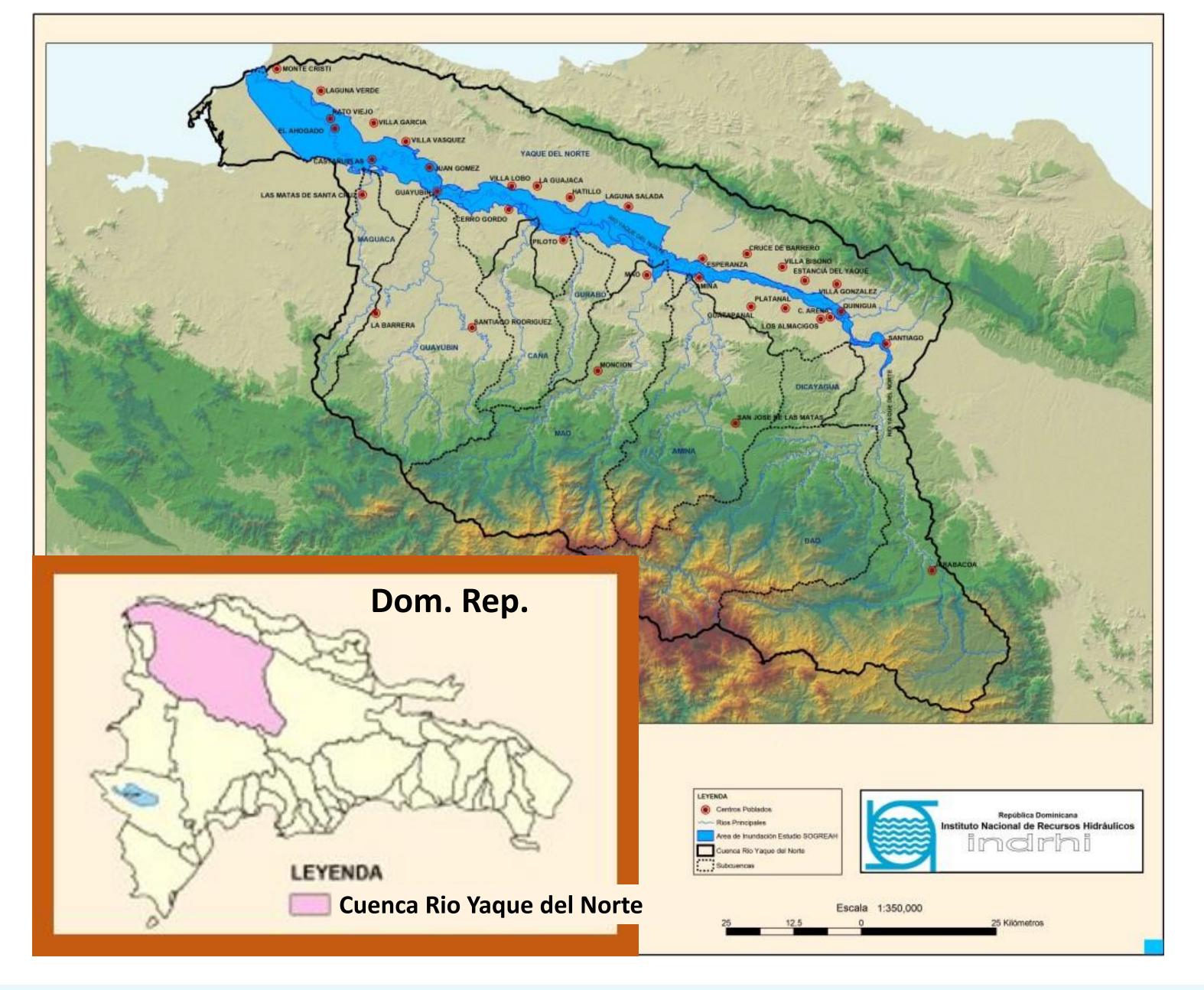
IMPLEMENTATION OF THE AWS STANDARD IN ORGANIC/BIODYNAMIC BANANA PLANTATIONS IN THE DOMINICAN REPUBLIC:

STUDY OF THE PLANTATIONS WATER MANAGEMENT AND CHALLENGES

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CONTEXT

Yaque del Norte river catchment:

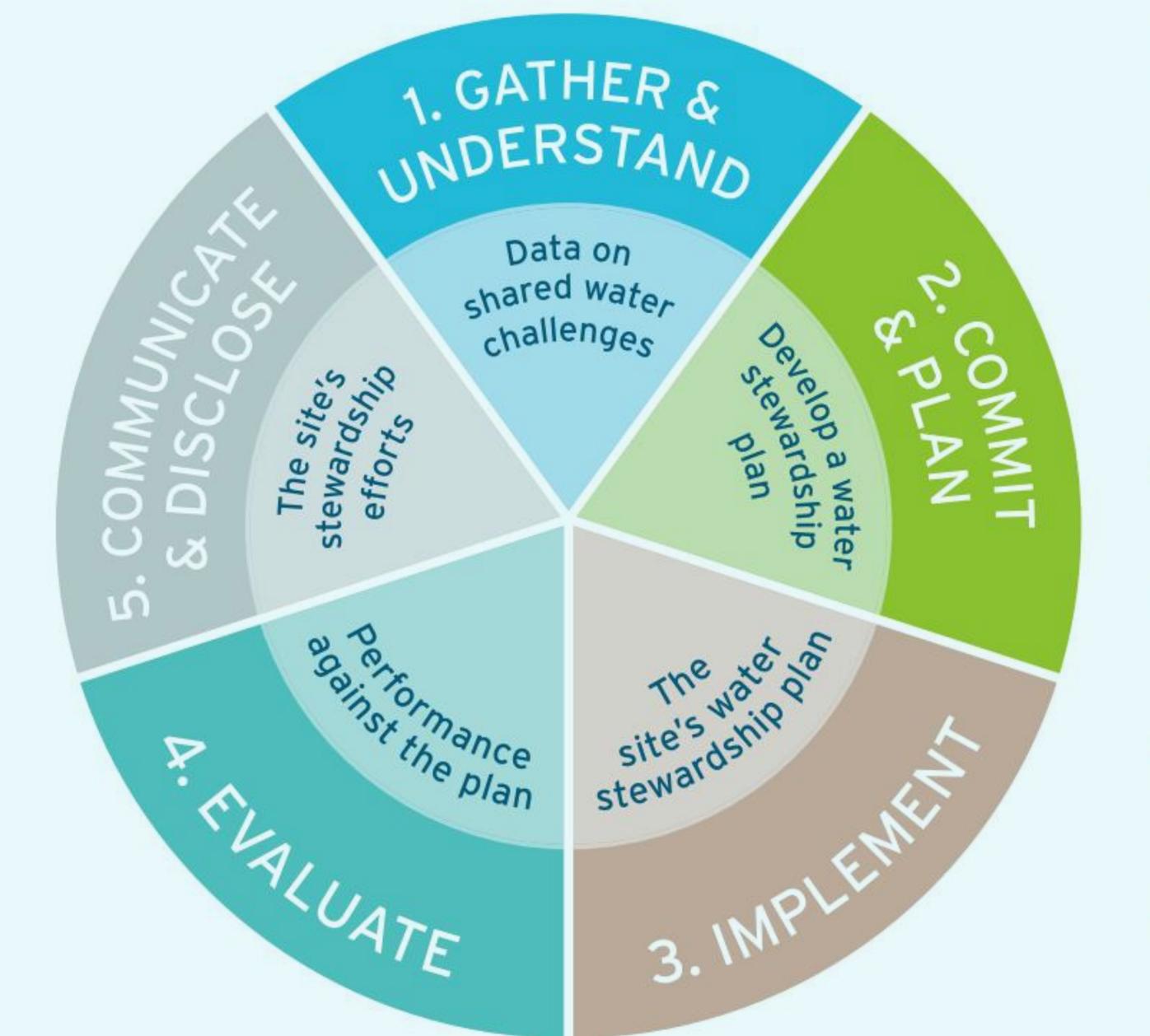
- tropical dry climate (precipitation < 900mm)
- 80% of the water used for the agricultural sector
- Pollution of water bodies
- Unsuitable policies in the last 50 years
- Inadequate use of soils, water demand exceeding availability
- Droughts and devastating climatic events

THE AWS PILOT PROJECT

2021: project started in 5 organizations. supported by the importers and the supermarket.

OBJECTIVES

implement good water stewardship principles that are:
« socially and culturally equitable, environmentally
sustainable and economically beneficial, achieved through
a stakeholder-inclusive process that involves **site-and catchment-based actions**." Alliance for Water
Stewardship (AWS)



IMPLEMENTATION OF THE STANDARD IS INTENDED TO ACHIEVE FIVE MAIN OUTCOMES FOR THE SITE AND ITS DEFINED PHYSICAL SCOPE:











International Water Stewardship Standard (AWS Standard) - <u>www.a4ws.org</u>

Example of water supply by irrigation in a plantation

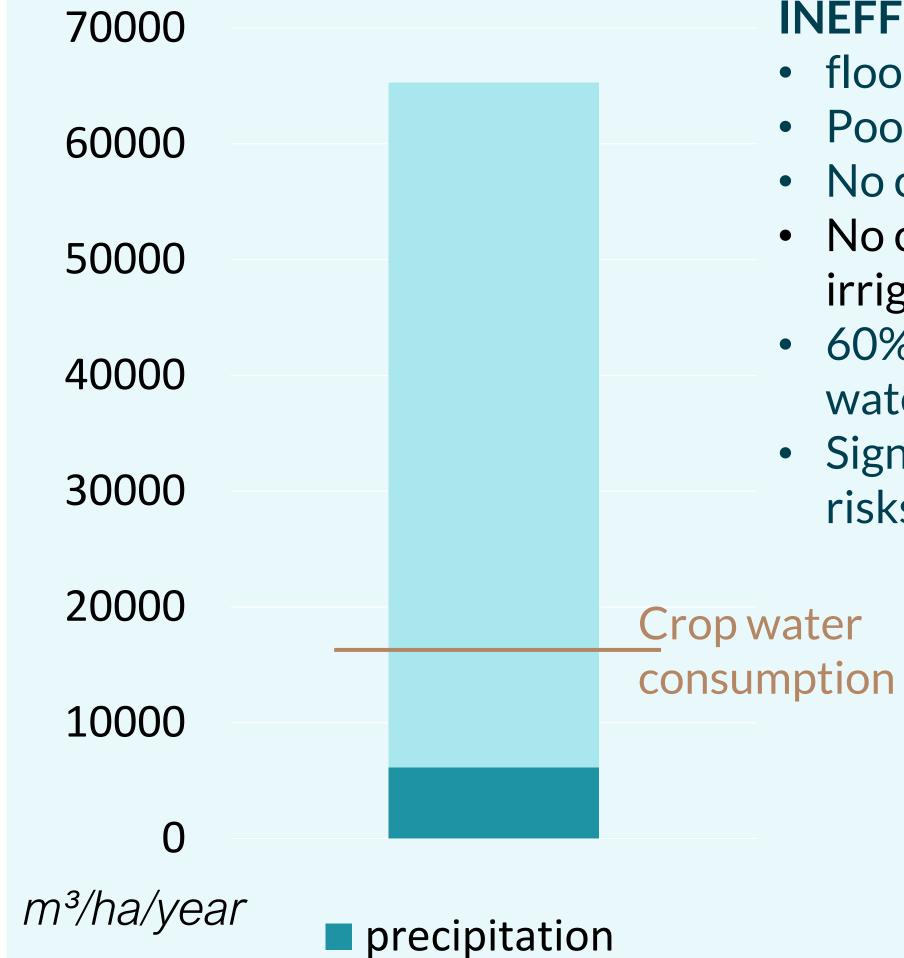
1. MAIN CHALLENGES OF THE PLANTATIONS

IRRIGATION

WATER

REQUIREMENT

15 217 m³/ha/year



Irrigation/year/ha

INEFFICIENT IRRIGATION SYSTEM

- flooding irrigation: high consumption-high losses
- Poor infrastructure
- No control over used water volumes nor quality
- No consideration of soil and climate conditions for irrigation
- 60% of water supply from irrigation but access to water unsecure
- Significant physical, regulatory and reputational risks associated

CROP WATER

CONSUMPTION

16 157 m³/ha/year

INADECUATE MANAGEMENT PRACTICES

- Alternating between water stress and excess of water
- Lack of staff training
- Fear of water shortage

VOLUME OF

WATER APPLIED

59 139 m³/ha/year

- Short term profitability target
- Lack of economic motivation
- Lack of awareness about water preservation

IRRIGATION

EFFICIENCY

26%

2. OPPORTUNITIES

DEVELOPP ACTUAL STRATEGIES

- Agricultural practices for water retention and evacuation
- Strategies for saving water
- Mitigation of water risks in the fields

IMPLEMENT WATER STEWARDSHIP IN PLANTATIONS & BASIN:

Sustainable water stewardship according to the 5 step continual improvement framework (that enables sites to commit, understand, plan, implement, evaluate and communicate water stewardship):

- Governance: Involve with relevant stakeholders of the basin and associate with AWS implementers
- Make long term changes towards continual improvement
- Water balance: Monitoring and scheduling irrigation, infrastructure, training of the workers, securing water supply and anticipating risks.

CONCLUSION AND PERSPECTIVES

Early benefits of AWS implementing:

- New challenges with huge potential for improvement
- Major benefit created through data collection: realizing the site's and basin's shared risks and challenges, the importance of water preservation, and basin-wide actions and the stakeholder's commitment.

Major difficulties faced:

Governance in the water sector institutionally backward, lack of regulation and coordination.

Inequalities between smallholders and companies with large areas > 100 ha

Difficulty to implement theoretical concepts into the fields, particularities of the agricultural sector

Lack of economic motivation to implement this demanding standard.

Continuation of the project:

Implementation the rest of the standard up to certification. (first planned end of 2022/starting 2023)