

# Sea water desalination plant

- > Build a sea water desalination plant to obtain drinking water that can also be usable for irrigation



## LOCATION

- Coastal area of Senegal



## STUDIES

- Feasibility: carried out
- Environmental and Social Impact: to be finalized



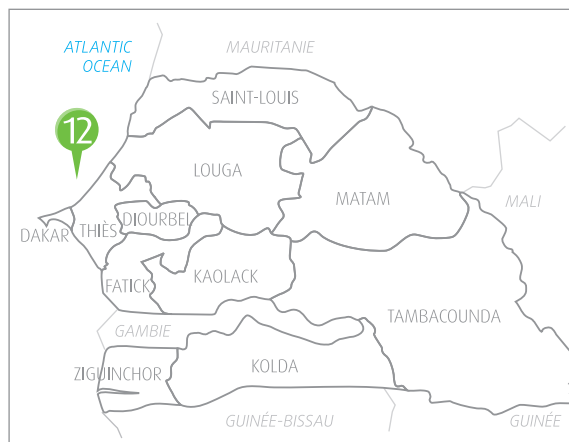
## ESTIMATED COST

- 80 million US\$



## ACTORS

- Ministry of Agriculture and Rural Development
- Ministry of Water Resources



## CHARACTERISTICS



- Construction of an outlet into the sea
- Set up a raw water pumping station and a pre-treatment unit (pre-chlorination, floatation, clarification)
- Construction of storage and sludge drying infrastructure (storage and dehydration)
- Set up a reverse osmosis unit and a post-treatment unit (re-mineralization and final disinfection)
- Install a pipe to transfer water to the existing reservoirs
- Construction of operation buildings and a pipe for discharging brine
- Establish a system for connection from SENELEC's 90 KV loop (underground cable)
- Establish an autonomous energy generation plant



## SPECIFIC OBJECTIVES

- Contribute to meeting the drinking water needs of the population of Dakar by 2025
- Ensure an additional production of 50 000 m<sup>3</sup>/day by 2017 for the region de Dakar
- Make electricity available to about 200 000 additional people in Dakar by 2017
- Improve the quality of water distributed in the Dakar suburbs
- Reduce diseases linked to the water quality and improve the living conditions of the populations



## OVERVIEW OF THE SECTOR

- Inadequate satisfaction of the populations' drinking water needs
- Need to increase and diversify the drinking water sources
- High demand for salt export on the international market