

Senegal dossier summary

Water, climate, fertilisers and crops. The essentials of the 26-page dossier.

Key figures

Figure	What it means
+2,406 t	Of extra maize per 10,000 ha treated, central scenario (1,203 to 4,813 t depending on the scenario).
+22,068 t	Of extra watermelon per 10,000 ha treated, central scenario (11,034 to 44,136 t depending on the scenario).
1,267,592 ha	Of groundnuts in shell harvested in 2024, the main crop (FAOSTAT).
120,100 ha	Equipped for irrigation, out of 3,912,560 ha of cropland (FAOSTAT).
384.9 Mm³	Irrigation water saved per year in the central scenario, enough to irrigate about 16,535 more ha.
54,348 t	Mineral nitrogen used in 2024, partly produced locally.
805 M$	Of agricultural exports in 2024, for $2,200 million of imports (FAOSTAT).

M = million · Mm³ = million cubic metres · t = tonnes. The gains are scenarios built from the trials cited; no trial has yet been conducted in Senegal.

Our products

Green Solutions develops products for water, fertilisation and crop protection. Four families are of interest to this dossier.

Product	Claimed use	Published evidence (level)
EVERGREEN® (water-retention polymer)	Holds rain or irrigation water as a gel, near the roots.	Trials on maize, potato, watermelon, date palm and soybean. Level B to C.
ECOSORB® (water-retention polymer based on corn starch)	Same use; lasting 2 to 3 years according to the website.	Soybean trial (China); laboratory acrylamide analysis. Level B to C.
ECOFERT® (fertiliser)	Fertiliser certified by SOHISCERT and EU Bio, usable in organic farming.	Published certificate; potato trial with EVERGREEN®. Levels A and C.
Paulownia ALTIFOLIA®	Fast-growing tree for agroforestry.	Website figures; no trial in Senegal. Level C.

Key points

- **Predominantly rainfed farming.** 120,100 ha equipped for irrigation, or 3.1% of cropland: The main challenge is to retain water from each rainfall event near the roots.

- **Where water is scarcest.** National water stress is 16.3%; Matam gets 224 mm of rain for 2,913 mm of evapotranspiration.
- **Rainfed crops quantified.** For maize and watermelon, a published trial makes it possible to quantify a yield gain.
- **In irrigation.** The "rice" group gives 57% of the water saved (generic assumption, no trial on rice).
- **Importing into Senegal.** 5% customs duty (ECOWAS tariff), 2.5% of levies in total, 18% VAT; fertiliser registration under Regulation C/REG.13/12/12.

The regions at a glance

Region (city)	Rainfall (mm/yr)	Deficit (mm/yr)	Temperature (°C)
Saint-Louis (Saint-Louis)	172	1,976	25.2
Louga (Louga)	246	2,155	26.7
Matam (Matam)	224	2,689	30.4
Dakar (Dakar)	287	1,545	24.6
Thiès (Thiès)	355	1,762	25.5
Diourbel (Diourbel)	388	1,852	26.9
Fatick (Fatick)	483	1,650	26.7
Kaolack (Kaolack)	502	1,636	27.1
Kaffrine (Kaffrine)	546	1,596	27.9
Tambacounda (Tambacounda)	583	1,719	29.5
Kédougou (Kédougou)	801	1,235	28.6
Kolda (Kolda)	847	1,201	28.1
Sédhiou (Sédhiou)	931	991	27.3
Ziguinchor (Ziguinchor)	1,158	719	27.0

How to read the figures

Each figure refers to a source with a confidence level. A: Official statistics or international database (World Bank, FAO, ECOWAS, WAEMU, Senegalese administration). B: Research institute, laboratory or public body outside statistics. C: Manufacturer statement, website, press or estimate. The sources are listed in Annex A of the dossier.

Extra production per 10,000 ha treated

Crop	Average yield (t/ha)	Cautious (t)	Central (t)	High (t)
Maize	2.81	1,203	2,406	4,813
Watermelon	14.71	11,034	22,068	44,136

Trade

- **Main products exported.** Groundnuts, shelled, cashew nuts, in shell and cigarettes, out of $805 million of agricultural exports in 2024.
- **Main imports.** Wheat, malt extract and maize (corn); rice imports amount to $497 million, out of $2,200 million of agricultural imports.

Full dossier: 26 pages, with the sources (Annex A) and the calculation method (Annex B). Green Solutions · contact@green-solutions-group.com · green-solutions-group.com