CASE STUDY - WATER

MAURITIUS

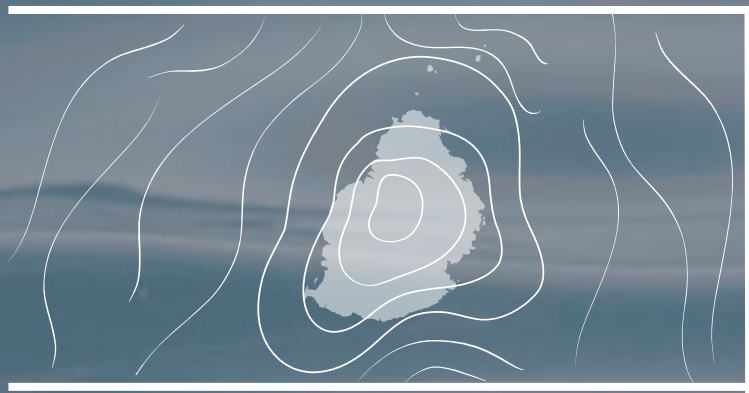
CONTEXT

Observations suggest that rainfall patterns have changed over the last decades.

Extreme rainfall events and intra-seasonal variability pose challenges for water resource management.

The water sector relies on 6-month seasonal outlooks and statistical models issued by the Mauritius Meteorological Service (MMS).

This study aims to improve spatiotemporal resolutions to manage water for domestic, industrial and agricultural use.



TOOLS & APPROACH

Collate historical data for rainfall and streamflow

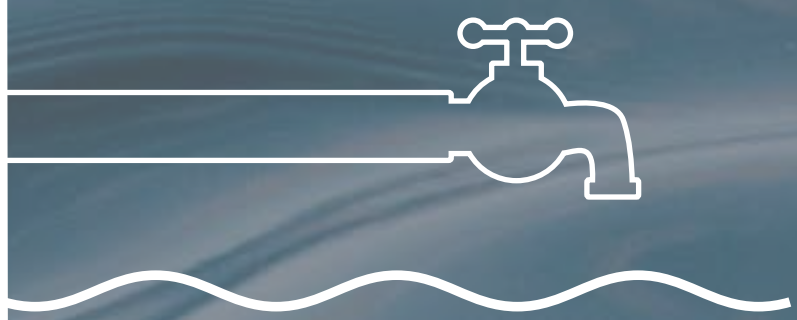
Apply downscaling techniques

Assess model skill for different lead-time

EXPECTED RESULTS

1 Generation of current and expected rainfall, drought and related likelihoods.

2 Developed thresholds for triggering drought or wet conditions alerts as a decision support tool.



CLIMATE SERVICES

BASELINE

Biannual seasonal forecast derived from consensus forecast (SARCOF; SWIOCOF) and a quarterly seasonal forecast with a simple downscaling analogue model.

INNOVATION

High-resolution statistical downscaled rainfall forecast.

High-resolution seasonal forecast verified and optimized for different watersheds.

Drought forecasting and monitoring early-warning system.

THE TEAM

RESEARCH PROVIDER	SERVICE PROVIDER	END USER
CSIR Touching lives through innovation	MMS	WATER SECTOR

FOCUS-**AFRICA**

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