



Country
Senegal

Client
COSEC and OMVS

Date
2000-2005

Sogreah's services
► Design Services

Description / Particularities

- Over the years, the river mouth has been shifting southwards.
- This is caused by the progression of the spit known as the "Lingue de Barbarie".
- This southward shift has resulted in a rise in water surface curves in the river.
- Consequences for the city of Saint-Louis: aggravation of flooding risks, problems of stormwater and wastewater disposal.
- The southward progression of the river mouth is threatening a nature reserve.

Detailed services

- For COSEC:
 - Hydrosedimentary assessment of the estuary's future.
 - 2D hydrodynamic modelling of currents, salinity and flood levels.
 - proposal of development scenarios and recommended solution (controlled cut-off of the "Lingue de Barbarie").
- For OMVS:
 - 3D physical model sedimentology study concerning the impact of the scenario and the stability of the new sea mouth.

- Determination of accompanying measures.
- Preliminary design of the structures: breakwaters, channel.
- Environmental monitoring plan.