

## SEYCHELLES WATER SUPPLY DEVELOPMENT PLAN 2008-2030

by Steve Mussard

14th African Water Facility Governing Council Meeting Tunis, Tunisia, 28-29 November, 2014

## Contents

- Background of Seychelles
- Existing situation
- Seychelles water development plan
- Summary of project
- Main issues addressed in the study
- Findings of the study
- 20-year investment plan
- Donor conference PUC's 5-year plan
- Achievement of the SWDP
- Funding for 5-year plan
- Status of implementation
- Raising of La Gogue dam project
- Assistance from AWF



## **Background of Seychelles**

- Population : 90,000
- 115 islands
- Annual rainfall : 2,300 mm
- Climate is temperate, temperature varies between 24 to 30°C
- Climate change challenge unpredictable rainfall pattern
- Topography of island limited potential for storage





## **Existing situation**

- Adequate rainfall during the year but inadequate storage facilities
- Water demand is approximately 38,000 m<sup>3</sup>/day
- Supply deficit of approximately 15,000 m<sup>3</sup>/day during dry periods
- > 50% non revenue water
- Limited investment in water sector there was no clear strategy to entice donors



Seychelles water development plan 2008-2030 (SWDP)

Against this backdrop of water scarcity, a study was commissioned with 2 main objectives:

- To prepare a comprehensive plan to satisfy the ever-increasing water demand in the three main Islands of Mahe, Praslin & La Digue up to the year 2030
- To mobilise investments in the sector



## **Summary of project**

- Name of Project : The Seychelles Water Supply Development Plan 2008 – 2030
- Executing Agency: The Public Utilities Corporation (PUC)
- Study commenced in February 2010 and ended in May 2011
- Study culminated with a donors' conference held in July 2011
- Total project cost was € 1,162,900 (AWF contribution was 82.1%)



## Main issues addressed in the study

- Study of the existing water supply systems
- Causal analysis of problems being encountered
- Examine possibilities for water supply enhancement
- Method for demand suppression
- Undertake a donor conference to present investment plan



## **Findings of the study**

- Current water deficit will aggravate in the future
- Storage capacity shortfall dam construction
- Shortcomings in wtp require basic refurbishment & upgrading
- Pipelines are old and leaking increasing NRW
- Limited demand side measures
- Refurbishment & upgrading of existing desalination plants



# 20-year investment plan to achieve water demand up to 2030

Action to be undertaken	Cost in USD / Million
Water resources	131
Water treatment plants	38
NRW Reduction + demand	26
suppression	
Improvement to networks	40
Telemetry	11
Total	246



### **Donor conference : PUC's 5-year plan**

- To mobilise funds for investment to reduce water deficit
- Present the 7 priorities of PUC's 5-year plan:
  - 1. NRW Reduction
  - 2. Water sources
  - 3. Water storage raising of existing La Gogue dam
  - 4. Water demand management
  - 5. Upgrade existing desalination plant + construction of new plants
  - 6. Organizational capacity
  - 7. Institutional changes



## **Achievement of the SWDP**

- Clearly defined issues with water systems
- Provided P.U.C with a clear strategy and a way forward
- Enabled PUC to secure funds to undertake several projects identified in the study
- As expected, created opportunity for the country to maintain economic growth



## Funding to meet 5-year plan

Sources of finance	Amount (million Euro)
E.I.B Loan	26.7
AFD loan	10.0
EDF Grant	2.4
AfDB grant	0.7
GOS	60.0
P.U.C	2.1
TOTAL	101.9



## **Status of implementation**

- Increase in desalination capacity (now 24,000 m<sup>3</sup>/day capacity)
- NRW programme in progress (target is 25% by 2017)
- Water treatments & weirs rehabilitation in progress
- New watersheds identified and project being initiated
- Feasibility study & detailed design for raising of La Gogue dam completed
- Water demand management programme & drought risk mitigation in progress
- Capacity building programme
- Total funds disbursed to date : € 50 Million



## **Raising of La Gogue dam project**

- Current storage is 1,000,000 m<sup>3</sup>
- Grant secured from AfDB to undertake feasibility & design
- Study completed in May 2011
- Dam can be raised by 6.0 m 60% increase in capacity
- GOS negotiating with AfDB to obtain loan for the project





## **Assistance from AWF**

- P.U.C is currently in discussion with AWF for a sanitation master plan
- Sanitation master plan will be an integrated approach to complement SWDP
- On behalf of GOS, PUC wish to express its gratitude for support provided by AWF in the water & sanitation in Seychelles





#### THANK YOU