



Product Development and Model Enhancements

Update on CCRIF's recent product development and model enhancements. The focus is on the latest advancements in risk modeling and product offerings.



SPHERA Model Update



Tropical Cyclone Model

The SPHERA TC model maintains its core functionality with only a minor refinement to the asymmetry parameter. This adjustment is not expected to significantly impact policy costs.



Earthquake Model

The SPHERA EQ model continues with its current configuration, ensuring consistent risk profiles for countries compared to the previous year.



Excess Rainfall: NASA IMERG Upgrade

IMERG v7 Upgrade

NASA upgraded its IMERG dataset to v7. This change impacted the performance of CCRIF's XSR product.

XSR v3.1 Upgrade

CCRIF upgraded its model to XSR v3.1 to address the performance impact of the IMERG v7 upgrade.

Risk Profile Changes

New risk profiles issued for each country. Potential changes to policy parameters will be discussed during renewal meetings.

Integrating Ground Station Data



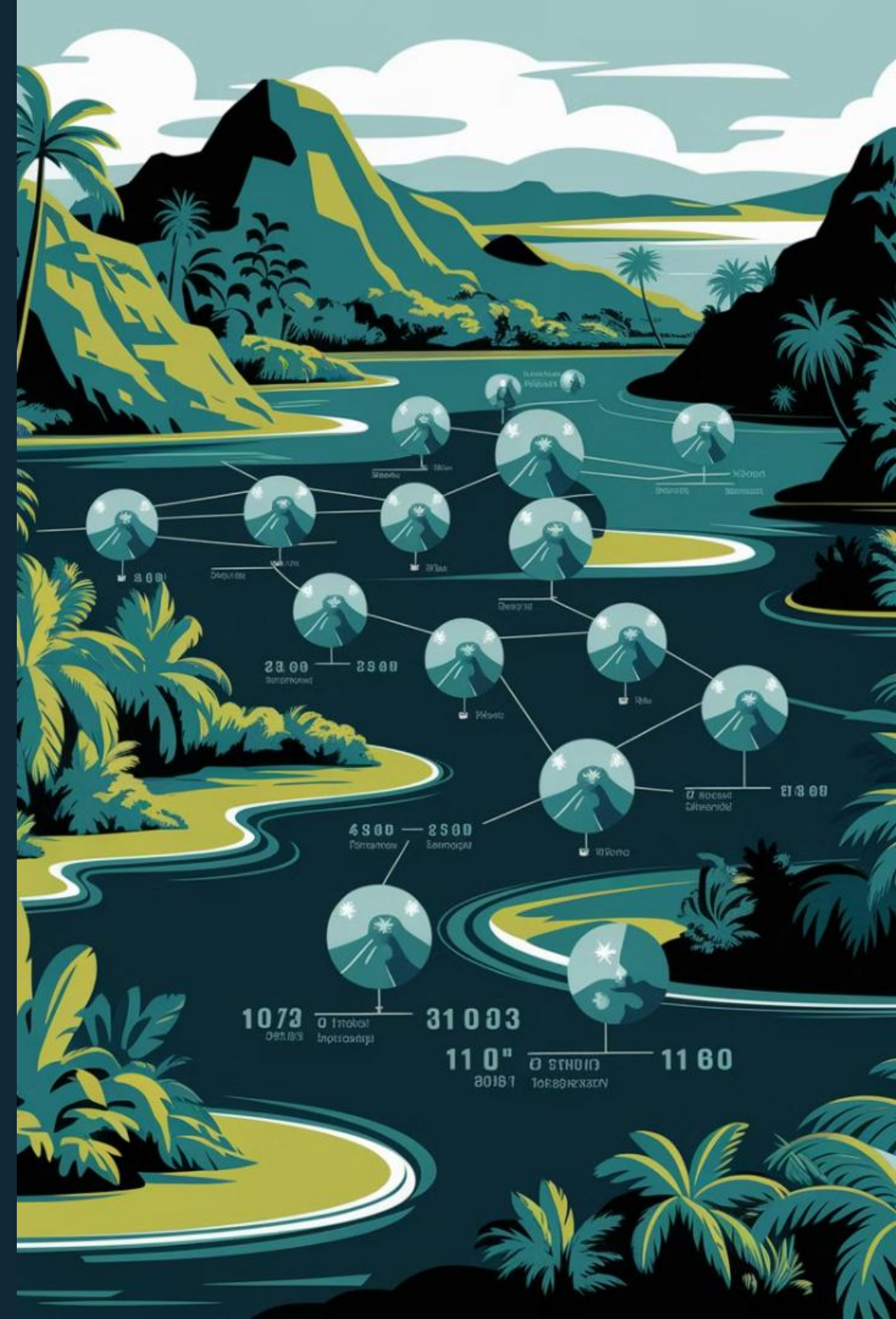
Ground Station Integration

CCRIF commissioned a study on integrating ground station data in the XSR model. Aims for a pilot program in Dominica and Belize in 2025/26.



Further R&D

R&D will take place in partnership with country experts to refine the model.





Runoff Model Implementation

1

Model Completion

The runoff model is complete and ready for implementation. Suitable for larger countries with significant river flooding.

2

Initial Implementation

Guyana and Suriname are the initial countries for implementation.

3

External Review

The product is undergoing an external review, consistent with CCRIF standards.

4

CWUIC Policies

Potential use in CWUIC policies, starting with Guyana and Suriname.

COAST Product Development

1

Current Coverage

Currently covers TC, storm surge, and business interruption from adverse weather.

2

Wave Impact Integration

R&D is ongoing to include direct wave impact in the product.

3

Secondary Trigger

Wave impact will serve as a secondary trigger.



Livelihood Protection Policy (LPP)

1

Model Change

Significant changes with a new downscaled application of SPHERA and XSR models.

2

Index Level

Indices are produced at administrative unit level 1.

3

Target Distribution

Targeted for Jamaica, St Lucia, Grenada, Belize, and Trinidad and Tobago.



LPP Distribution and Role



Micro Insurance Product

Designed as a micro insurance solution underwritten by the local insurance market to protect individuals and small businesses.



Government Participation

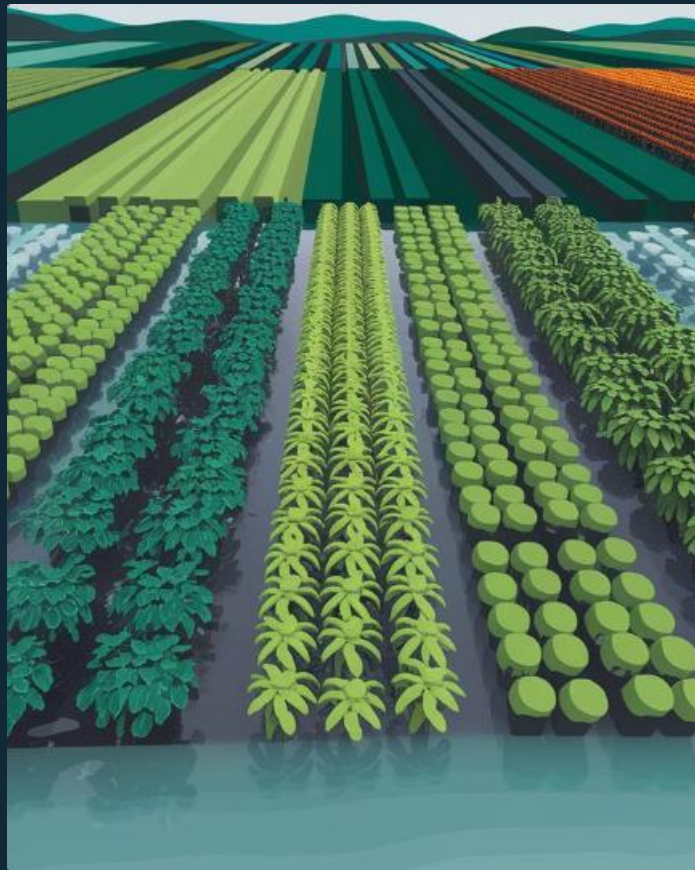
Governments can take an active role by subscribing to group policies to protect their citizens.



CCRIF Support Structure

CCRIF provides essential infrastructure through product setup, calculation services, digital platform management, and reinsurance support.

Agriculture Insurance Product



Multi-Peril Coverage

CCRIF is finalizing a multi-peril agricultural insurance product to protect against various risks.



Drought Protection

Drought model based on the Standard Precipitation and Evapotranspiration Index (SPEI) provides comprehensive drought coverage.



Weather Event Coverage

Protection against tropical cyclone winds and excess rainfall events that can impact crops.



SPEI Drought Model Details

SPEI captures precipitation deficits. It accounts for the impact of extreme heat on soil water evapotranspiration. The SPEI model is developed in partnership with Gallagher Re.



Covered Crops

Core Crops

Initial coverage includes banana, coffee, rice, sugar cane, and maize.

Generic Category

A generic category will cover other types of crops.



Index and Policy Structure

1

Index Level

Index and trigger are at administrative unit level 1.

2

Policy Structure

The policy will be structured similarly to COAST.

3

Group Policy

Government takes a group policy on behalf of farmers and agriculture-dependent populations.

Agriculture Insurance: Benefits

1 Risk Transfer

Provides risk transfer mechanisms for agricultural stakeholders.

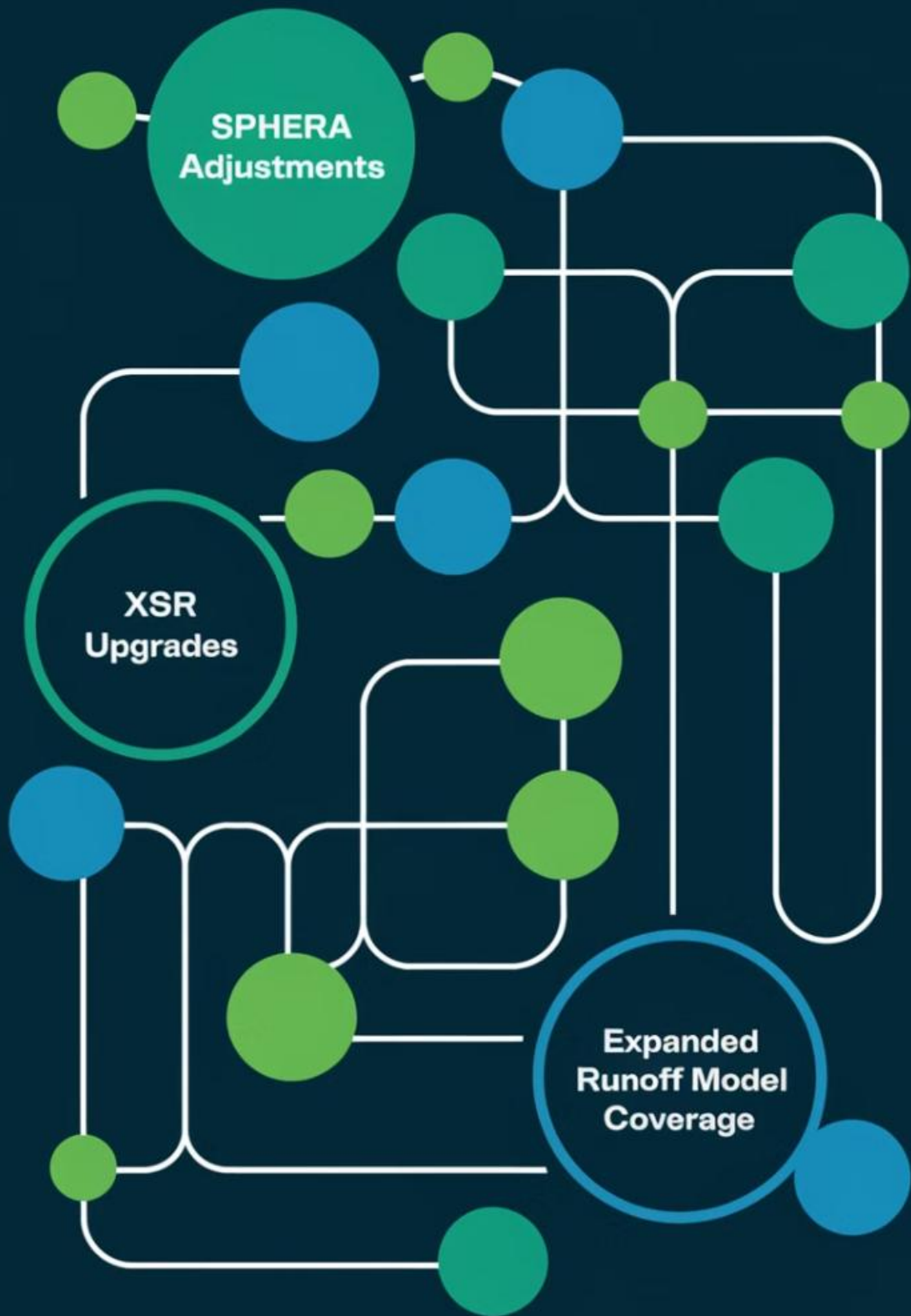
2 Economic Stability

Promotes economic stability and resilience in agriculture.

3 Food Security

Supports food security by protecting crops from various perils.





Model Enhancements: Key Takeaways

- SPHERA model adjustments ensure accuracy.
- XSR upgrades address data changes.
- Runoff model expands coverage.

Product Development: Next Steps

Continued R&D for COAST product. LPP rollout in target countries.
Finalizing agriculture insurance for implementation.



Looking forward



Risk Coverage Expansion

Investigation of coverage solutions for extreme heat, volcano, and tsunami risks



Housing Protection

Product specific to vulnerable housing structures



Tourism Workforce Protection

Specialized coverage for tourism industry workers



Financial Risk Solutions

Development of investment and loan de-risking solutions

Questions?

