

Summary of the Djibouti dossier

Water, climate, agriculture and fertilisers. The essentials of the 15-page dossier and its six regional studies.

Key figures

Figure	What it means
1,066,809	Inhabitants at the 2024 census (INSTAD), 72% of them in the Djibouti City region.
264 m³	Of renewable fresh water per person per year (World Bank, 2022). No permanent river.
228 mm	Of rain a year in Djibouti City, for 2,017 mm of reference evapotranspiration (ERA5, 1991-2020).
1,010 ha	Equipped for irrigation (FAOSTAT, 2023). Local production covers about 10% of food consumption.
22,500 m³	Produced each day by the Doraleh desalination plant since 2021; 45,000 m³ targeted after the second phase.
$579 M	Of fertilisers received in 2022, almost all re-exported to Ethiopia (UN Comtrade, via the French Treasury).
696,750 m³	Of agricultural water saved per year in the central scenario, 31 days of output of the Doraleh plant.

M = million · m³ = cubic metres · ET0 = reference evapotranspiration.

Our products

Product	Claimed use	Published evidence (level)
EVERGREEN® (water retainer)	Holds irrigation water as a gel, close to the roots.	Date palm trial in sandy, saline soil (ICBA, Dubai): 82% less water, 20% more dates. Level B.
ECOSORB® (water retainer based on maize starch)	Same use; effect lasts 2 to 3 years according to the website.	Soybean trial (China). Level B to C.
ECOFERT® (fertiliser)	Fertiliser certified by SOHISCERT and EU Organic.	Published certificate. Level A (certificate).
Paulownia ALTIFOLIA®	Fast-growing tree for agroforestry.	Website figures; no trial in Djibouti. Level C.

Key points

- **An urban country.** The Djibouti City region grew from 475,322 to 767,250 inhabitants between 2009 and 2024; Ali Sabieh, Dikhil and Tadjourah lost population.
- **Rising heat.** In Djibouti City, +0.32 °C per decade since 1981: The annual mean rose from 28.6 °C (1981-1990) to 29.8 °C (2015-2024).
- **Aquifers under pressure.** Groundwater supplies 99% of the rural population (IFAD). The capital's aquifer is becoming saline; the deficit of Djibouti City would exceed 5 million m³ a year.
- **Agriculture of gardens.** About 9,896 t of plant products in 2019/2020 (INSTAD): Market gardens and orchards along the wadis. Livestock is about three quarters of agricultural GDP.
- **Ethiopia's gateway.** FAOSTAT records 488,284 t of nitrogen and phosphate imported in 2023 for 104 t used locally: The rest goes on to Ethiopia.

The six regions

Region	Inhabitants 2009	Inhabitants 2024	Rain (mm)	ET0 (mm)
Djibouti City	475,322	767,250	228	2,017
Ali Sabieh	86,949	76,414	284	2,102
Dikhil	88,948	66,196	142	2,398
Tadjourah	86,704	60,645	229	1,996
Arta	42,380	48,922	198	1,946
Obock	37,856	47,382	235	2,010

Population: INSTAD, 2009 and 2024 censuses. Climate: ERA5, 1991-2020, at the capital. Details in section 7.

Water savings (scenarios)

Agricultural water amounts to 3.0 million m³ a year (World Bank) for 1,010 ha equipped. The calculation applies the watermelon and date palm trials to market gardens and palms, and 5 to 20% to orchards.

Scenario	Water saved (m³/yr)	Days of Doraleh	Share of the capital's deficit
Cautious	348,375	15.5	7.0%
Central	696,750	31.0	13.9%
Strong	1,393,500	61.9	27.9%

Potential benefits

Situation	Product	Expected benefit
Irrigated market gardens, saline groundwater	EVERGREEN®, ECOFERT®	Less water per harvest, soil enriched with organic matter.
Date palms and orchards	EVERGREEN®	Less frequent irrigation, better resistance in summer (ICBA trial: 82% less water).
Green spaces and urban planting	EVERGREEN®, ECOSORB®	Less watering with desalinated or treated water for the same planted area.
Reforestation (Day forest, around towns)	Paulownia ALTIFOLIA®, EVERGREEN®	Better seedling survival, to be measured by trial.
Platform for Ethiopia	Whole range	Storage and delivery to the Ethiopian market.

External trade

- **A transit country.** In 2024, FAOSTAT records $1,623 M of agricultural imports: Palm oil, sunflower oil, sugar, rice, wheat flour. A large part goes on to the region.
- **Livestock, the main export of its own.** Sheep, goats, cattle and camels leave for the Arabian Peninsula from the Damerjog and Doraleh terminals.

How to read the figures

A: Official statistics or international database (INSTAD, FAO, World Bank). B: Foreign administration, United Nations agency, development bank or climate model. C: Manufacturer statement, press or estimate. The sources are listed in Annex A of the dossier.

Full dossier: 15 pages, with a study of each region, the sources (Annex A) and the calculation method (Annex B). Green Solutions · contact@green-solutions-group.com · green-solutions-group.com