

LES ASSISES DE L'AGRICULTURE 2026:

SMART AGRICULTURE FOR A RESILIENT MAURITIUS



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CLUSTER 2: CROP

Regenerative and Sustainable Agriculture
Climate Resilience, Adaptation and Disaster Preparedness

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Focus and Objectives

Regenerative and Sustainable Agriculture

Promotes regenerative and sustainable farming systems that **restore** soil fertility, and integrate **circular economy** approaches, thereby ensuring long-term productivity and **climate-resilient** sustainability.

Climate Resilience, Adaptation and Disaster Preparedness

Strengthens Mauritius' agricultural **resilience** to climate shocks through adaptation, mitigation, disaster preparedness, and risk management, ensuring **food security**, **sustainable** production, and farmer protection.

Main Challenges

- **Degradation of Soil Quality**
- **High dependency on chemical inputs**
- **Limited organic inputs and circularity**
- **High post-harvest losses**
- **Climate Vulnerability**
- **Weak early-warning systems**



Domains of Intervention

**Disaster Risk Assessment
and Early Warning
Systems**

**Climate-Resilient Crop
Development**

**Adaptation and Mitigation
Strategies**

**Waste Management and
Food Loss Reduction**

**Institutional Coordination,
Research & Safety Nets**

Disaster Risk Assessment and Early Warning System

Implement **satellite imagery**, **drones**, and AI-based predictive models for real-time field assessment.

Scale up the network of **Automatic Weather Stations** to improve local climate data coverage and accuracy.

Promote **water harvesting**, **improved drainage**, bioswales and vegetative barriers into disaster-preparedness plans for high-risk zones.

Establish a **National Agricultural Disaster Database** to centralise damage assessment and yield loss data.

Proposed Flagship Intervention
Develop an Integrated Climate Risk Intelligence Systems for Early Action and Response



Climate-Resilient Crop Development

- Formulate a **National Crop Breeding** and Seed-System Strategy to develop drought, heat and pest tolerant varieties.
- Scale up **Quality Declared Seed (QDS)** production.
- Promote **traditional climate-resilient crops**.
- Establish a multidisciplinary **Rapid-Response Task Force** for emerging pest and disease threats related to climate change.

Proposed Flagship Intervention
Establish a National Crop Innovation and Seed Programme



Adaptation and Mitigation Strategies

- Establish **Integrated Soil Health Programmes**.
- Develop model **Integrated Crop–Livestock** demonstration farms.
- Support **renewable energy systems** in agriculture including solar-powered irrigation, biogas and agrivoltaics.
- Encourage **permaculture, Agroforestry** and **regenerative farming** practices to improve carbon sequestration.
- Integrate **regenerative agriculture** into national climate strategies and reporting frameworks.

Proposed Flagship Intervention

Develop a National Agroecology Transition Programme



Waste Management and Food Loss Reduction

- Establish **regional composting units** using segregated organic waste, including seaweed.
- Develop **quality** and safety standards for compost and organic soil amendments.
- Support processing facilities for surplus produce to **extend shelf life** while creating new market products.
- Establish **community level** cold rooms and conditioning facilities for smallholder clusters and cooperatives.

Proposed Flagship Intervention
Implement a Circular Economy and Waste Valorisation Strategy



Institutional Coordination, Research & Safety Nets

- **Central Coordination**

Align ministries, parastatal bodies, research institutions, and local authorities for integrated policy implementation.

- **Capacity Building**

Strengthen researcher, extension officer and farmer skills in climate risk analysis, digital tools, soil health, and circular agriculture.

- **Research & Innovation**

Promote R&D in climate-smart and regenerative agriculture.

- **Policy & Safety Nets**

Provide targeted subsidies, insurance schemes, and disaster relief to protect farmers from climate and economic risks.

Proposed Flagship Intervention

Promote a National Agricultural Resilience Framework

Thank You!

Together, initiating a constructive dialogue for a resilient, regenerative, and inclusive agricultural future.

