

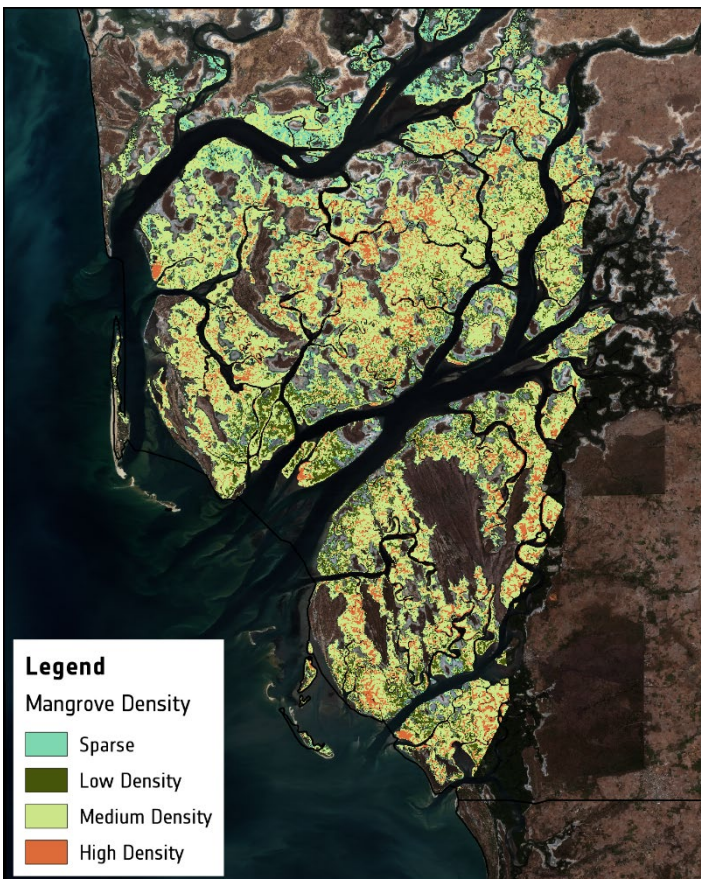
DELTA DU SALOUM

SPOTLIGHT

“The Sine Saloum Delta is a biodiversity-rich mangrove ecosystem on Senegal’s Atlantic coast. More than 100,000 inhabitants depend on the mangroves for their livelihoods. The Delta faces many threats including destructive use of the mangroves and climate change impacts.”

| Eijk & Van Lavierien, Wetlands International ¹ |

MANGROVE INVENTORY AND CHARACTERISATION



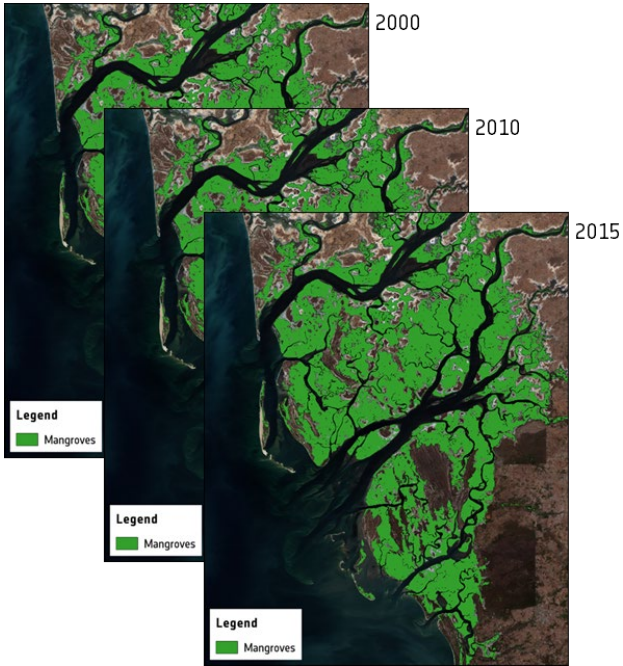
Description: The coastal wetlands in Delta du Saloum (Senegal) provide many benefits including coastal protection, flooding control and provision of fresh water. Still, the delta has been heavily degraded and large areas of mangroves have been lost since the 1950s. The GlobWetland Africa toolbox can assist wetland conservation and restoration planning in the Saloum delta by delivering monitoring information on e.g. the extent, state and evolution of Mangrove forest.

FAST FACTS

- The Delta is located in the Saloum national park in Senegal at the mouth of the Saloum river and the Sine river, flowing into the North Atlantic Ocean
- The area covers 73,000 ha
- The site includes dune areas with dry, open forests and extensive mangrove forests dissected by saline and brackish channels, lagoons, islands and islets
- The site also supports a variation of fauna including numerous species of notable mammals, four species of breeding turtles and an array of nesting waterbirds and wintering Palearctic migrants
- The coastal wetlands of the Delta are buffers against disasters as the area acts as coastal protection, flooding control and provision of freshwater preventing floods, droughts and tropical hurricanes
- However, the area has been heavily degraded over the years, and since 1950 huge areas of mangroves have been lost to deforestation for timber, agriculture and infrastructure developments
- It is both a RAMSAR site, a Biosphere Reserve and a UNESCO World Heritage Site



Location map of the Saloum delta in Senegal

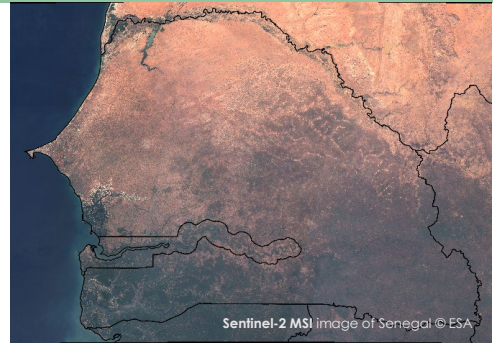


Description: The Globwetland Africa toolbox can provide users with accurate predictions of the extent and change of Mangrove forest. Historical satellite imagery from the Landsat program are used to provide maps of previous Mangrove extension which is then being related to the current state and extent of Mangroves as revealed by timely data from e.g. Sentinel-1 and -2.



Challenges: There is a whole suite of challenges facing mangrove ecosystems in the Sine Saloum Delta, including a decline of freshwater, intrusion of salt water, over-exploitation of timber and fishery resources, land use changes such as clearance for agriculture, and ill-planned developments, such as offshore oil and gas exploration, and climate change. A rapidly growing population with limited alternatives to destructive mangrove use has increased these pressures.

GlobWetland Africa toolbox is designed to provide the reference information needed to adapt and modify Mangrove conservation and restoration plans in a timely manner and based on valid scientific information derived from Earth Observation data.



Sentinel-2 MSI RGB image showing the territory of Senegal.

Outstanding Universal Value

The region of the Saloum Delta is a remarkable testimony to the synergy between a natural environment with extensive biodiversity and a style of human development that is still present albeit fragile.

- With its numerous shell mounds, associated landscapes and the presence of a rare and well-preserved ensemble of funerary tumulus mounds, the Saloum Delta provides exceptional testimony to a coastal lifestyle, in a Sahelian subtropical environment, with brackish water rich in shellfish and fish.
- All the shell mounds built up over a 2,000 year-long cultural process have formed a physical structure of stable islets and reclaimed land within the Saloum Delta. The resultant cultural landscapes are exceptional and illustrate a long period of the history of human settlement along the West African coast.
- The Saloum Delta is an eminent example of traditional human settlement. It represents a lifestyle and sustainable development based on the gathering of shellfish and fishing, in a considered interaction with a natural environment of extensive but fragile biodiversity.

References

[1] Eijk & Van Lavieren (2016): Conservation and sustainable use of mangroves in the Sine Saloum Delta, Senegal;
<https://www.wetlands.org/casestudy/conservation-and-sustainable-use-of-mangroves-in-the-sine-saloum-delta-senegal/>

[2] UNESCO: Saloum Delta.
<http://whc.unesco.org/en/list/1359>

All satellite derived products shown here have been derived from Sentinel-2 MSI and Landsat. The product development and processing have been performed within the ESA project Globwetland-Africa.

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