



GEF-IWCAM Project

Integrating Watershed and Coastal Areas Management

GUIDE FOR POLICY MAKERS

Briefing Note #9

Integrated Water Resources Management (IWRM)

Barbados (430 km²)

Introduction

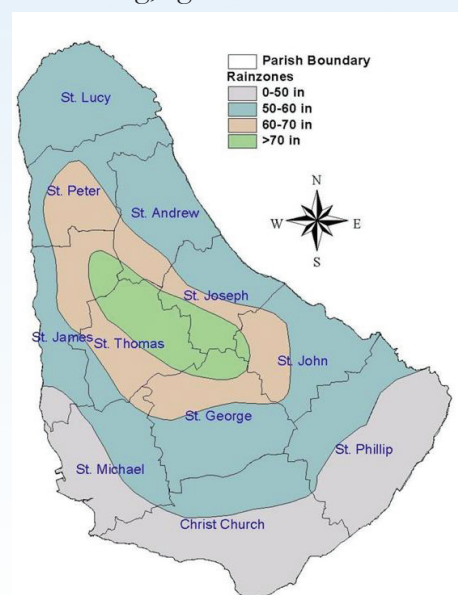
Barbados is considered one of the world's most water scarce countries. Although there is substantial rainfall, most of the rivers are dry due to the permeable nature of the karstic (limestone) soil which limits surface water.

The country's aquifers are vulnerable to contamination by land-use activities, especially the housing, agricultural and industrial sectors. Water, water management and pollution of groundwater and surface water run-off are issues that must be addressed as they impact negatively on quality of life and sustained economic growth and development.

Barbados already has difficulty in providing sufficient water for its population and for the tourism industry from its groundwater resources. To meet this demand, it has invested in an expensive desalination plant. If less groundwater becomes available in the future, the costs of water provision will increase significantly.

Climate Change is expected to negatively impact resources available for potable water and agricultural activities. Sea level rise can result in salt water intrusion into the freshwater aquifers and changed patterns of rainfall can lead to periods of drought.

In 2002 and 2003, three West Coast wells were closed due to over-extraction, which resulted in high salinity levels. This deprived the area of an important supply source and put severe pressure on the Barbados Water Authority (BWA) to make-up for the supply in the area serviced by these wells.



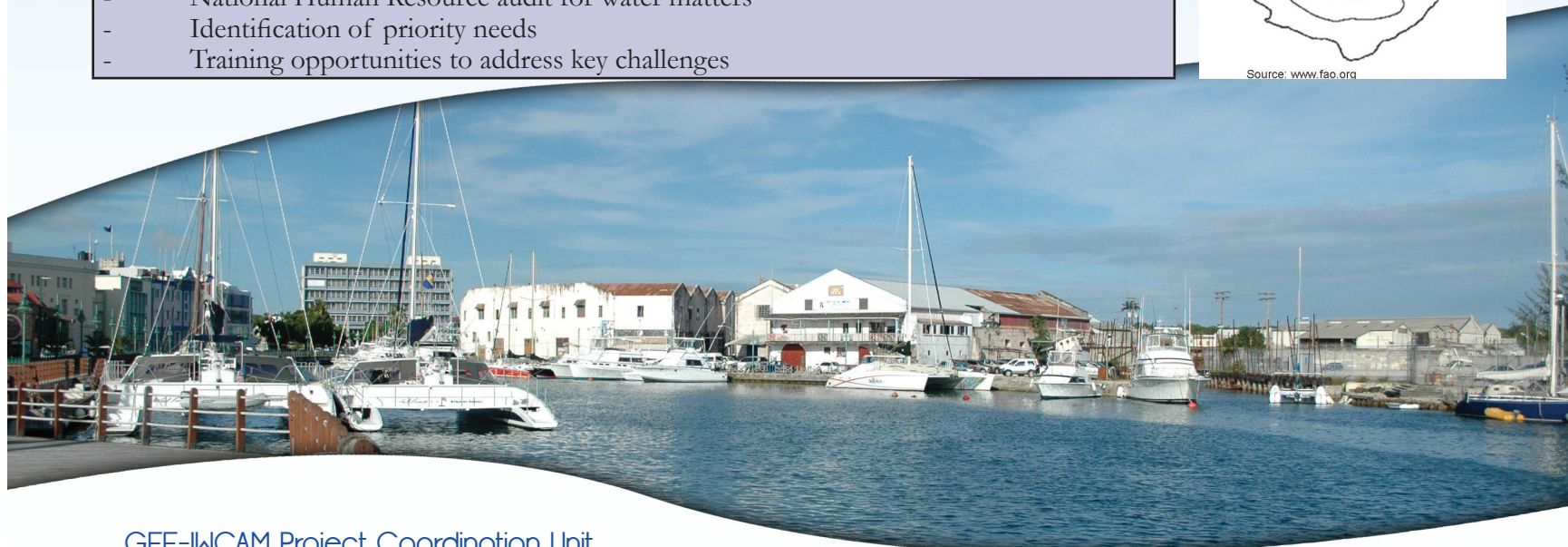
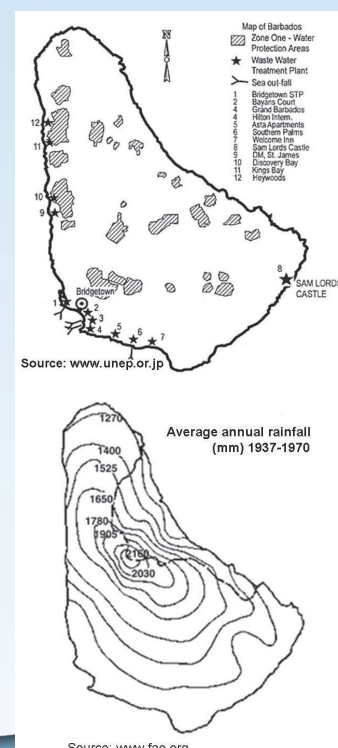


Issues and Challenges

- Efficient use of scarce water resources.
- Maintaining and upgrading the water services infrastructure.
- Resource protection from pollution sources.
- Pricing structure and cost recovery.

Next Steps

Governance framework <ul style="list-style-type: none"> - Development of a National Water Policy and implementation strategy
IWRM Information Management System <ul style="list-style-type: none"> - Centralized data system, for land, water, and coastal resources - Protocols to promote data sharing among government agencies - Decision support tool for policy makers
Outreach: Public Education and Awareness Programmes <ul style="list-style-type: none"> - Awareness building for government officials - Public involvement and community support for the IWCAM approach - Sector-specific information, sectoral messages and consultations
Review and Development of Incentives for Compliance & Enforcement <ul style="list-style-type: none"> - Review of existing environmentally related incentive schemes - Development of economic measures to increase inducocompliance with environmental regulations
Water Resources Development and Management Plans <ul style="list-style-type: none"> - Updating of existing studies and development of a National WRM Plan
Capacity Building <ul style="list-style-type: none"> - National Human Resource audit for water matters - Identification of priority needs - Training opportunities to address key challenges



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