9.4 Intervention Area 4: Producer-to-Consumer Platforms**

Small producers face limited access to markets and struggle to connect directly with consumers. Digital platforms can improve transparency, traceability and fair pricing while promoting local products.

**Priority Actions:**

- Develop e-marketplaces and digital traceability systems linking farmers, processors and consumers.
- Promote the use of QR codes to showcase product origin, quality and sustainability practices.
- Encourage cooperatives and youth enterprises to manage and scale these platforms.

#### **9.5 Intervention Area 5: Youth Engagement and Capacity Building**

The agricultural sector faces an ageing workforce and struggles to attract young people. Engaging youth through technology, entrepreneurship and training can revitalise the sector.

**Priority Actions:**

- Integrate agriculture and AgriTech in school and tertiary curricula to reshape perceptions.
- Create innovation hubs and incubation programmes supporting youth-led agribusinesses.
- Provide targeted financing, mentorship and grants for digital and green agriculture ventures.
- Promote success stories of young agripreneurs to inspire new entrants into the sector.

#### **9.6 Intervention Area 6: Shared Data Platforms**

Fragmented information systems hinder evidence-based decision-making and transparency.

**Priority Actions:**

- Develop a centralised digital database on livestock production, health and markets.
- Ensure data interoperability among ministries, FAREI and Statistics Mauritius.
- Build staff capacity in data management and analytics for policy planning.



## **Theme 10: Good Governance, Institutional Coordination, Policy Coherence and Financing**

Strengthening coordination among ministries, parastatals and local authorities; improving policy alignment; and creating sustainable financing mechanisms are essential to ensure that institutional actions reinforce one another and deliver coherent support to producers. Transparent governance, shared data systems and innovative financing will unlock the full potential of the agri-food system.

### **10.1 Intervention Area 1: Inter-Agency Coordination**

Ministries, agencies and livestock institutions often act independently reducing efficiency and accountability in service delivery

#### **Priority Actions:**

- Establish a Livestock Sector Coordination Committee under the Ministry of Agro-Industry to oversee cross-institutional collaboration (FAREI, SFWF, Agricultural Services, Veterinary Services, MMA, and Farmer Associations) and to harmonise planning, implementation and resolve bottlenecks.
- Define clear institutional roles, reporting lines and accountability frameworks.
- Promote joint planning, budgeting and monitoring mechanisms across agencies.

### **10.2 Intervention Area 2: Regional Integration**

Limited collaboration with regional bodies restricts knowledge exchange and market access.

#### **Priority Actions:**

- Strengthen collaboration with regional organisations (SADC, COMESA, FAO, AU-IBAR) for livestock development, trade facilitation, and technology transfer.
- Promote regional agreements on animal health surveillance, transboundary disease control, and genetic material exchange.
- Facilitate farmer participation in regional training programmes on breeding, feed formulation, and animal welfare.
- Encourage regional trade and investment partnerships to expand market opportunities for local livestock products.
- Develop joint research and breeding initiatives with regional partners to enhance genetic diversity and resilience.

### **10.3 Intervention Area 3: Policy Coherence**

Policies governing livestock sectors, trade, health, tourism and environment need to be synergized for better efficiency.

#### **Priority Actions:**

- Review all existing livestock support schemes for effectiveness, inclusivity, and relevance to current market realities.
- Align financial incentives and subsidies with production performance and verified output to promote efficiency and accountability.
- Promote local livestock products within the tourism sector through government-led branding and procurement initiatives.
- Review price control mechanisms (e. beef and other meats during festive seasons) to ensure fairness and market stability.
- Establish a national policy framework aligning livestock production, food security, welfare, and trade objectives under a unified vision.

#### **10.4 Intervention Area 4: Monitoring and Accountability**

Weak monitoring limits the ability to measure performance and enforce responsibilities.

**Priority Actions:**

- Establish a results-based sector monitoring and evaluation (M&E) framework.
- Publish annual livestock performance scorecards and public dashboards.
- Introduce independent audits and social-accountability mechanisms.

#### **10.5 Intervention Area 5: Innovative Financing**

Public budgets are insufficient to meet sector investment needs.

**Priority Actions:**

- Mobilise blended-finance instruments combining public, private and donor funds.
- Create revolving funds or guarantee schemes for livestock SMEs.
- Promote green-finance and climate-investment facilities supporting sustainable practices.

#### **10.6 Intervention Area 6: Farmer Security and Enforcement**

Weak enforcement of contracts and limited farmer protection reduce trust and investment.

**Priority Actions:**

- Strengthen legal frameworks for contract enforcement and dispute resolution.
- Develop farmer-insurance and risk-mitigation mechanisms.
- Ensure transparent licensing, inspection and compliance processes.
- Enhance farmer protection mechanisms ensuring secure land tenure, fair market access, and transparent contract arrangements.

**RODRIGUES**

## **RODRIGUES: AGRICULTURAL CONTEXT, STRUCTURAL CONSTRAINTS AND PATHWAYS FOR RESILIENCE**

Rodrigues, as an autonomous island region of the Republic of Mauritius, presents a distinct agricultural context shaped by geographic isolation, limited land availability and heightened exposure to climatic variability. Agriculture plays a critical role in local livelihoods, food availability and socio-economic stability, yet the sector operates under structural constraints that differ markedly from those of mainland Mauritius. These realities necessitate a contextualised understanding of challenges to ensure that national deliberations adequately reflect Rodrigues' specific needs and priorities.

The island's agro-ecological conditions are characterised by fragile soils, recurrent water scarcity, irregular rainfall patterns and increasing climate-related risks. Landholdings are generally small and fragmented, constraining economies of scale and mechanisation. Limited natural resources, coupled with high transport and input costs, place additional pressure on producers and reduce the competitiveness of local agricultural outputs. These constraints have contributed to persistent dependency on food imports from mainland Mauritius, heightening vulnerability to supply disruptions.

Human resource constraints further shape the agricultural landscape in Rodrigues. Stakeholders highlighted an ageing farming population, labour shortages and limited generational renewal, alongside constrained access to technical expertise, extension services and specialised skills. These factors affect productivity, innovation uptake and the capacity to adapt to evolving climatic, market and regulatory environments.

Within this context, agriculture in Rodrigues remains strategically important for strengthening local food resilience, supporting rural livelihoods and preserving cultural and environmental assets. Beyond addressing immediate constraints, the island's scale, ecological sensitivity and production systems also present conditions that could allow for the gradual consolidation of agro-ecosystems anchored in agroecological and nature-based practices, should such pathways be explored through sustained and coherent efforts. Such considerations provide an additional lens for national reflection and underscore the importance of articulating Rodrigues' agricultural realities and potential within the pre-consultative framework, ensuring that its specific context is fully considered.

*In order to preserve the integrity of the Rodrigues consultation and reflect the priorities as articulated by local stakeholders, the thematic flow and intervention areas presented in this chapter follow the structure and sequencing submitted by Rodrigues, while being harmonised in tone and presentation with the consolidated national framework.*

## Theme 1: Food Sovereignty and Resilient Production Systems

Food sovereignty remains a central concern for Rodrigues, given the island's high dependence on imports and its exposure to external supply disruptions. Local agricultural production is constrained by limited arable land, water scarcity, climatic variability and high input costs, which collectively affect the island's capacity to consistently meet local demand. These constraints are compounded by geographic isolation, which increases vulnerability to logistical disruptions and price volatility.

Stakeholders highlighted that while subsistence and semi-commercial farming contribute to household food availability, production systems remain highly sensitive to climatic shocks such as prolonged droughts and irregular rainfall. Limited irrigation coverage, low uptake of climate-resilient practices and restricted access to appropriate inputs continue to undermine productivity and production stability across the island.

### 1.1 Intervention Area 1: Boosting production of strategic crops

This section addresses the boosting of major food crops in order to improve food self-sufficiency.

#### Priority Actions:

- Establish production targets for selected crops with potential to increase production including potato, onion, garlic, crucifer, legumes, tomatoes, banana and starchy crops (eddoes, cassava and sweet potato)
- Review seed purchase schemes for relevant strategic crops
- Review the pricing and grading system for relevant strategic crops
- Make provision for additional storage facilities at AMB to enhance storability for seeds and products for consumption
- Develop value chain flagship programmes using a farm to fork approach for strategic crops

### 1.2 Intervention Area 2: Food Crops Monitoring and Preparedness

The absence of integrated planning tools, performance indicators and formal coordination mechanisms limits the capacity to anticipate food supply risks and guide coherent interventions.

#### Priority Actions

- Develop a strategic plan for the agricultural sector in Rodrigues to support sustainable development and food security objectives.
- Establish a food balance sheet for Rodrigues to strengthen evidence-based policy decisions and targeted interventions.
- Develop and regularly monitor food-sovereignty indicators to assess production performance, import dependence and resilience.
- Establish an Inter-Island Coordination Committee for Agriculture to strengthen alignment and cooperation between the Island of Mauritius and the Island of Rodrigues.

### 1.3 Intervention Area 3: Land Access, Tenure and Productive Use

Increasing pressure from competing land uses and abandoned agricultural land constrain access to productive land and pose a threat to food sovereignty. These

factors limit the capacity to sustainably expand and optimise local agricultural production.

#### **Priority Actions**

- Develop a land-use map for the island of Rodrigues to support informed planning and protection of agricultural land.
- Establish an agricultural land bank to secure land for agricultural purposes and prevent further loss of productive land.
- Rehabilitate abandoned agricultural land and undertake de-rocking of land under cultivation to facilitate mechanisation and reduce labour-intensive constraints.

### **1.4 Intervention Area 4: Water Security and Irrigation Efficiency**

Water scarcity remains the primary limiting factor for crop and livestock production in Rodrigues. Insufficient and inefficient water infrastructure constrains production stability and limits agricultural expansion.

#### **Priority Actions**

- Rehabilitate existing and abandoned water ponds and irrigation networks to improve water availability for agriculture.
- Develop new water infrastructure, including rainwater harvesting systems, dams and check dams, in agricultural zones and catchment areas to mobilise water for irrigation and livestock.
- Promote efficient irrigation technologies, including drip and micro-sprinkler systems, as well as solar-powered irrigation through appropriate incentive schemes.
- Promote individual rainwater harvesting schemes and on-farm water reservoirs to strengthen water availability at farm level.
- Establish water user groups in key agricultural zones to improve collective management of water points and associated irrigation networks.

### **1.5 Intervention Area 5: Seeds and Plant Materials (Local System)**

Erosion of crop biodiversity, high reliance on imported seeds and limited availability of quality seedlings constrain the resilience and sustainability of local production systems. These challenges weaken local seed autonomy and threaten the conservation of native crop varieties.

#### **Priority Actions**

- Develop quality declared seed production at Government crop stations and at farmer level to improve access to locally adapted planting materials.
- Operationalise the crop gene bank at Oyster Bay Nursery to conserve and secure local seed varieties.
- Promote in-situ production and characterisation of landrace and native crop varieties to strengthen local genetic resources.
- Protect native seed varieties through appropriate labelling mechanisms, including Geographical Indication, to enhance recognition and preservation.

### **1.6 Intervention Area 6: Sustainable Inputs, Soil Health and Fertility**

Soil health and fertility remain dependent on organic inputs, with a need to strengthen agroecological practices and better valorise organic waste streams to sustain crop productivity.

#### **Priority Actions**

- Maintain and promote the use of organic soil amendments to improve soil fertility and food quality.
- Develop organic agriculture and strengthen agroecological farming practices in Rodrigues.
- Promote composting and recycling of green waste, farm waste and farmyard manure.
- Establish compost production centres in coordination with the solid waste management programme of the Rodrigues Regional Assembly.
- Encourage livestock penning practices to facilitate manure collection for use in crop production.

### **1.7 Intervention Area 7: Protected Cultivation and Climate-Smart Production**

Climate change has affected open-field production, creating the need to shift towards protected cultivation and climate-smart production systems.

#### **Priority Actions**

- Promote greenhouses, net houses and shade systems to maintain production during dry periods.
- Encourage water capture and efficient water management in protected farming systems.
- Promote intercropping and the use of organic and plastic mulches to improve resilience.
- Develop and implement climate-smart agriculture schemes adapted to Rodrigues conditions.

### **1.8 Intervention Area 8: Mechanisation, Technology and On-Farm Energy**

Labour scarcity and an ageing farming population constrain agricultural production, highlighting the need for appropriate mechanisation, technology adoption and on-farm energy solutions.

#### **Priority Actions**

- Strengthen the Mechanisation Unit with appropriate tractors and implements that minimise soil degradation.
- Implement small equipment schemes covering acquisition and maintenance.
- Implement small tractor schemes adapted to local farming conditions.
- Promote acquisition of renewable-energy-based equipment, including dryers and cold rooms.

### **1.9 Intervention Area 9: Finance, Insurance and Risk Management**

Align financial assistance, insurance schemes and risk management mechanisms with those established in Mauritius.

### **1.10 Intervention Area 10: Post-Harvest, Storage and Cold Chain**

Align post-harvest handling, storage and cold chain provisions with those applied in Mauritius to reduce losses and extend shelf life of fresh agricultural produce.

### **1.11 Intervention Area 11: Markets, Procurement and Value Chains**

Erratic production, limited market access and competition from imported products constrain value chain development and negatively affect local producers' livelihoods.

#### **Priority Actions**

- Introduce restrictive import permit mechanisms for vegetables and fruits to support local production.
- Develop value chains for key local products, including processing and recipe development.
- Promote e-commerce and digital marketing platforms for agricultural products in Rodrigues.
- Develop crop villages for selected crops to facilitate coordinated management and targeted public investment.

### **1.12 Intervention Area 12: Extension, Research and Data**

Effective extension services, applied research and data systems are essential to support technology transfer, innovation and climate resilience in agriculture.

#### **Priority Actions**

- Strengthen extension services through recruitment of additional staff and implementation of adapted research programmes.
- Revive government demonstration plots across the island.
- Establish youth incubator farms on government agricultural stations.
- Support applied research focused on climate resilience.
- Implement the Rodrigues Agricultural Digital Information System (RADIS).



## Theme 2: Value Chains and Market Differentiation

Agricultural value chains in Rodrigues remain largely underdeveloped, with most local products marketed in raw or minimally processed form and sold predominantly at farm-gate level. This limits value capture, reduces income opportunities for producers and constrains the competitiveness of local agricultural products. Strengthening value chains is therefore a key requirement for improving economic returns, enhancing market resilience and supporting the sustainability of the agricultural sector.

Structural constraints across processing, storage, marketing and logistics continue to affect the development of differentiated products and organised market channels. Limited processing capacity, weak market integration and insufficient alignment between production and demand restrict the ability to respond to evolving consumer preferences, tourism demand and potential export opportunities. At the same time, Rodrigues possesses distinctive products and production characteristics that offer scope for value addition, branding and niche market positioning.

Addressing these challenges requires a coherent approach encompassing value addition, waste valorisation, agribusiness development, market integration, consumer trust and stronger linkages with tourism and export markets. Such an approach must remain aligned with national frameworks while being adapted to the specific scale, capacities and cultural context of Rodrigues.

### 2.1 Intervention Area 1: Value Addition Opportunities

Limited processing and value addition constrain income generation and market differentiation, with most products sold raw at farm-gate level. Strengthening processing capacity is essential to meet customer demand and improve product value.

#### Priority Actions

- Operationalise processing units as centralised processing parks for key local products.
- Promote development of ready-to-eat and nutraceutical products.
- Introduce schemes and incentives to support cottage and individual-level processing.
- Establish codes of practice for key local products.
- Train processors and youth in value addition, product development and marketing.
- Promote innovation in processing lines, including use of solar-powered equipment and sensory analysis.

### 2.2 Intervention Area 2: Waste Valorisation

Limited valorisation of plant and food waste reduces organic matter return to soils and affects soil fertility and long-term productivity.

#### Priority Actions

- Promote segregation of plant and food waste to enable compost production.
- Establish a regional compost centre to provide farmers with quality compost.

### 2.3 Intervention Area 3: Agri-Business Models

Limited agribusiness capacity and self-marketing practices constrain producers' ability to invest in value addition and business growth.

#### **Priority Actions**

- Train producers in production economics, agribusiness management and marketing.
- Promote establishment of agricultural cooperatives to support risk sharing and structured marketing.
- Establish training and mentoring units to foster entrepreneurship and business skills.
- Promote incentives for participation in fairs outside Rodrigues to support exposure and knowledge transfer.

### **2.4 Intervention Area 4: Market Integration**

Weakly structured marketing channels and limited logistics constrain market access and price stability for local producers.

#### **Priority Actions**

- Conduct market research and establish structured marketing channels for Rodrigues products.
- Strengthen marketing logistics for agricultural produce.
- Incentivise acquisition of transport tools and equipment for producers.
- Review legislation to increase procurement of local products by hotels and restaurants.
- Enable Rodrigues Trading and Marketing Co Ltd to act as a price regulator and collaborate with AMB Mauritius.

### **2.5 Intervention Area 5: Consumer Trust and Branding**

Limited branding and protection reduce the ability to fully capitalise on strong consumer demand for local products.

#### **Priority Actions**

- Characterise and protect local products against counterfeiting.
- Market products under a Rodriguan label with certified protection, including Geographical Indication.
- Improve product quality and reliability.
- Structure supply chains to minimise disruptions and ensure availability of substitutes.

### **2.6 Intervention Area 6: Export Markets**

Limited compliance with international standards constrains access to export markets despite strong product potential.

#### **Priority Actions**

- Address phytosanitary and SPS gaps limiting export access.
- Streamline production channels to meet importer requirements.
- Train producers to align with international market standards.

### **2.7 Intervention Area 7: Tourism as a Driver**

Growth in tourism creates opportunities to expand food production and develop products aligned with tourist demand.

**Priority Actions**

- Evaluate tourism demand for local food products.
- Develop new products targeting tourist markets.
- Develop new dishes using local products to increase tourist consumption.

**2.8 Intervention Area 8: Agro-Tourism**

Align agro-tourism development with national strategies while adapting models to Rodrigues' local environment and cultural context.

## **Theme 3: Information and Knowledge Management, Agri-tech and Youth Engagement**

The performance and sustainability of the agricultural sector in Rodrigues are closely linked to the availability and effective use of information, knowledge systems and appropriate technologies. Limitations in data availability, research application and technology adoption constrain planning, productivity and service delivery across the sector. Strengthening information and knowledge management is therefore essential to support evidence-based decision-making and improve sectoral performance.

Demographic trends within the farming community, particularly the ageing of producers, continue to affect production capacity and long-term continuity. At the same time, the agricultural sector remains insufficiently attractive to younger generations, due in part to perceptions of high risk, labour intensity and limited economic returns. Addressing these challenges requires greater integration of modern technologies, digital tools and innovation within agricultural systems.

Advancing agri-tech, strengthening research–extension linkages and improving access to digital platforms and skills are critical to enhancing productivity, reducing risk and supporting youth engagement and entrepreneurship. Progress under this theme will depend on coherent institutional capacity, effective data governance and alignment with national strategies, adapted to the specific context and resource availability of Rodrigues.

### **3.1 Intervention Area 1: National Agri-Information Platform**

Limited availability and organisation of agricultural data constrain evidence-based planning, service delivery and sector development. Strengthening digital information systems is essential to improve decision-making, forecasting and information access for producers.

#### **Priority Actions**

- Operationalise the Rodrigues Agricultural Digital Information System (RADIS) to consolidate agricultural data, support forecasting and enhance service delivery.
- Integrate a market intelligence platform within RADIS to inform producers of market demand and price trends.
- Digitalise Extension Services to provide timely field information on pests, diseases and recommended responses.

### **3.2 Intervention Area 2: Research and Development and Farming Community Linkages**

Limited research activity and weak linkages between research, extension services and farmers constrain the effective transfer of knowledge and the resolution of production challenges. Strengthening applied research and extension capacity is essential to improve advisory services and sector performance.

#### **Priority Actions**

- Review and strengthen the Extension Service to ensure closer alignment with
- farmers' needs.

- Recruit additional extension staff to achieve an officer-to-farmer ratio of 1:200 and improve regular field support.
- Equip the Extension Unit with adequate logistics to conduct on-farm trials, field schools and training activities.
- Promote specialisation of officers in key local crops and critical technical fields, including entomology, pathology, biometry and statistics and agricultural engineering.
- Use digital tools to develop visual advisory materials, including videos and mobile applications, to facilitate access to information by farmers.

### **3.3 Intervention Area 3: Digital Tools and Forecasting Models**

Align the development and use of digital tools and forecasting models with national strategies, but tailored to support agricultural planning and risk management in Rodrigues.

### **3.4 Intervention Area 4: Youth Engagement and Entrepreneurship**

Youth participation in agriculture remains low despite high unemployment, due to perceived risks and labour-intensive production systems. Targeted support is required to improve the attractiveness and economic viability of the sector for young people.

#### **Priority Actions**

- Launch a national campaign to promote agriculture as a viable business opportunity for youth.
- Provide learning-by-doing training and incentives to support youth-led agricultural enterprises, individually and through cooperatives.
- Continue implementation of the Young Agricultural Labour Scheme to provide structured training on government stations.
- Engage donor agencies to support financing of agricultural projects led by youth groups.
- Develop strategic agricultural subsectors using modern and digital technologies and machinery to attract youth participation.

### **3.5 Intervention Area 5: Data Governance and Institutional Capacity**

Align data governance frameworks and institutional capacity development initiatives with national strategies.

### **3.6 Intervention Area 6: Producer to Customer Platforms**

Align the development and deployment of producer-to-customer platforms with national strategies.

### **3.7 Intervention Area 7: Capacity Building and Digital Literacy**

Align capacity-building and digital literacy programmes with national strategies.

### **3.8 Intervention Area 8: Financing and Investment for Agri-Innovation**

Align financing and investment instruments for agri-innovation with national strategies.

## **Theme 4: Regenerative Agriculture, Soil Fertility and the Circular Economy**

Agricultural production systems in Rodrigues face increasing pressure from declining soil fertility, limited recycling of organic resources and persistent reliance on linear input–output models. These constraints affect long-term productivity, increase vulnerability to climatic variability and limit the capacity of farming systems to regenerate natural resources essential for sustained food production.

At the same time, current practices constrain the effective integration of crop, livestock and waste management systems, resulting in underutilisation of organic matter, erosion of agro-biodiversity and continued dependence on external inputs. These factors weaken the resilience of agro-ecosystems and reduce their ability to contribute to environmental sustainability, food security and climate objectives.

Advancing regenerative agriculture and circular economy approaches offers an opportunity to restore soil fertility, enhance nutrient and biomass cycling, reduce input dependency and improve the environmental performance of agricultural systems. Progress under this theme requires coordinated action across farming practices, research, extension, waste valorisation and climate-responsive measures, adapted to the specific ecological and institutional context of Rodrigues.

### **4.1 Intervention Area 1: Organic Matter Availability**

Limited penning of livestock and under-utilisation of organic residues reduce the availability of organic matter required to sustain soil fertility. Improving organic matter management is essential to support soil health and long-term productivity.

#### **Priority Actions**

- Encourage livestock penning practices to increase availability of farmyard manure for use as organic fertiliser.
- Establish composting units to valorise green waste and livestock waste.
- Promote on-farm composting and the use of crop residues, cover crops and green manures as primary sources of organic matter.
- Provide appropriate machinery to support cover crop incorporation, shredding and compost turning.
- Strengthen research on low-cost tools and approaches for crop residue management.
- Encourage participation in regional soil and soil-health initiatives.

### **4.2 Intervention Area 2: Agroecology and Regenerative Farming Systems**

Limited awareness and adoption of agroecological and regenerative practices constrain both environmental sustainability and economic performance of farming systems. Strengthening knowledge, incentives and market recognition is essential to support transition towards sustainable production models.

#### **Priority Actions**

- Support adoption of agroecological practices including intercropping, crop rotation, agroforestry, mulching, reduced tillage and integrated crop–livestock

systems.

- Strengthen capacity of extension officers through specialised training in agroecology, soil health management and integrated pest management.
- Develop practical guides and television and radio programmes on agroecology and regenerative farming using locally adapted examples and techniques.
- Provide subsidies or grants for leguminous cover crops, companion and trap crops, eco-service plants and heirloom varieties.
- Promote collaborative regional research on soil biology, organic matter restoration and soil carbon monitoring.
- Provide incentives to encourage adoption of organic farming practices.
- Establish certification and labelling standards for regenerative or agroecological produce to support consumer recognition and market incentives.
- Allocate dedicated sections within local markets for certified regenerative and agroecological products.
- Encourage intercropping in maize and vegetable production to improve yields and soil fertility.
- Provide continuous training on composting, microbial soil health and zero-budget natural farming principles.

### 4.3 Intervention Area 3: Reducing Reliance on Chemical Inputs

Continued reliance on chemical agricultural inputs affects soil health, environmental sustainability and long-term productivity. Reducing dependency requires integrated soil health management, alternative inputs and strengthened regulatory oversight.

#### Priority Actions

- Launch Integrated Soil Health Programmes combining soil testing, tailored organic amendments and IPM training to reduce reliance on chemical fertilisers and pesticides.
- Support adoption of biological pest control methods.
- Provide incentives for investment in composting units, drip irrigation systems, biofertiliser production and protected cultivation.
- Support local research and development on bio-pesticides and bio-fertilisers derived from local plants and microorganisms.
- Establish certification systems such as “In Transition”, “IPM Certified” and “Organic”
- to support gradual transition to low-input systems.
- Develop laboratory capacities in soil chemistry, food technology and residue testing to monitor soil health and food safety.
- Conduct awareness campaigns on safe chemical use and promote progressive adoption of regenerative practices through incentives.
- Ensure availability and quality control of fertilisers and pesticides on the market.

### 4.4 Intervention Area 4: Circular Economy Models

Limited waste segregation and recycling infrastructure constrain the development of circular agricultural systems. Advancing circular economy models is essential to improve resource efficiency, nutrient recycling and environmental performance.

#### Priority Actions

- Integrate circular economy principles across agriculture, waste management and energy policies to close nutrient and water loops.
- Provide incentives for valorisation of agricultural by-products, including maize residues, manure and food waste, into compost, animal feed and renewable

energy.

- Support water circularity through rainwater harvesting initiatives.
- Promote use of renewable energy solutions, including solar and biogas, for agricultural operations such as irrigation, drying and cooling.
- Strengthen capacity of extension officers to support farmers in developing customised circular transition plans and identifying appropriate technologies.
- Establish schemes to facilitate acquisition of equipment such as rotovators, shredders and compost turners.
- Provide incentives to farmers who enhance soil carbon sequestration, water retention and biodiversity through certified practices.
- Support applied research on local composting prototypes, microbial inoculants and low-cost regenerative formulations.

#### **4.5 Intervention Area 5: Food Loss and Waste Reduction**

High levels of food loss occur along the supply chain due to weak post-harvest practices, limited infrastructure and inefficient market linkages. Reducing losses is essential to improve food availability, value capture and resource efficiency.

##### **Priority Actions**

- Conduct awareness campaigns on food loss prevention targeting farmers, traders, retailers and consumers.
- Provide subsidies for rigid stackable crates and improved packaging materials to reduce post-harvest losses.
- Support shared processing facilities for surplus or imperfect produce to extend shelf life and develop new market products.
- Encourage collaboration between farmer cooperatives, hotels and NGOs for surplus food redistribution and transformation.
- Develop mobile digital platforms providing real-time market information, price alerts and weather forecasts to reduce mismatches between production and demand.
- Promote “imperfect produce” campaigns to change consumer perceptions and reduce retail waste.
- Review market standards to allow flexibility for grade-based marketing of local produce.

#### **4.6 Intervention Area 6: Agro-biodiversity Restoration**

Erosion of traditional crop varieties and associated knowledge reduces agricultural resilience, nutritional diversity and cultural heritage. Restoring agro-biodiversity is essential to strengthen sustainability and adaptive capacity.

##### **Priority Actions**

- Operationalise seed banks and germplasm collections for traditional and local crop varieties, including cassava, maize, sweet potato, local red bean, Ti Piment Rodrigues, lemon and other indigenous crops.
- Revitalise government nursery plots to supply affordable, quality planting materials of traditional crop varieties.
- Support research on optimal growing conditions, pest resistance and nutritional properties of traditional crops.
- Implement public awareness campaigns and “Eat Local” initiatives to promote the nutritional and cultural value of indigenous crops.
- Collaborate with chefs and restaurants to promote traditional crops in gastronomy and local cuisine.



- Develop market linkages and supply chains connecting traditional crop producers with supermarkets, hotels and processors.

#### **4.7 Intervention Area 7: Climate Contribution**

Agricultural production both contributes to and is impacted by climate change, affecting productivity and environmental performance. Strengthening climate-smart and low-emission practices is essential to enhance resilience and reduce the sector's footprint.

##### **Priority Actions**

- Promote adoption of regenerative agriculture strategies to support climate mitigation and adaptation.
- Develop incentive schemes for farmers adopting low-emission and carbon-sequestering practices, including compost use, agroforestry and biochar.
- Support local research and development on climate-smart practices and precision tools adapted to local conditions.
- Provide incentives for renewable energy systems and low-emission technologies in farming operations.
- Strengthen agricultural extension services to deliver continuous technical support on climate adaptation and mitigation measures.
- Develop certification and traceability systems for regenerative and climate-friendly agricultural products.
- Phase out hazardous agrochemicals and promote integrated nutrient management to reduce emissions.
- Optimise the contribution of Rodrigues and Agalega to national food production and carbon balance through adapted regenerative models.
- Strengthen and develop capacity of staff to empower and support planters in natural farming.

## Theme 5: Empowering Smallholders, SMEs, Women and Youth

The agricultural system in Rodrigues is predominantly characterised by smallholdings, with a large proportion of producers engaged in farming on a part-time basis alongside other income-generating activities. This structural context, combined with labour shortages, limited succession and demographic pressures, constrains productivity, continuity and long-term sector resilience.

Women constitute a significant share of the agricultural workforce, while many farms face difficulties in attracting successors and sustaining labour availability. At the same time, smallholders and micro-enterprises remain insufficiently recognised within policy frameworks, limiting their access to tailored support, incentives and market opportunities.

Addressing these challenges requires targeted measures to recognise and empower smallholders, improve retention and motivation, support sustainable practices, strengthen the role of women and youth and professionalise farming as a viable and dignified economic activity adapted to the realities of Rodrigues.

### 5.1 Intervention Area 1: Recognition of Smallholders

Smallholders constitute the majority of agricultural producers in Rodrigues but remain insufficiently recognised within policy and institutional frameworks. Strengthening their formal recognition is essential to improve access to support, planning and market opportunities.

#### Priority Actions

- Formally recognise and register smallholders as key contributors to food security in Rodrigues.
- Conduct GIS mapping of smallholder plots to support planning, clustering and targeted service delivery.
- Introduce incentives and policy measures adapted to smallholder realities, including access to credit and marketing support.
- Strengthen inter-institutional coordination between the Commission for Agriculture and relevant institutions to streamline access to support schemes.
- Implement awareness campaigns to improve public perception of smallholder agriculture as a viable livelihood and career.
- Encourage household-level processing and preservation to strengthen community food security and value addition.

### 5.2 Intervention Area 2: Retention and Motivation

Negative perceptions, income instability and weak market and support structures reduce motivation and contribute to exit from agriculture. Improving retention requires income stabilisation measures, stronger follow-up and enhanced sector attractiveness.

#### Priority Actions

- Introduce maximum price mark-up guidelines to ensure fair returns across the agricultural value chain.
- Implement floor prices for selected strategic commodities to stabilise farmer incomes.
- Strengthen follow-up mechanisms under DBM, SFWF and HRDC programmes to ensure sustained post-training support.

- Promote value addition and local processing to improve farm profitability.
- Reinforce agricultural planning and zoning to safeguard productive agricultural land.
- Conduct public awareness campaigns highlighting the economic and environmental value of agriculture.
- Implement import-control measures for selected crops during peak local production to protect income stability.

### **5.3 Intervention Area 3: Sustainability Adoption**

Limited access to knowledge, certification and incentives constrains adoption of agroecological and low-input practices among smallholders. Strengthening enabling conditions is required to support sustainable production transitions.

#### **Priority Actions**

- Establish certification systems for bio and organic production and develop dedicated organic zones, including designation of chemical-free areas.
- Provide incentives and training to support adoption of regenerative and low-input practices, including demonstration plots.
- Develop business models demonstrating the economic viability of agroecological farming systems.
- Integrate agroecology and sustainability standards into agricultural production systems.
- Support digital tools and platforms to enhance traceability, knowledge sharing and market access for certified producers.

### **5.4 Intervention Area 4: Women and Youth Empowerment**

Structural barriers and social perceptions limit participation of women and youth in commercial agriculture. Targeted support is required to improve access, skills and representation within the sector.

#### **Priority Actions**

- Provide targeted financial incentives for women and young agricultural entrepreneurs, with flexible repayment terms.
- Strengthen skills of women and youth in mechanisation, processing and marketing.
- Promote branding and development of value-added agricultural products led by women and youth.
- Introduce integrated training and mentorship programmes combining technical, digital and business skills.
- Establish nursery or childcare facilities to support women entrepreneurs with young children.
- Promote women and youth incubation programmes to support professionalisation in agriculture.
- Increase representation of women and youth in agricultural committees and decision-making structures.
- Encourage establishment of young farmer exchange programmes.
- Integrate social rehabilitation and youth reintegration programmes with sustainable agriculture training.
- Simplify procedures and reduce administrative burdens within existing agricultural support schemes.

### **5.5 Intervention Area 5: Capacity Building and Skills Development**

Limited availability of practical, market-oriented training constrains skills development for youth and women in agriculture. Strengthening hands-on training, mentorship and digital competencies is essential to improve employability and enterprise viability.

#### **Priority Actions**

- Establish national and international exchange programmes and industrial placements to provide practical agricultural training.
- Integrate professional agriculture modules into school curricula at appropriate levels to promote early exposure and positive perceptions.
- Develop crop-specific cost and feasibility sheets to support business planning and investment decisions.
- Create online platforms linking producers, buyers, processors and consumers to strengthen market connectivity.
- Promote coaching and mentoring hubs focused on finance, marketing and digital literacy.
- Mobilise donor and private sector partners to support innovation initiatives targeting smallholders and youth.

### **5.6 Intervention Area 6: Professionalisation of Farming**

Perceptions of agriculture as subsistence activity, combined with weak incentives and institutional support, constrain professionalisation of farming. Strengthening recognition, predictability and career pathways is essential to elevate farming as a viable profession.

#### **Priority Actions**

- Launch a National Agri-Entrepreneurship Programme to promote business-oriented farming models.
- Redesign the SFWF Planter's Card to better address farmers' needs, including insurance, grants, training, input rebates and medical leave.
- Promote digitalisation and data-driven decision-making in farm management.
- Introduce minimum support prices for key crops to enhance income predictability and reinvestment.
- Facilitate regional and international study tours to expose farmers to innovative and profitable models.
- Encourage collaboration and exchange with relevant ministries and institutions in Mauritius to strengthen agri-entrepreneurship.
- Establish a professional compensation mechanism to cover significant yield losses caused by climatic events, pests and diseases.
- Develop a retirement pension system for aged farmers exiting agricultural activities.
- Introduce traceability systems to promote responsible farming practices and continuous up-skilling.

### **5.7 Intervention Area 7: Inclusive Value Chains**

Weak integration of smallholders into structured value chains limits market access, bargaining power and income stability. Strengthening inclusive value chain arrangements is essential to improve profitability and resilience.

#### **Priority Actions**

- Promote contract farming frameworks linking smallholders, cooperatives and institutional buyers.

- Facilitate digital platforms, regional fairs and village markets to connect producers directly with buyers, processors and exporters.
- Pilot minimum support price mechanisms for selected commodities to improve income stability.
- Establish a Police Agricole unit to safeguard agricultural produce and infrastructure, enhancing security and producer confidence.

### **5.8 Intervention Area 8: Succession Planning and Generational Renewal**

An ageing farming population and limited succession incentives threaten long-term agricultural continuity and food sovereignty. Strengthening generational renewal requires targeted financial, institutional and career-support mechanisms for youth.

#### **Priority Actions**

- Design succession-support schemes offering concessionary loans, mentorship and start-up grants for young farmers.
- Promote parental engagement and mentorship programmes linking retiring farmers with aspiring youth.
- Develop youth-targeted credit lines and guarantee funds to facilitate farm succession within families.
- Implement agriculture career campaigns highlighting successful pathways and viable income opportunities.
- Simplify access to land, licences and markets for young agricultural entrepreneurs.
- Introduce tax or lease incentives for farmers transferring land-use rights to trained youth.
- Strengthen capacity-building through starter kits, mentorship and leadership training for young farmers.
- Integrate agriculture career pathways into pre-vocational and secondary education, supported by internships and mentoring.

## **Theme 6: Good Governance, Institutional Coordination, Policy Coherence and Financing**

Clear institutional mandates, effective coordination and coherent policy frameworks are essential to ensure focused action and measurable impact in the agricultural sector. Well-defined roles and responsibilities across commissions, statutory bodies and implementing agencies enable efficient service delivery, reduce ambiguity and support accountability.

Strengthening governance under this theme seeks to promote clarity in institutional mandates, enhance coordination across sectors and levels and improve alignment between policies, programmes and financing mechanisms. Such an approach supports more effective planning, streamlined implementation and better use of public resources.

Advancing good governance, institutional coherence and transparent financing arrangements is therefore critical to sustaining confidence, improving performance and ensuring that agricultural interventions deliver tangible outcomes for producers and the wider economy.

### **6.1 Intervention Area 1: Institutional Coordination and Mandate Review**

Overlapping mandates and unclear institutional responsibilities reduce efficiency and weaken service delivery. Clarifying roles and improving coordination are essential to enhance institutional performance.

#### **Priority Actions**

- Clearly define and formalise the roles and mandates of all stakeholders, including parastatal and statutory bodies.
- Strengthen coordination of budgeted projects to improve efficiency and reduce duplication and ambiguity.
- Ensure fair opportunities for Rodriguan technicians to build capacity and access professional development.

### **6.2 Intervention Area 2: Regional Integration and Cooperation**

Strengthening regional and international cooperation is essential to support knowledge exchange, technical collaboration and access to specialised expertise. Enhanced integration can improve innovation and capacity development in the agricultural sector.

#### **Priority Actions**

- Reinforce collaboration with the Ministry of Agro-Industry and the Ministry of Foreign Affairs to support coordinated regional engagement.
- Strengthen cooperation with regional partners, including Réunion Island, Madagascar and relevant African research and technical institutions.

### **6.3 Intervention Area 3: Policy Coherence across Sectors**

Lack of coherence across sectoral policies can reduce effectiveness and create confusion in implementation. Strengthening coordination across sectors is necessary to ensure alignment and impact.

**Priority Actions**

- Promote joint programmes and coordinated initiatives between the Commissions for Education, Tourism and Marketing and Trade.
- Strengthen inter-commission collaboration to improve policy information sharing and dissemination to the population and visitors.

**6.4 Intervention Area 4: Agricultural Data and Digital Governance**

Effective agricultural governance requires reliable data systems and digital tools to support planning, decision-making and service delivery. Strengthening digital governance improves efficiency and stakeholder confidence.

**Priority Actions**

- Promote the use of digital tools for agricultural data analysis to support decision-making and service delivery.
- Standardise systematic data collection, analysis and interpretation for crop and livestock sectors.
- Develop digital platforms to enhance efficiency and strengthen confidence among producers and service users.

**6.5 Intervention Area 5: Monitoring, Evaluation and Accountability**

Limited transparency and weak monitoring mechanisms reduce confidence in public service delivery. Strengthening accountability and performance monitoring is essential to improve credibility and effectiveness.

**Priority Actions**

- Document procedures and service delivery processes across agricultural institutions.
- Enhance accountability and transparency in the allocation and use of resources.
- Regularly assess performance of operational units and implement corrective actions where required.
- Provide continuous training for officers on customer service and performance reporting.

**6.6 Intervention Area 6: Financing and Investment Mechanisms**

Limited access to finance constrains entry and expansion of agricultural enterprises, particularly for start-ups. Targeted financing mechanisms are required to stimulate production and investment.

**Priority Actions**

- Establish dedicated financing schemes for start-ups involved in the production of key local agricultural products.
- Implement bonus production schemes to incentivise cultivation of labour-intensive and high-demand crops.

**6.7 Intervention Area 7: Institutional Strengthening and Human Capital**

Institutional effectiveness depends on adequate staffing, clear organisational structures and appropriate technical expertise. Strengthening human capital is essential to improve service delivery and operational efficiency.

**Priority Actions**

- Recruit additional staff to improve service delivery to the farming community.

- Restructure technical departments to reduce administrative overlap and improve efficiency.
- Advertise and appoint key technical personnel, including engineering expertise, to strengthen institutional capacity.

### **6.8 Intervention Area 8: Farmers' Security and Enforcement**

Align farmers' security and enforcement mechanisms with those implemented in Mauritius.



## **Theme 7: Climate Resilience, Adaptation and Disaster Preparedness**

Agricultural systems in Rodrigues are increasingly exposed to climatic variability, extreme weather events and biological risks that affect production stability and food security. Water scarcity, pest pressure and climate-related shocks continue to pose significant challenges to both crop and livestock systems.

Strengthening climate resilience under this theme focuses on preparedness, adaptation and mitigation measures that reduce vulnerability, protect productive assets and ensure continuity of food supply. Coordinated action across early warning systems, import regulation, genetic resources, adaptation practices and institutional capacity is essential to enhance resilience and disaster readiness.

### **7.1 Intervention Area 1: Disaster Risk Assessment and Early Warning Systems**

Align disaster risk assessment and early warning mechanisms with those implemented at national level.

### **7.2 Intervention Area 2: Import Regulation and Food Security**

Unregulated movement of agricultural produce can undermine local production and farmers' livelihoods. Strengthening import controls is essential to support food security and biosecurity.

#### **Priority Actions**

- Introduce import permit mechanisms to minimise negative impacts of imports on local production and farmer incomes.
- Strengthen border monitoring to reduce phytosanitary risks and illegal importation.

### **7.3 Intervention Area 3: Local Crop Development and Genetic Resources**

Local crop varieties play a critical role in climate resilience despite lower yields. Strengthening genetic resource management supports adaptive capacity and food security.

#### **Priority Actions**

- Strengthen crop propagation stations through recruitment of additional staff.
- Increase production of quality declared seed for local crop varieties.
- Develop value chains for traditional food crops.
- Operationalise the crop gene bank at Oyster Bay and ensure strategic storage of key crops.

### **7.4 Intervention Area 4: Adaptation Strategies**

Water scarcity and climate stress significantly affect agricultural production. Strengthening adaptive practices is essential to reduce vulnerability and sustain yields.

#### **Priority Actions**

- Improve management of run-off water to enhance infiltration and reduce soil erosion.
- Provide incentives for farmers to establish rainwater harvesting systems.
- Promote use of machinery and soil-water conservation techniques across agricultural areas.

- Encourage adoption of biological soil amendments, biological pest control and diversified cropping practices.
- Strengthen border controls to prevent introduction of new polyphagous pests.

### **7.5 Intervention Area 5: Mitigation Strategies**

Reducing emissions and improving system efficiency contribute to climate mitigation and production stability. Targeted investments can support low-emission agricultural practices.

#### **Priority Actions**

- Promote investment in sheltered farming through dedicated loan facilities.
- Provide incentives for use of farmyard manure and compost to enhance soil water retention and biology.
- Restore drainage systems in agricultural blocks to improve response to heavy rainfall.
- Promote development of organic farming systems to reduce greenhouse gas emissions.

### **7.6 Intervention Area 6: Insurance and Safety Nets**

Align agricultural insurance and safety-net mechanisms with those implemented at national level.

### **7.7 Intervention Area 7: Institutional Coordination and Capacity Building**

Align institutional coordination and capacity-building mechanisms for climate resilience and disaster preparedness with those implemented at national level.

## **Theme 8: Soil, Water and Pollution Management**

Sustaining agricultural productivity in Rodrigues depends on the effective management of soil and water resources and the reduction of environmental pollution. Declining soil fertility, increasing pressure on water infrastructure and inadequate waste management practices pose risks to long-term production and ecosystem stability.

This theme focuses on strengthening soil health, improving water-use efficiency, reducing pollution and reinforcing governance, research and coordination mechanisms. Integrated approaches are required to safeguard natural resources while supporting resilient and sustainable agricultural systems.

### **8.1 Intervention Area 1: Soil Fertility and Biological Health**

Declining soil fertility and biological activity threaten agricultural productivity. Strengthening soil health is essential to sustain yields and ecosystem functions.

#### **Priority Actions**

- Provide incentives to increase use of organic materials, including farmyard manure, green manure and compost.
- Promote practices that enhance soil organic matter and biological activity.
- Acquire laboratory equipment and testing kits to enable routine soil analysis.
- Encourage adoption of sustainable cropping systems such as mixed cropping and crop rotation.

### **8.2 Intervention Area 2: Organic Matter and Nutrient Management**

Limited availability of organic amendments constrains soil fertility improvement. Strengthening nutrient recycling is required to support sustainable production.

#### **Priority Actions**

- Provide incentives for on-farm compost production.
- Strengthen incentives to encourage use of farmyard manure and compost.
- Establish compost-making centres for bulk production of compost.

### **8.3 Intervention Area 3: Soil Conservation and Land Management**

Climate variability and inappropriate tillage practices contribute to land degradation. Improved soil conservation and land management are required to protect productive land.

#### **Priority Actions**

- Monitor soil erosion to update erosion indices and support informed decision-making.
- Improve run-off management to enhance water infiltration.
- Promote minimum tillage and soil-conserving practices.
- Procure suitable machinery for cultivation on sloping land.
- Maintain drainage systems, infiltration ditches and terraces.

### **8.4 Intervention Area 4: Water Networks and Irrigation Efficiency**

Weak maintenance of irrigation networks and unauthorised water use reduce system efficiency. Strengthening water infrastructure and governance is essential for

equitable distribution.

#### **Priority Actions**

- Rehabilitate and maintain existing water networks and water points.
- Establish a dedicated irrigation unit to improve efficiency and ensure fair distribution.
- Provide incentives to promote adoption of efficient irrigation systems, including drip irrigation.
- Construct reservoirs and rainwater harvesting structures in agricultural zones and on farms.

### **8.5 Intervention Area 5: Pollution, Waste Management and Circular Economy**

Agricultural waste and pollution pose environmental risks if not properly managed. Strengthening waste management and circular practices supports environmental sustainability.

#### **Priority Actions**

- Provide incentives to promote use of environmentally friendly phytosanitary products.
- Promote biological recycling of agricultural waste through composting and organic matter reuse.
- Build capacity on pest identification, control and safe disposal of agrochemical containers.
- Strengthen enforcement of waste-disposal policies in environmentally sensitive areas.

### **8.6 Intervention Area 6: Monitoring, Data Systems and Governance**

Align monitoring, data systems and governance mechanisms with national frameworks.

### **8.7 Intervention Area 7: Research, Innovation and Capacity Building**

Limited research and innovation constrain improvements in soil and water management. Strengthening research capacity and knowledge transfer is required to support sustainable practices.

#### **Priority Actions**

- Strengthen human resources to establish a dedicated agricultural research unit.
- Promote research on composting and biological agricultural inputs.
- Facilitate access to green-solution publications, including pest management resources.
- Train trainers and farming communities on soil and water conservation techniques.

### **8.8 Intervention Area 8: Institutional Coordination and Policy Integration**

Strengthen coordination with Mauritius and regional partners, including Réunion Island, to support policy integration and cooperation.

## **Theme 9: Nutrition Security, Food Security and Wellness**

Nutrition security and food safety are central to public health, social wellbeing and long-term resilience in Rodrigues. Ensuring consistent access to safe, nutritious and locally produced food requires food systems that protect consumer health while safeguarding the island's natural resource base.

Given the fragility of Rodrigues' ecosystems and the close interlinkages between agriculture, environment and public health, it is important to adopt development pathways that avoid the negative externalities observed in highly intensive, chemically dependent agricultural systems elsewhere. Strengthening food security must therefore be pursued alongside practices that minimise environmental degradation, protect soil and water resources and reduce health risks.

This theme promotes a transition towards sustainable, eco-friendly and health-conscious agricultural and food systems, with reduced dependency on external inputs and greater reliance on local production, sound post-harvest management and robust food safety and traceability mechanisms. Such an approach supports nutrition security, consumer confidence and long-term wellness while reinforcing the resilience of Rodrigues' food systems.

### **9.1 Intervention Area 1: Food Safety, Quality Control and Traceability**

Strengthening food safety, quality control and traceability is essential to protect public health and build consumer confidence. Improved post-harvest and testing capacities support safe and reliable food systems.

#### **Priority Actions**

- Modernise food laboratories and recruit qualified personnel to conduct critical food safety testing.
- Establish a Post-Harvest and Agro-Processing Unit to support quality management and value addition.
- Strengthen capacity of officers and agro-processors to comply with food safety and quality standards.
- Develop post-harvest infrastructure, including pack houses, to enhance traceability and food safety.
- Conduct an assessment of the agro-processing sector and define a strategic development pathway.

### **9.2 Intervention Area 2: Local Food Systems**

Strengthening local food systems improves food availability, reduces dependency on imports and supports local producers. Short supply chains and timely information enhance market efficiency and resilience.

#### **Priority Actions**

- Facilitate development of short supply chains to strengthen local food distribution.
- Introduce import permit mechanisms for fresh produce to encourage local production.
- Ensure regular publication of crop production data, market prices and expected monthly output.

## Theme 10: Seed Sovereignty, Breeding and Genetic Resources

Seed availability remains a critical constraint for agricultural production in Rodrigues, affecting productivity, crop diversity and production planning. Challenges relate not only to the availability of seed, but also to quality, timely provision and access to varieties adapted to local agro-climatic conditions.

Rodrigues possesses a unique diversity of locally adapted crop varieties that have been cultivated and selected over generations. These genetic resources constitute an important asset for resilience, food security and cultural heritage. Preserving and perpetuating this local diversity is essential to prevent genetic erosion and reduce the risk of losing valuable traits through over-reliance on imported hybrid varieties that may not be adapted to local conditions.

Strengthening seed sovereignty under this theme therefore focuses on reinforcing local breeding and research programmes, improving seed multiplication and quality assurance systems and safeguarding plant genetic resources. Such an approach supports sustainable agricultural development while reducing dependency on external inputs and ensuring long-term access to resilient, locally adapted seeds.

### 10.1 Intervention Area 1: National Seed Policy and Institutional Framework

Align seed policy and institutional arrangements in Rodrigues with national seed policy frameworks.

### 10.2 Intervention Area 2: Local Breeding and Research Programmes

Limited access to locally adapted seed varieties constrains production of traditional crops. Strengthening local breeding and research programmes supports seed availability and adaptation.

#### Priority Actions

- Establish breeding and production plans for locally adapted Rodriguan crop seeds.
- Provide incentives to promote local seed production to meet domestic demand.
- Train farmers in seed breeding and support establishment of seed-breeding enterprises.
- Restore genetic purity of local crops through controlled breeding programmes on government stations and selected farms.

### 10.3 Intervention Area 3: Seed Multiplication and Distribution Systems

Reliable seed multiplication and distribution systems are required to ensure availability and preserve rare varieties. Strengthening farmer and cooperative participation supports continuity and access.

#### Priority Actions

- Strengthen farmer-level seed production through contract growing arrangements.
- Initiate production of quality declared seed.
- Provide incentives for cooperatives to engage in seed production.
- Support seed producers with facilities for seed processing and storage.

### 10.4 Intervention Area 4: Seed Quality Assurance and Regulation

Seed quality assurance systems are essential to ensure reliability and farmer confidence. Strengthening testing and certification capacity supports regulated seed systems.

#### **Priority Actions**

- Establish a seed laboratory to conduct seed quality testing.
- Train Commission for Agriculture officers in seed certification procedures.
- Procure modern field and laboratory equipment to support seed testing.

### **10.5 Intervention Area 5: Conservation of Plant Genetic Resources**

Endangered indigenous crop varieties represent valuable genetic and cultural assets. Strengthening conservation systems is essential to safeguard biodiversity and resilience.

#### **Priority Actions**

- Operationalise the seed gene bank under construction.
- Propagate rare crop varieties through live gene banks and conservation plots.
- Characterise and classify rare crop species as genetic accessions.
- Undertake cryopreservation of priority local crop species.
- Implement awareness programmes at school and community levels on conservation of endangered crops.

### **10.6 Intervention Area 6: Farmer Participation and Seed Rights**

Align farmer participation and seed rights provisions with national policy frameworks.

### **10.7 Intervention Area 7: Regional Cooperation and Knowledge Exchange**

Align regional cooperation and knowledge exchange initiatives with national policy frameworks.

### **10.8 Intervention Area 8: Financing and Incentives**

Align financing and incentive mechanisms for seed systems with national policy frameworks.

## **Theme 11: Sustainable Livestock Development, Genetic Resources and Value Creation**

The livestock sector plays a significant role in food security, rural livelihoods and land-use systems in Rodrigues, while also contributing to the broader livestock supply of Mauritius. Over time, livestock production in Rodrigues has adapted to local agro-ecological conditions, resulting in animal breeds that are resilient to climatic stress, limited water availability and extensive production systems.

These locally adapted breeds constitute an important asset for the sustainability and resilience of the livestock sector and represent a strategic resource that should be preserved and enhanced. At the same time, productivity constraints, animal health risks and limited value-addition opportunities continue to affect sector performance and economic returns.

Strengthening the livestock sector therefore requires a balanced approach that safeguards local genetic resources while improving production efficiency, animal health and market integration. Preserving local breeds, enhancing their performance through targeted breeding strategies and exploring differentiation mechanisms such as geographical labelling and value-based marketing can support both conservation objectives and improved livelihoods, while reinforcing Rodrigues' contribution to national livestock systems.

### **11.1 Intervention Area 1: Strategy, Planning and Production Targets**

Weak planning and unmanaged resource use constrain livestock productivity and sustainability. Strengthening strategic planning and regulatory frameworks is required to guide sector development.

#### **Priority Actions**

- Conduct an evaluation of the current livestock production system.
- Monitor and map grazing areas and communal pastures.
- Develop a land-use map to secure resources for ruminant production.
- Update and reinforce legislation to control stray animals and prevent overgrazing.

### **11.2 Intervention Area 2: Land Access, Pasture Development and Conservation**

Limited access to quality pastures constrains livestock productivity. Improving pasture development and conservation supports sustainable ruminant production.

#### **Priority Actions**

- Rehabilitate existing sylvo-pastoral areas across the island.
- Promote establishment of individual pastures to increase fodder availability.
- Initiate research on fodder production and conservation techniques.

### **11.3 Intervention Area 3: Water Security**

Limited water availability during dry periods reduces livestock productivity and welfare. Strengthening water infrastructure and protection measures is essential.

#### **Priority Actions**



- Secure additional water ponds for livestock production.
- Construct regional livestock water points and troughs to ensure adequate drinking water access.
- Enforce legislation to minimise pollution and degradation of water resources.

#### **11.4 Intervention Area 4: Animal Health and Welfare**

Exposure to transboundary diseases poses significant risks to livestock health and productivity. Strengthening veterinary capacity and biosecurity is essential to safeguard the sector.

##### **Priority Actions**

- Strengthen veterinary services through recruitment of additional veterinary personnel.
- Develop and implement disease preparedness and response plans for transboundary risks.
- Intensify border controls to reduce the risk of disease introduction.
- Introduce a veterinary drug refund scheme to support farmers.
- Strengthen farm-level biosecurity measures.
- Establish a post-quarantine station to ensure effective sanitary control of livestock movements.

#### **11.5 Intervention Area 5: Value Chain Development and Marketing**

Limited processing and marketing infrastructure constrain value addition in the livestock sector. Strengthening local processing capacity supports market development and income generation.

##### **Priority Actions**

- Operationalise the Baie Diamant slaughterhouse.
- Promote establishment of individual meat processing facilities.
- Strengthen capacity of meat processors on food safety, packaging and labelling standards.

#### **11.6 Intervention Area 6: Waste Management**

Livestock waste management presents both environmental risks and resource opportunities. Promoting recycling and composting supports circular and sustainable livestock systems.

##### **Priority Actions**

- Introduce incentive schemes to encourage recycling of livestock waste.
- Promote composting schemes to add value to livestock waste.

#### **11.7 Intervention Area 7: Breeding and Genetic Conservation**

Genetic limitations constrain productivity and resilience of local livestock breeds. Strengthening breeding strategies supports herd improvement and sustainability.

##### **Priority Actions**

- Facilitate importation of new genetic material to reduce inbreeding and improve local livestock performance.

# **FISHERIES SECTOR**

## ENSURING FOOD SAFETY AND SECURITY: CONTRIBUTIONS OF THE FISHERIES SECTOR

Mauritius' fisheries and aquaculture underpin national food security and public health through regulated harvesting, processing and trade of fish and fish products. The Fisheries Act 2023 and its implementing regulations strengthen licensing, aquaculture development, import controls, disease management and food-safety oversight along the value chain. The Competent Authority – Seafood (CASF) certifies fishery products for export (notably to the EU) using farm-to-fork HACCP principles and routine inspections. Training delivered by FiTEC upgrades fishers' skills and safety, shifting effort toward sustainable off-lagoon fishing around anchored FADs (AFADs) and improving fish handling, preservation and marketing. Marine protected areas, closed seasons and quotas support stock conservation, while a Fish Toxicity Laboratory screens ciguatoxin (toxic fish list maintained), safeguarding consumers.

On the pelagic side, the Pelagic Fishery Unit collects and analyses catch/effort and biological data (logbooks, landings, size frequencies) from Mauritian and foreign-licensed fleets. These data inform responsible management nationally and feed into IOTC stock assessments, ensuring harvesting remains within ecological limits. Aquaculture is promoted with technical assistance, seed distribution (e.g., red tilapia fingerlings and freshwater prawn juveniles at subsidised rates) and a marine ranching programme that periodically releases fingerlings to replenish lagoon stocks.

Looking forward, the sector must modernise technology (AI tools in aquaculture, digital production reporting), upgrade infrastructure and certification for artisanal chains, enhance observer coverage and anti-IUU measures, replace legacy rosary AFADs with SMART AFADs, refresh the toxic fish list as oceans warm, expand aquaculture zones with streamlined authorisations, reduce post-harvest losses through cold chain and value addition, stabilise supply during festive peaks (targeted imports) and reinforce inter-agency/ regional collaboration to embed resilience in a changing climate and market context.

### 1.1 Intervention Area 1: Food Safety, Certification and Traceability

Fragmented capacities and uneven compliance in artisanal, small processors and farms risk food-safety lapses and market access constraints.

#### Priority Actions:

- Strengthen the regulatory and institutional framework for seafood safety under a unified governance approach.
- Extend certification and HACCP support to artisanal fishers, small processors and aquaculture farms.
- Build a national digital registry of certified operators with traceability (landing → handling → markets).
- Maintain and routinely update toxic fish lists, risk communication protocols and public advisories.

## **1.2 Intervention Area 2: Sustainable Fisheries and Stock Conservation**

Lagoon pressure, climate stress and variable compliance threaten stock health and long-term yields.

### **Priority Actions:**

- Replace legacy rosary AFADs with SMART AFADs; optimise siting and maintenance at confirmed locations.
- Enforce closed seasons/MPAs/quotas; scale marine ranching (fingerling releases) for stock rebuilding.
- Strengthen on-board/landing inspections, port sampling and compliance checks.
- Expand observer programmes and electronic monitoring to improve catch data quality.

## **1.3 Intervention Area 3: Combating Illegal, Unreported and Unregulated (IUU) Fishing**

IUU undermines conservation, revenue and food safety through unverified landings.

### **Priority Actions:**

- Intensify MCS (monitoring, control, surveillance) with VMS/AIS, joint patrols and risk-based audits.
- Implement deterrent sanctions (license suspension, product seizure) and transparent enforcement reporting.
- Enhance regional cooperation for information-sharing and joint actions along transboundary routes.

## **1.4 Intervention Area 4: Pelagic Data, Science and Regional Engagement**

Management requires robust evidence and alignment with regional science and measures.

### **Priority Actions:**

- Consolidate logbook, effort, landing and size-frequency data flows; improve validation and analytics.
- Maintain timely submissions to IOTC; align domestic measures with adopted conservation rules.
- Invest in marine research (stock structure, spatial distribution, climate impacts) to guide policy.

## **1.5 Intervention Area 5: Aquaculture Development and Innovation**

Untapped farming potential is constrained by site access, permitting, data gaps and technology uptake.

### **Priority Actions:**

- Expand and gazette aquaculture zones (marine & freshwater) with environmental safeguards.
- Establish a one-stop shop for licenses (e.g., fisherman/oyster farming cards), EIA support and service timelines.
- Deploy AI-based predictive models for real-time farm monitoring (growth, health, feed, water quality).
- Roll out digital tools to capture farm production data (mobile reporting, dashboards).
- Continue targeted seed supply and technical assistance (e.g., tilapia, freshwater prawn).

### **1.6 Intervention Area 6: Capacity Building for Fishers and Value Chain Actors**

Skills gaps in off-lagoon fishing, handling, preservation and marketing reduce value and safety.

#### **Priority Actions:**

- Scale FiTEC training for responsible off-lagoon fishing (AFAD operations, safety at sea) and untapped resources (e.g., squid).
- Expand courses in fish handling, preservation & marketing; promote hygiene and cold-chain basics.
- Provide business skills (record-keeping, costing, market requirements) to artisanal operators and MSMEs.

### **1.7 Intervention Area 7: Post-Harvest Infrastructure, Cold Chain and Value Addition**

Post-harvest losses and quality variability limit domestic supply and export potential.

#### **Priority Actions:**

- Upgrade landing, icing, storage and transport infrastructure at key sites.
- Support value-addition (filleting, ready-to-cook, smoked/dried products) and packaging standards.
- Facilitate market access and reliable transport links to reduce spoilage and price volatility.

### **1.8 Intervention Area 8: Market Stability and Seasonal Supply**

Demand peaks (festive seasons) outstrip landings, causing price spikes and shortages.

#### **Priority Actions:**

- Allow targeted, time-bound imports of specified species to meet seasonal demand without undermining local fishers.
- Enhance market information (landings, prices, availability) to improve planning along the chain.
- Encourage contracts/forward planning with processors/retailers to smooth supply.

### **1.9 Intervention Area 9: Governance, Investment and Blue-Economy Resilience**

Multi-agency roles and fragmented programmes can dilute delivery and deter private investment.

#### **Priority Actions:**

- Operationalise Fisheries Act 2023 through clear mandates, SOPs and performance monitoring.
- Foster intra-departmental cooperation on shared goals; create an investment facilitation window.
- Attract private capital via bankable pipeline (AFAD modernisation, cold chain, aquaculture parks, biowaste).
- Deepen regional collaboration (science, enforcement, trade facilitation) to leverage scale.