# The FUTURE of WATER in CURAÇAO

"The past can no longer effectively predict the future, while we assume largely fixed and stable conditions in our decision-making"

-UN Water-

DIWC

*P. Girigori de Flores Martinez MSc Secretaris CIWC* 

## Overview

- Who are we?
- Root cause analysis of the water problem
- Vision and policy objectives
- Proposed strategy

## **Members of the Committee**















## **Structure of the Commission**

The Project Management Team consists of:

- Chair of the Cie: Mrs. V. Toré
- Member of the Cie: Mrs. C. Profas
- Civil engineering expert: Mr. G. Gijsbertha
- Secretary: Mrs. P. Flores-Girigori











#### **REGERING VAN CURAÇAO**

COMMISSIE INTEGRAAL WATERMANAGEMENT CURAÇAO

Root cause analysis

## **Current Situation**



No data: Target 6.6 on waterrelated ecosystems

## **Root cause Analysis**



## **Climate Variability**

A dataset can be characterized by a mean and a variance

- The **mean** indicates the expected value of a random variable
- the **variance** is used as a measure of how far a set of numbers are spread out around the mean

Why is the change in climate variability important??



## **Climate Variability: Temperature**

Maximum (TNx) and minimum (TNn) of daily minimum Temperature Maximum (TXx) and minimum (TXn) of daily maximum Temperature



Girigori, P. J. (2011). Impact of climate change on small islands; Curaçao a case study on climate change in climate variability. Meteorological Department Curaçao. Unpublished.

## **Climate Variability: Temperature**

Change in periods of consecutive lower temperatures (CSD) and periods of consecutive warmer temperatures (WSD)



The diurnal temperature range is the difference between the maximum and minimum temperature



Year

## **Climate Variability: Precipitation**



## **Expected Impacts: Curaçao**

### **Temperature Variability**

- An extremely likely (>95%) increase in temperature, warm spells and heat waves
- An extremely likely (>95%) increase in warmer and more frequent hot days and nights
- Increase in evaporation due to higher temperatures

### **Precipitation Variability**

- A more likely than not (>50%) increase of extreme rainfall events
- A more likely than not (>50%) increase of the dry season
- A very likely (>90%) increase in rainfall intensity

## **Root cause Analysis**





#### **R**EGERING VAN **C**URAÇAO

COMMISSIE INTEGRAAL WATERMANAGEMENT CURAÇAO

Vision and policy objectives

# *Curaçao, livable and sustainable through water.*

The Policy Objectives of this Policy are:

- Water efficiency By 2030, the residents and sectors on Curaçao will make efficient use of water.
- Water equity By 2030, water will be affordable for everyone and everyone will have access to safely managed water supplies;
- Water security By 2030, 50% of water sources will meet the established standards and requirements for quality;
- Water sustainability In 2030, all water sources on Curaçao will be sustainably managed;
- Water safety By 2030, the risk of flooding, coastal flooding, coastal erosion and drought will be sustainably managed to a nationally accepted level.



#### **REGERING VAN CURAÇAO**

COMMISSIE INTEGRAAL WATERMANAGEMENT CURAÇAO

Strategy & Instruments

Strategy I: Making the water management system circular





## **Strategy II: Application of water retention infrastructure**



# **Strategy III: Effective management of water resources**



## **Institutional Framework for Water**

#### **Best practice:**

One organization with the mandate for planning-. Development and management strategies







### Strategy VI: Strategic application of communication

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# Stakeholder Consultation:



https://www.publicpolicycuracao.com/

